

EFFECTS OF SYSTEMATIC ASSIGNMENT TO DYING CLIENTS
ON DEATH ANXIETY AND
ATTITUDES TOWARD CARE OF THE DYING
IN DIPLOMA NURSING STUDENTS

by

Tina Enns

A Thesis
Presented to the University of Manitoba
in Partial Fulfillment of the
Requirements for the Degree of
Master of Nursing
in
Nursing

Winnipeg, Manitoba

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ABSTRACT

The purpose of this study was to evaluate the effectiveness of the type of clinical experience in a palliative care course on death anxiety and attitudes to the care of the dying in diploma nursing students. A pretest-posttest quasi-experimental design was used with the experimental group assigned to clinical experience in a palliative care unit (PCU) in an extended treatment facility and the control group assigned to clinical experience in the general medical surgical units in an acute care institution where they may or may not have had the opportunity to care for dying clients.

The hypothesis that students would have lower death anxiety and more positive attitudes to care of the dying following an experience in the PCU than those who were assigned to the general medical surgical units was tested using the Collett-Lester Fear of Death scale to measure death anxiety and the Winget Questionnaire for Understanding the Dying Person and His Family to measure attitudes to the care of the dying. In addition, students at the the posttest responded to direct questions with regard to their perception of attitude change. The number of students (of a potential of 72) who participated in both the pretest and

posttest consisted of 29 students in the experimental group and 23 students in the control group.

No significant differences were found between the two groups at the posttest on the dependent variables, death anxiety and attitudes to the care of the dying. There is however a strong indication from both groups that the experience of caring for the dying is a significant factor influencing their subjective perception of attitude change. Further research is required to evaluate the extended effects of structuring death education in this way in diploma programs.

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CHAPTER 1: STATEMENT OF THE PROBLEM

Sociocultural Attitudes to Death and Dying

Death is a universal and inevitable experience (Kneisl, 1968). Yet in our society, we go to great lengths to deny, avoid and ignore death. Leonard (1976) has labelled our society as death-denying. May (1969) noted that "we repress death and its symbolism ... the way the Victorians repressed sex. ... Death is not talked about in front of children nor talked about at all if we can help it" (p. 106). Elderly are isolated in retirement villages or complexes, elderly requiring care are moved into nursing homes, and the seriously and terminally ill are hospitalized, thus allowing families and communities to avoid interaction with dying persons. Children are protected from discussions about death and dying and emphasis is placed on youth, life and health (Yeaworth, Kapp, & Winget, 1974).

Changes in Health Care

This death denial is further reinforced by tremendous advances in medical science and technology that have supported such attitudes about youth and health and "have made the modern general hospital a center of life-saving

activities - so much so that the staff themselves forget that people also come to the hospital to die" (Quint, 1967, p. 764). Thus caregivers are faced with a paradox. On the one hand, patients enter the health care system to be cured and on the other, patients no longer die at home but in hospital. Statistics indicate that approximately 75% of deaths in the United States occur in hospitals and nursing homes (Yarber, Gobel & Rublee, 1981) while the percentage in Canada is likely to be even higher as a result of our medicare system.

As a result of this shift toward institutional care, the family is no longer the prime support for dying patients. Health care professionals, specifically the physician and the nurse, are today faced with the realities of dying and death more often than any other professionals (Denton & Wisenbaker, 1977; Yarber et al. 1981). However, care of the dying is not a task which health professionals undertake with a great deal of ease. They too reflect the death-denying attitudes of our society and seem to prefer to direct their energies toward cure and preservation of life. "The death of a patient is in conflict with the primary life saving goals of the hospital" (Quint, 1967, p. 763). For this reason, aggressive therapy frequently continues until close to the time of death (Degner, 1985; Mumma & Benoliel, 1984).

Nurses as Caregivers for the Dying

Care of the dying is no longer a function of the family. Hamric (1977) states that "the nurturing functions of the extended family have increasingly been transferred to the nurse and she is expected to meet both the patient's physical and psychological needs" (p. 184). Families feel uncomfortable in providing care in the unfamiliar environment of the hospital and willingly concede the responsibilities of comfort care to the nurse who "is most consistently at the bedside of the dying patient and ... is often the most important health care professional in the dying patient's experience" (Hamric, p. 183). Her competence to respond with sensitivity and compassion to the dying and the grieving is therefore vital in her care-giver role.

However, "nurses, as the primary care givers for the dying patients and their families, are frequently ill equipped to assist individuals and families in handling the human experience of dying" (Coty & Tamlyn, 1984, p. 41). They continue to be uncomfortable and consequently less than therapeutic in their care of dying patients and their families (Quint, 1967; Wheeler, 1980). In a survey of nurses regarding their feelings about death and dying, Popoff (1975) found that 47% of those responding seldom or never felt satisfaction or fulfillment from working with dying patients. Of these, 72% did not feel confident or only

slightly confident in caring for the psychological needs of the dying. These feelings may well lead to avoidance or limited involvement with dying patients. Degner (1985) stated that:

Contact with the dying is avoided for a number of reasons: anxiety it raises in the nurse regarding her own mortality; poor attitudes toward the dying such that the nurse can see no positive feedback from providing comfort care; or feelings of insecurity as to what to say to the dying person and his family. Whatever the reasons, the nurse's avoidance behavior can in itself be stressful. She knows that the patient requires care yet she does not feel comfortable in providing it (p. 3).

These attitudes and behaviors impact on the consumer and this may well be one of the reasons which gave rise to 'The Dying Patient's Bill of Rights' which states that these patients have the right to be cared for by sensitive and knowledgeable people (Barbus, cited in Whitman & Lukes, 1975). Justice (1984), a hospital chaplain, stated that:

In the wake of almost every death are at least a few persons who suffer a gaping wound across the soul, that no suture can close and no analgesic can deaden. They all need help but too few receive it, not because no one cares, but because not enough people know how to give help. As one learns to meet the needs of those who suffer a physical wound, one can learn to meet the needs of those who suffer the emotional wounds known as grief (p. vii).

If we as nurses purport to give holistic care to our clients and their families, we cannot ignore the responsibility to provide supportive care to the dying client and grieving and bereaved families. Justice (1984), in the above statement, indicated that the ability to give this supportive care is not an innate quality but that it can be learned.

The Challenge for Nurse Educators

Hamric (1977) stated that one of the reasons for the difficulties nurses have in caring for the dying is as a result of "lack of adequate training and feelings of incompetence in dealing with the subject of death" (p. 191). Although nurses are being taught principles of care for the dying (Hamric, 1977), their continued discomfort and stress in dealing with dying and grieving clients was repeatedly noted in the literature (Fochtman, 1974; Hoggatt & Spilka, 1978). Since care of the dying and grieving continue to be important functions of our health care system, nurse educators must find ways of preparing their students to become comfortable with and therapeutic in their role when caring for dying patients and their families.

The reality facing nurse educators is that culturally induced fears of death and dying are reflected in nursing students' attitudes as they enter the nursing program (Leonard, 1976). Quint (1967) stated that unless the nursing program is instrumental in bringing about a change in these attitudes and unless it equips them with new skills, these societal attitudes will persist and will continue to influence the attitudes, values, beliefs and practices of the nursing culture and perpetuate these avoidance behaviors. If "this denies the patient the opportunity to live until he dies" (Hopping, 1977, p. 443), then Quint (1967) suggested that it is time to revise nursing education programs. She indicated that:

The basic problem is that of providing an environment in which students can recognize how many of their attitudes acquired through acculturation in the wider society, seriously affect their actions as professional practitioners and interfere with their abilities to provide compassionate and understanding care (p. 252).

The basic purpose of diploma education is to prepare a skilled practitioner at the bedside. Emphasis tends to be placed on the recovery and adjustments to daily living, but the care of the dying is often left to chance and may or may not become a part of the students' experience. Because today a high percentage of deaths occur in hospitals and because diploma graduates are prepared to function primarily within institutional settings, these graduates are particularly at risk.

In her presentation to the annual meeting of the Manitoba Association of Registered Nurses, Tamblyn (1985) discussed criteria for Quality Assurance in nursing education. The first and foremost was "relevance" which refers to the congruence between that which is required in practice and that which is provided in nursing education. The onus on nurse educators is to ensure that care of the dying is given its rightful place in nursing curricula. Their challenge is to find ways of structuring death education so that nurses will feel more comfortable in this aspect of their role. While diploma graduates would seem to be particularly at risk, research into death education in diploma schools is limited and requires further exploration.

The Problem

In nursing, death education encompasses not only the mere learning about death and dying, but also it must include the actual care of the dying, learning which requires a high degree of skill in both the physiological and the psychosocial spheres. For this reason, learning to cope with death and dying is a much more complex and profound experience for nursing students than it is for many other professionals. Direct exposure to death and dying, and the knowledge that they will be required to interact with and care for the dying, can in fact cause the students considerable anxiety. Some studies have shown that anxiety actually increased following death education (Combs, 1981) which gives indication of the importance of careful planning for this content and experience within nursing programs.

The question for nurse educators is how they can help students who later become our nursing practitioners to feel more confident in and comfortable with this aspect of their role. What type of learning experiences will be most effective in changing attitudes toward death and dying or in reducing death anxiety and in enhancing approach behaviors when caring for the dying? Previous research into death education has indicated that death education can be effective in changing attitudes to death and dying (Coty & Tamlyn, 1984; Cook Coolbeth & Sullivan, 1984; Degner, 1985, Lev, 1982; Yeaworth et al. (1974). Degner (1985) found that

a special course approach was effective in reducing death anxiety in third year baccalaureate students. This gives rise to further questions with respect to diploma nursing education. Is a special course approach useful at the diploma level as well, and if so, at what point in the program should it be scheduled? Answers to these and other questions would be useful to nurse educators in planning curricula in order to meet the "relevance" criterion.

CHAPTER 2: REVIEW OF THE LITERATURE

Overview

The review of the literature provides a context for examining the current state of knowledge of death education in nursing. Changes in health care and in societal attitudes to death and dying which have resulted in the problem are briefly discussed. Approaches to death education are identified, and pros and cons of different teaching strategies are explored. Problems inherent in research into death education are discussed. Other variables which may impact on death anxiety and attitudes toward the care of the dying are identified. This review provides a basis for research decisions made with regard to design and method in this study.

Changing Attitudes to Death and Dying

Throughout the centuries and until approximately the middle of the current century, immediate and extended families had been the prime source of support and comfort for the dying person and his family. All family members from the oldest to young children were familiar with death and considered death to be a part of living and family life

(Berg & Daugherty, 1973). With an increase in scientific knowledge and technology, a gradual and increasing shift from death in the home to the hospital has taken place (Degner, 1985). No longer is death an intimate part of family life. Support and care of the dying is left to the health care professional. This shift of care from home to the hospital has impacted significantly on the health care system and society.

The health care professional who functions within the health care system reflects the same general attitudes toward death and dying that are prevalent in our society. The nurse who has the highest degree of exposure to dying patients and who provides continuity of care for the critically ill is expected to be capable of providing sensitive and competent care. This frequently proves to be a difficult and painful experience for many nurses and "not only reminds them of their own vulnerability and mortality, but challenges the foremost goal of the medical profession, the preservation of life" (Thrush, Paulus, & Thrush, 1979, p. 132). Chandler (1976) noted that while nursing staff are exceptionally capable in performing the technical aspects of care for the terminally ill, the actual patient contact is kept at a minimum. This is labeled as "discontinuing care - care that is mobilized for the momentary demand and ceases when the patient is made comfortable. Unfortunately, 'making comfortable' may well refer to the feelings of the nursing staff and less to the patient" (p. 83).

Death education and support for health care professionals and nurses specifically, has not kept pace with the identified learning needs. Survey research confirms that nurses feel that their education does not adequately prepare them to provide support and comfort care to the dying and grieving client. Hoggatt and Spilka (1978) found that 43% of the nurses reported they encounter death frequently and 61.5% claimed that their education did not adequately prepare them for this role. Other studies (Fochtman, 1974; Popoff, 1975) confirm this finding. Since nurses continue to experience difficulty in dealing with death and dying, the research question addressing the placement and structure of death education in diploma nursing education is both timely and relevant for the nurse educator.

Approaches to Death Education

Nurse educators today, as a result of the classic works of Quint (1967) and Kubler-Ross (1969), are recognizing the importance of including death education in nursing education programs. In a survey of 205 American nursing schools, most reported including instruction on death and dying (Thrush et al., 1979). In Canada, a survey of 33 university medical and nursing schools indicated that all but four nursing schools and two medical schools included death education in their programs (Coty & Downe-Wamboldt, 1983). Thrush et al. (1979) stated that death education courses were a relatively recent

addition to nursing curricula in the previous two to three years and that only five had been offered for more than four years.

Three approaches to death education for nurses are described in the literature:

1. Integration of death and dying content into existing courses.
2. Offering an elective course.
3. Providing a required course. (Degner, 1985).

1. The most frequent approach in basic nursing programs is to integrate death and dying concepts into already existing courses. Thrush et al. (1979) reported that 92% of 205 responding institutions used this approach. Segments of death education are presented at various levels in the program and content is integrated into such courses as medical-surgical nursing, gerontology, care of acute and chronically ill, pediatric nursing and fundamentals of nursing. In the Canadian survey, 27 of 33 nursing and medical schools used the integrated approach. In nursing programs, content is integrated into courses on family nursing, the life cycle, maternal and child health, community health, health promotion, gerontology, psychosocial care of the individual and psychiatric nursing (Coty & Downe-Wamboldt, 1983) and is reflective of the view that death and dying is a normal stage of the life cycle.

Considerable variation existed in these curricula. Thrush et al. (1979) noted that the amount of time devoted to death education varied anywhere from two to three hours to three weeks. In the Canadian survey, it was noted that 10 schools (medicine and nursing) using an integrated approach did not specify the number of hours, which suggested that this integration is less than systematic (Coty & Downe-Wamboldt, 1983). The inclusion of such content may well vary with the degree of comfort of the faculty in approaching death related issues (Degner, 1985; Quint, 1967). The integrated approach would seem to be the most frequent approach for associate degree and diploma nursing programs although only one such integrated program is described in the literature (Snyder, Gertler, & Ferneau, 1975). This could be because nurse educators don't value this as an important part of a nurse's role with possibly their own discomfort in dealing with death and dying playing a part in the importance given to it in the curriculum. Another reason could be that time is at a premium and other courses may be seen as more important.

2. A second approach to providing death education is by an elective course. Thrush et al. (1979) found that of 205 schools, 24 offer elective courses and a further 57 (including 9 diploma schools) have death education available through other academic departments or institutions. However, only about 15% of students enroll in elective courses. Generally, these courses have been only recently

established. They may be offered at the graduate level (Benoliel, 1982; McCorkle, 1982); at the undergraduate level (Hopping, 1977; Lev, 1981; Swain & Cowles, 1982; Yarber et al. 1981); or as continuing education (Conedera & Schoessler, 1985; Murray, 1974).

Elective courses generally focus on specific objectives related to concepts of death and dying, loss and grieving, and on assisting students to cope with their own personal feelings about death and dying. The time frame varies from 2-3 hours of instruction per week over a period of 6-15 weeks. Elective courses described in the literature vary from courses which are planned specifically for nursing to courses which are open to students in other faculties as well. Hopping (1977) described a clinical course for baccalaureate students with objectives relating to supportive care to cancer patients and their families in different stages of illness but without a clinical component. Swain and Cowles (1982) described a course for baccalaureate nursing students which was also open to students from other faculties and therefore had no clinical component attached to it. Only two elective courses described in the literature provide for both theory content and supervised clinical practice - an undergraduate course in hospice nursing (Lev, 1981), and a graduate course which prepared nurses to care for patients with advanced cancer (McCorkle, 1982). For those courses without clinical

components, the onus is on nursing faculty to assist the nursing students to integrate this learning with the care of their patients. One might question how aware faculty are of course content when they have not been involved in it, especially in elective courses which may be offered by non-nursing departments.

3. A third approach is to provide a required course. One required undergraduate course was described in the literature (Degner, Chekryn, Deegan, Gow, Koop, Mills, & Reid, 1982). This course was provided over two academic terms and included both didactic input and the opportunity for clinical experience in giving care to dying patients and their families. A variety of teaching strategies were employed with lectures being used for presenting biophysiological aspects of comfort care while affective aspects were dealt with in drama, selected readings, participation in seminars and discussion of case studies including ethical dilemmas. The contention was that while classroom learning is important, the most critical learning takes place in the clinical assignment to dying patients. Careful selection of the patient assignment is also crucial so that the student does not become overwhelmed.

Evaluation of the above required course approach supported the findings of previous researchers that death education reduces death anxiety in nurses (Degner, 1985). In a longitudinal study, Degner and Gow (in press) found that

while death anxiety was increased at the pretest in the experimental group (enrolled in special course approach), it was reduced significantly by the first posttest and was similar to the results of the nursing control group at the first and second posttests. The experimental group had significantly better attitudes to the care of the dying than the nursing control group at the pretest and two posttests. Of further importance are data with respect to the behavior of nursing graduates one year after graduation. There was a significant difference in favor of the experimental group who felt more adequate in caring for the dying; they were also more likely to discuss with the patients their emotional concerns, preference about a place to die, to make referral to support groups, and to take responsibility for informing the family about the patient's condition.

These results provide strong evidence in favor of a special course approach. However, the literature clearly indicates that the preferred approach to death education in schools of nursing is by the integrated approach. Degner (1985) pointed out that the conventional wisdom of nurse educators in this respect is not in keeping with "the concept that controlled exposure to the care of the dying is necessary to reduce threat and consequent withdrawal behavior" (p. 17). Further research is therefore necessary to support a required course approach.

Pros and Cons of Different Learning Strategies

Survey research has been used to evaluate the effectiveness of teaching strategies in death education in nursing programs. These data have been gathered from various sources such as faculty, students and staff nurses. Wheeler (1980) surveyed community health nurses caring for non-hospitalized terminally ill patients for their recommendations with regard to learning experiences related to death and dying for baccalaureate students. The learning experiences were categorized according to the cognitive, affective and psychomotor domain. The survey results showed that learning experiences in the "most recommended" category were representative of the perceived need for death education in all three domains. This is consistent with the premise of Yeaworth et al. (1974) that "attitudes have cognitive, affective and behavioral components" (p. 20). Generally, most death education courses include a variety of teaching strategies and a discussion of the more common ones follows.

Lecture

The lecture method is undoubtedly the most efficient method of providing cognitive and didactic content and often a favorite of faculty. Caty and Downe-Wamboldt (1983) found the lecture method to be used most frequently in Canadian medical and university nursing schools. Degner et al. 1

(1982) reported the use of the lecture method to present the biophysiological aspects of comfort care. Wheeler (1980) found that community health nurses ranked a class on processes of loss and grief at the top of a list of 25 learning experiences. She also noted that in the "40 and older" age group, nurses tended to recommend the lecture method most highly for learning about the behavior of the dying and grieving. This is possibly a reflection of strategies they were accustomed to in their earlier education and is a method with which they feel comfortable. However, Conedera and Schoessler (1985) indicated that hospice nurses fatigue easily when continuing education programs are offered by the lecture format and suggested that content in such programs is better suited to teaching strategies which actively involve the participant in the learning process. Although the lecture method is a useful teaching strategy for the presentation of factual aspects of death and dying and comfort care, some aspects of death education are more effectively assimilated by the use of other teaching strategies.

Seminars and Small Group Discussions

The use of seminars and small group discussions are frequently noted in the literature on death education and are used specifically for learning in the affective domain. They are useful to students for the purpose of discussing

and sharing their own fears and attitudes toward dying and death. They also serve as an avenue for discussion of approaches useful in interacting and caring for dying and grieving persons. Kubler-Ross (1969) emphasized that helping professionals must take a serious look at their own attitudes and emotions toward dying and death if they want to be helpful to terminally ill patients without feeling discomfort and anxiety in the situation.

In a survey of baccalaureate students following curricular experiences related to death and dying, Martin and Collier (1975) indicated that the seminar on death, grief and grieving was named most often (30 percent of students) as the factor which affected attitudes towards death. In response to the question of what should be included in death education, 70 percent suggested the seminar on death and grief. Other topics suggested for inclusion in these seminar discussions were: exploration of personal attitudes and feelings (named most frequently); discussion and preparation for one's own death; religious and cultural differences; personal experiences with dying persons and alternative approaches to caring for and communicating with dying and grieving persons (p.33).

The timing of seminars varies as well. These may take place periodically, e.g. weekly (Lev, 1981), or they may take the form of a two-day seminar experience. Caty and Tamlyn (1984) described a required two-day seminar for

baccalaureate students. The focus on the first day was "Death and Me" and on the second day was "Death and Nursing". They concluded that positive attitude changes in undergraduate nursing students occurred as a result of the two-day seminar as measured by the Winget scale. Swain and Cowles (1982) described a weekend workshop seminar which constituted one aspect of an elective interdisciplinary death education course. The seminar was evaluated as effective in achieving its objectives by most of the students.

Generally comments regarding seminars and small group discussions are positive. One of the essential elements is a good facilitator who assists students to feel comfortable in sharing and disclosing their own personal feelings and fears about death and dying.

Role Play and Simulation

Role play can be an effective method for learning to care for dying and grieving clients. Wise (1974) described the usefulness of role play and simulation in a baccalaureate nursing course when not all students could be assigned to an actual experience of caring for dying clients. Several advantages of these learning strategies are identified in this study, such as:

1. Role play and simulation are used in a sheltered environment and therefore eliminate the need for concern about causing harm to the patient.
2. Role play and simulation also serve as valuable transition experiences to the actual patient situation.
3. Students can try out many nursing approaches and find ones which suit them best.

Subjective follow-up data indicated that 90 percent of students thought that these learning experiences had improved their care of the dying. They were better able to cope with their own fears, felt more accepting of the dying clients and felt competent in interacting with and caring for the dying.

Caty and Downe-Wamboldt (1983) in a Canadian survey of teaching strategies used in death education found that role playing is used infrequently. Faculty may be hesitant to use it for the following reasons:

1. Students often hesitate to participate in role play.
2. A considerable amount of faculty time and energy are required for role play and simulation to be effective.

An increase in the use of role play is highly recommended because it can provide students with the opportunity to develop empathy and skill in communicating with the dying

and their families. Degner et al. (1982) agreed when they suggested that "the most effective in-class approaches appear to be those that first command the attention and then stimulate their sensitivities" (p. 26).

Care of the Dying

Rogers (1969) stated that "much significant learning is acquired through doing" (p. 162). Direct experience is one of the most effective ways to promote learning. It is generally agreed in nursing that clinical practice is a vital aspect of nursing students' professional education. Learning in this setting confronts students with challenges which are absent in the classroom. In the clinical setting there is

little control over environmental conditions; students must combine the use of cognitive, psychomotor, and affective skills to respond to individual client needs; client safety must be maintained while he or she is cared for by a novice practitioner; and faculty must monitor client needs as well as student needs (Windsor, 1987, p. 150).

Quint (1967) emphasized that while classroom experiences are useful, these cannot replace the experience of actually caring for a person who is dying. She pointed out that such experiences should be both observational and participative and must be well planned. It is wise to avoid encounters with patients which overwhelm the student as they often result in a reinforcement of the general culture of

withdrawal from dying patients. Quint indicated further that early educational experiences are crucial in the development of positive attitudes toward death and dying and "that what happens to students during their first year in the school plays a crucial part in the development of their identities as nurses" (p. 236).

Such systematic assignment to the care of dying clients was advocated by many respondents in the Canadian survey, but only one of the programs had this built into its course of study (Coty & Downe-Wamboldt, 1983). Martin and Collier (1975) noted in a survey of baccalaureate students that care of a dying person was cited as the second most significant factor in affecting attitudes toward death and dying following a seminar on death and dying, and 30 percent of respondents advocated its inclusion in death education courses for student nurses. Indirect involvement with dying patients was generally rated as having less effect than direct care. Degner et al. (1982) supported this idea as well when they stated that while in-class activities stimulate the "students interest in comfort-oriented care, the critical learning occurs in the clinical domain as students attempt to apply theory in practice" (p. 26).

Further support for the inclusion of controlled systematic assignment to dying clients was found in a study of medical students' self-reported worries about aspects of death and dying (Field & Howells, 1986). Results indicated

that in spite of having received a course in death and dying as part of their preclinical studies, one of the major concerns expressed was communicating with the dying. It may be that concurrent clinical practice would allay these fears. These findings support the stand that a required course in death education with controlled systematic exposure to the care of the dying together with the necessary faculty support is more effective in reducing death anxiety than didactic content alone.

An important aspect of systematic assignment of students to dying clients is the role of the teacher. Faculty who themselves know how to deal with the dying client and their families are an important resource to the student (Coty, Downe-Wamboldt & Tamlyn, 1982). Quint (1967) indicated how important faculty support is to students coping with emotionally charged situations. In a study of nursing students' perceptions of their clinical experience, Windsor (1987) noted that students expressed the need for knowledgeable clinical instructors. Their respect for instructors increased if they observed the instructor interacting well with patients and demonstrating good nursing skills. A nervous instructor was seen as "terrible" by the students who "are already anxious enough doing all this new stuff" (p. 153). Degner et al. (1982) reported that both important and effective teaching strategies in a required palliative care course using systematic assignment

to dying clients have been role-modelling and post-hoc analysis of difficult situations. Role modelling is seen as essential not only in reducing the students' fears but also in increasing their confidence in providing care. Sensitivity to students' feelings is essential. "They need to know that faculty do not expect them to be instant 'experts' in palliative care" (p. 27). McDonald (1981) stated that "the teacher and the teaching method may be pivotal in determining the effects of a course on death and dying" (p. 64).

In summary, there are numerous learning experiences that have been used effectively as indicated by subjective evaluation. Survey research (Coty & Downe-Wamboldt, 1983; Martin & Collier, 1975; Wheeler, 1980) has indicated that learning in the cognitive, affective and psychomotor domains is essential in order to reduce death anxiety and increase approach behaviors to dying patients. Learning in one domain in isolation will not result in the desired effect. Quint (1967) maintained that nurses exposed to care of the dying without the accompanying educational support would adopt the behaviors of other professionals around them and limit their involvement with dying patients.

Experienced registered nurses also reported their uneasiness with providing care to the dying. Stollar (1980) hypothesized "that with experience, nurses develop coping techniques to deal with difficult work situations and that

the uneasiness which novices experienced in early encounters with dying and death begin to subside as they learn various defensive strategies" (p. 35-36). Nurses in fact reported that their uneasiness increased with experience. This would indicate that care of the dying alone without appropriate cognitive and affective learning does not achieve the expected results of attitude change. Knott (cited in Caty & Tamlyn, 1984) stated that knowledge or didactic instruction alone cannot bring about the desired attitudinal and behavioral changes. These changes will come about only if students are given opportunities to explore their own feelings and anxieties regarding dying and death. Caty and Downe-Wamboldt (1983) also recommended an increase in those methods which encourage and involve the active participation of students for the purpose of exploring their own feelings and attitudes. Degner et al. (1982) stated that critical learning occurs during clinical experience as students apply the theory to their practice. Thus it would seem that a combination of cognitive, affective and clinical learning are needed to accomplish the desired goals of death education. To date, no research specifying the types of clinical experience or clinical learning which would be most effective in accomplishing the desired goals has been reported in the literature.

Problems Inherent in Evaluating Death Education in Nursing

In recent years, the need for death education has gained widespread acceptance from nurse educators. Commonalities in terms of intended outcomes are generally expressed as a change in attitude. As summarized by Yarber et al. (1981), these are "the ability to deal with our own mortality and to provide effective care for the dying" (p. 322). Nurses have recognized the need to evaluate the effect of death education on the students' attitudes toward death and dying in a systematic and objective way (Coty & Tamlyn, 1984). Such studies are generated more frequently in institutions of higher learning which require and support research as a part of the faculty role. In spite of the fact that to date the greater percentage of nurses are educated at the diploma and associate degree levels, few such studies have been generated in diploma programs, while studies in baccalaureate programs and continuing education programs are more common (Thrush et al., 1979).

Research findings generally indicate that death education has a positive impact on the learners' attitude to death and dying (Coty & Tamlyn, 1984; Cook Coolbeth & Sullivan, 1984; Degner, 1985; Hopping, 1977; Lester, Getty, & Kneisl, 1974; Lev, 1982; Snyder et al., 1973; Yeaworth et al., 1974). Such research has not been able to establish a clear relationship between educational design and its effects on attitudinal change (Coty & Tamlyn, 1984). However, longitudinal

research reported by Degner (1985) indicated that students exposed to a palliative care course with systematic assignment to dying clients experienced a significantly greater reduction in death anxiety than those exposed to an integrated approach. She concluded that further evidence is required before making recommendations regarding the role of such courses in undergraduate nursing programs. A question which remains is whether such a recommendation would also be appropriate for diploma programs. In a study of death anxiety among registered nurses following a two-day workshop, Murphy (1986) found that the type of nursing education did not have any effect on death anxiety scores.

Degner and Gow (in press) provided a summary of evaluation research into death education. They identified many difficulties inherent in these studies including design problems, small sample size, reliability and validity of instruments used, and methods of data analysis, the results of which are less than convincing and often confusing. A clear definition of concepts under study is often lacking (Degner & Gow, in press), as are the stated desired behavioral outcomes of the course (Knott & Prull, 1976). Knott and Prull (1976) also pointed out the need for the development of more sophisticated methods of analyzing these outcomes.

The need for rigorous research into the effects of death education is now being recognized in nursing. However,

experimental design in evaluation research is generally not achievable in these studies, since investigators are often evaluating treatment effects or interventions through the use of pre-existing or intact groups. Random assignment is usually not possible. Pre-existing differences in the treatment and control groups may affect the validity of the results. In evaluating the effects of a palliative care course, Degner (1985) noted that a greater number of mature students in the experimental group when compared with the control groups could have threatened the validity of the conclusions. Murphy (1986) made an attempt to equalize the experimental group and the control group. The 150 participants in a two day workshop (experimental group) were primarily hospital staff nurses and educators who chose to participate in the workshop. The control group of 150 nurses was drawn from other hospitals and matched with the experimental group by sex and type of nursing responsibility in an attempt to establish group similarity and thus allow the researcher to place greater confidence in her results.

Studies in nursing usually conform to a variety of quasi-experimental designs. These may be cross-sectional or longitudinal. Since students or nurses require time to internalize information learned in death education, longitudinal studies are the design of choice (Degner & Gow, in press; Hopping, 1977) for studying the effects of death education. Murray (1974) and Laube (1977) studied the

effects of death education on registered nurses. They found no significant difference between pre and immediate post test scores. However, both found a significant decrease in death anxiety in the second posttest scores as measured by the Templer Death Anxiety Scale. Caty and Tamlyn (1984) found no significant difference between pre and post seminar measurement of mean scores on the Winget Questionnaire for Understanding the Dying Patient and His Family in the experimental group. There was a significant difference ($t = 3.02$, $df = 30$, $p = .005$) between the pretest score and the second posttest score which occurred fourteen months following the seminar. No significant differences between mean scores were noted in the control group. This would indicate that the students require time to process and internalize their learning (Yarber et al., 1981). These findings support the need for delayed measurement and longitudinal research. Nonsignificance of data may result in questions with respect to the validity and reliability of the measurement tool when in fact the timing of the measurement may be influencing the results.

Measurement in Death Education

The intent of death education is generally articulated as a change in the learner's attitude toward dying and death or to reduce death anxiety. However, the researcher evaluating the adequacy of death education courses in achieving this

goal does not have an easy task. Kurleychek (1978) stated that "the main dilemma facing an investigator, following the formulation of the research hypotheses and methodology, is how to effectively operationalize and measure an individual's attitudes toward death and dying" (p. 37). McDonald (1981) raised a further question:

The evaluation of the thought of death as essentially negative has been shown ... to be a generally common response in contemporary society, even when classroom or other life experiences do not focus a person's attention on death. When one is confronted with or immersed in the subject, however, the question to be answered is whether such immersion heightens the negative affect generally associated with the thought of death or leads to greater comfort, acceptance and ultimately, less negative affect. Studies that have attempted to address this problem have approached it from the standpoint of death anxiety, which may or may not be synonymous with negative affect with respect to death (p. 64).

Definition of Constructs.

Constructs to be operationalized and measured in death education have not been well defined. Terms such as death anxiety and attitudes toward death tend to be used interchangeably. Degner and Gow (in press) stated that researchers frequently proceed without first identifying theoretical or formal definitions of the constructs to be measured. They pointed out that a clear definition of death anxiety was provided by Schulz (1979):

The terms fear and anxiety have been used interchangeably. A distinction often made by psychoanalysts is that fear is experienced in reference to specific environmental events or objects while anxiety is a negative emotional state that lacks a specific object. The

apprehension evoked by thoughts of death and dying has properties of both fear and anxiety. There are specific things one can fear, such as the pain and associated psychological suffering. In addition, thinking about death may arouse amorphous and unspecified anxieties about the many unknowns associated with death: we do not know when, where or how we will die, or if there is an afterlife. The idea of not being is for some persons incomprehensible and unsettling (p. 69-70).

Such a clear definition does not exist for death attitudes. Hopping (1977) defined attitudes toward death as "the sum total of a person's inclinations and feelings, prejudice or bias, and convictions about death". Since the terms death anxiety and death attitudes are used interchangeably in the literature, they will be referred to as death anxiety/attitudes in this discussion.

Social scientists have operationalized death anxiety/attitudes in a variety of ways such as death concern, death anxiety, fear of death and death acceptance (Kurleychek, 1978). They have developed a variety of scales and employed a wide variety of methods in their attempts to measure attitudes toward death. These have included questionnaires, projective tests, in-depth interviews, and psychophysiological measures such as galvanic skin response (GSR) to death-related words (Kurleychek, 1978). In recent studies, measurement is most often done by rating scales. Kurlychek (1978) stated that these vary and include Likert type, Thurstone, forced-choice and semantic differential scales. Some treat death anxiety as a unidimensional construct, while others treat it as a multidimensional

construct (Kurleychek, 1978). Of the scales which view death anxiety/attitudes as a unidimensional construct, the most recommended are the Boyar Fear of Death Scale (1964), the Templer Death Anxiety Scale (1970) and the Dickstein Death Concern Scale. Kurleychek (1978) stated that the above-named scales "demonstrate the most normative data of all death attitude scales" (p.44).

The Boyar Fear of Death Scale was found to have a test-retest reliability of .79. Although concurrent validity was reported when compared with four other measures of death (Kurleychek, 1978), it has not been used in the evaluation of death education in nursing (Degner, 1985). The Templer Death Anxiety Scale has been used in nursing with varying results. Murray (1974) and Murphy (1986) found significant change in death anxiety as measured by the Templer scale while results in other investigations were ambiguous. Some investigators found that the instrument is insensitive to group differences (Combs, 1981; Laube, 1977). Use of the Dickstein Death Concern Scale with college students resulted in a high level reliability (above .85) in terms of internal consistency for both males and females (Dickstein, 1972). Although its reliability has not been established in a nursing population, it holds some promise for research in the future if death anxiety/attitudes is considered to be a unidimensional construct (Degner, 1985).

Schulz (1979) supported the notion that death is a multidimensional construct and stated that "many of the inconsistencies in the death anxiety data will probably be clarified once researchers begin paying closer attention to the components of death" (p. 72). Collett and Lester conceptualized four dimensions of the fear of death. These are: fear of death of self, fear of death of others, fear of dying of self and fear of dying of others. Similarly, Nelson and Nelson identify four dimensions of death anxiety as death avoidance, death fear, death denial and reluctance to interact with the dying (Kurleychek, 1978). Still other researchers say that it is possible to measure only the surface-level attitudes acquired through culture and religion but that even valid and reliable instruments cannot measure attitudes and feelings existing at the unconscious level (Schulz, 1979).

Instruments for the measurement of death anxiety/attitudes as a multidimensional construct are less common. The Multidimensional Death Anxiety Scale (MDAS) was developed using factor analytic techniques. It was used to evaluate an elective death education course for diploma nursing students and was unable to detect changes in death anxiety (Yarber, et al., 1981). The one which has received the most attention in the nursing literature is the Collett-Lester Fear of Death Scale (FDS). Collett and Lester (1969) "found low intercorrelations among their subscales,

especially between the two subscales dealing with self and the two dealing with others, suggesting that death anxiety is a multidimensional concept" (Schulz, 1979, p.72). The FDS is being used with nursing students to evaluate the effects of an elective hospice nursing course (Lev, 1982). It has also been used in surveys of nursing staff. Lester et al. (1974) were unable to detect changes in death fear as a result of increased educational preparation. Stollar (1980) used it to evaluate the effect of death experience on nurses' responses to dying and death in the hospital setting. In a pilot study of the effects of death education on sophomore and senior nursing students, Gow and Degner (cited in Degner, 1985) concluded that the Collett-Lester scale could be useful in longitudinal research for measuring students' attitudes toward death and dying. Longitudinal research led to the conclusion that the Collett-Lester scale was in fact useful for detecting reduced death anxiety as a result of a palliative care course when compared with an integrated approach or no death education. However, problems were experienced with the reliability of the total scale as well as the subscales, and Degner and Gow (in press) concluded that the Collett-Lester scale was more likely measuring a unidimensional construct than a multidimensional one as intended by its developers.

Attitudes to Care of the Dying.

Concepts of death anxiety/attitudes have more recently been gaining attention in the nursing literature. Available measurement scales have been used with some success to evaluate death education in nursing. The question remains whether or not nursing's interests go beyond what is measured by available death anxiety/attitude scales. Are these scales valid, reliable and adequate measures of death anxiety/attitudes of nurses?

Degner (1985) differentiated between death anxiety/attitudes of the nurse and attitudes to the care of the dying. In a pilot study of the effects of death education on sophomore and senior nursing students, Gow and Degner (cited in Degner, 1985) utilized the Winget Questionnaire for Understanding the Dying Person and His Family to measure attitudes to the care of the dying. They concluded that the Winget scale "was in fact measuring a construct distinct from death anxiety/attitudes and that it was suitable for use in a longitudinal evaluation of the effect of death education in nursing" (Degner, 1985, p. 32). They found that it demonstrated adequate reliability ($\alpha=0.82$) and was able to detect improved attitudes to care of the dying in seniors when compared with the sophomores. Subsequent use in a longitudinal study indicated that while reliability was high ($\alpha = 0.77$, $N=601$), the treatment effect which was detected by analysis of

covariance disappeared when these data were subjected to reliability adjusted forms of the analytical model (Degner, 1985).

Not all nurse researchers articulated these differences nor did they define the constructs under study. In their study of the effects of a two-day seminar on nursing students' attitudes toward death and dying, Caty and Tamlyn (1984) did not define attitudes. The Winget scale was used for pre- and post seminar measurement. This scale measures attitudes in terms of "flexibility in interpersonal relations, desire for open communication about critical issues, and 'psychological mindedness' in relation to patients and families of dying persons" (Yeaworth et al., 1974, p.21). Caty and Tamlyn (1984) concluded that the seminar had had some influence on attitudes toward death and dying.

The literature indicates that researchers attempting to evaluate the effects of death education have a difficult choice to make when deciding on instruments to be used for measurement. Kurleychek (1978) noted that the attitude dimension and the constructs which various authors have developed are not always interchangeable. The sensitivity of an instrument to detect change due to a particular intervention is crucial. Measures using a forced-choice scale such as Templer's Death Anxiety Scale and Lester's Fear of Death Scale may be less sensitive to pre and post

test changes than those which allow for degrees of agreement/disagreement, such as the Dickstein Death Concern Scale and the Collett-Lester Fear of Death Scale. Kurleychek (1978) cautioned investigators to consider a number of criteria when selecting death anxiety/attitude measures:

In selecting an assessment procedure, an investigator should consider many factors, including; the attitude dimension to be measured (e.g., fear, concern, acceptance, GSR, etc.), the attitude object referred to (e.g., death of self, dying of others, the state of death, etc.), sample characteristics (e.g., young, old, etc.), the availability and feasibility of a particular method, reliability and validity data, and the proposed number of test administrations (i.e., one-shot or repeated measures) (p. 44).

Since there are numerous questions related to the validity and reliability of instruments available for measurement in death education, possibly the role or usefulness of subjective evaluation needs further exploration.

Data Analysis Problems in Death Education.

Degner (1985) provided extensive discussion of the reliability and validity of conclusions drawn in death education evaluation. She pointed out the dangers in drawing conclusions as though analyzing true experimental data. She cautioned researchers with regard to methods of statistical analysis and emphasized "the importance of performing reliability adjustments to pretest values when using analysis of covariance (ANCOVA) to compensate for nonequivalence in quasi-experimental designs" (p. 121).

She found that on the basis of ANCOVA alone, the palliative care course approach reduced death anxiety and improved attitudes to the care of the dying. However, when using reliability adjusted forms of ANCOVA, the evidence in support of improved attitudes to the care of the dying disappeared.

Another issue to consider is familiarity of the subjects with the test or instrument in a pretest-posttest design. Degner (1985) stated that since there was an eight month time span between the pretest and the posttest, familiarity with the instruments used was not likely to result in improved performance. Not all nurse researchers address this aspect. In evaluating the effects of a two-day workshop for registered nurses, Murphy (1986) concluded that the workshop did decrease nurses' death anxiety. The question should be raised whether or not familiarity with the instrument may have had some influence on these data, since the pretest was given at the start of the workshop, the first posttest at the end of the workshop and a further posttest by mail one month later.

Potential Confounding Variables

Degner (1985) stated that the investigator evaluating effects of death education is faced with the challenge of ensuring "that potential confounding variables ... do not either obscure or accentuate the effects of such

evaluations" (p. 35). The literature suggests that such variables include age, sex, education, death experience, religion, and length of work experience in nursing (Denton & Wisenbaker, 1977; Gow & Williams, 1977; Hopping, 1977; Murphy, 1986; Schulz, 1979).

Although there is considerable discrepancy in findings related to age in the general population (Schulz, 1979), in a study of 137 nurses, Gow and Williams (1977) found that "younger nurses had higher anxiety levels, poorer perceptions of caring for the dying and more negative attitudes" (p. 197), while "nurses 40 years of age and older had more positive reactions" (p.198). This is supported by Murphy (1986) who found that of 150 nurses who chose to attend a death and dying seminar, age and length of experience were related to significant change in death anxiety. The relationship between age and anxiety was strongest for subjects between the ages of 31 to 40. Death anxiety decreased most significantly among those subjects who had worked in nursing for seven to twelve years. Degner (1985) concluded that students do not acquire improved attitudes toward the care of the dying or have reduced death anxiety as a result of maturation alone. Home Economics students, the second control group in the study, who did not take a course in death education, showed no such changes over time.

In his discussion of demographic factors, Schulz (1979) indicated that females fear death more than males when assessed by affectively oriented death anxiety scales, while this may not be true on cognitively oriented ones. Dickstein (1972) indicated that the Death Concern Scale possesses a high level of internal consistency for both males and females. In his study, no significant sex differences in death concern were noted.

There are some indications that religious beliefs affect death anxiety. Individuals with strong religious commitments and belief in afterlife show less fear of death (Schulz, 1979). This was confirmed by Hopping (1977) who indicated that a belief in a supreme being was associated with a positive attitude toward death. Murphy (1986) found that religious preference had no effect on death anxiety. In a study of registered nurses and baccalaureate students, Denton and Wisenbaker (1977) found that a death in the family or the death of a friend were not related to death anxiety, but that seeing a person die and being in a situation where you think you are going to die were related inversely to death anxiety. These findings were supported by Degner (1985). They were not confirmed by Cook-Coolbeth and Sullivan (1984) and Murphy (1986) who found no significant effect for personal death experience on death anxiety.

Summary

In summary, the literature indicates that death education is an important aspect of any nursing curriculum. Further rigorous study is essential in evaluating various approaches to death education. In order to place any confidence in such results, studies must be designed so that they will meet the necessary criteria of reliability and validity. Then nurse educators should be able to feel more confident in their approach to death education. Ultimately, dying clients will experience more sensitive and compassionate comfort care from nurses prepared to meet this challenge.

The review of the literature has provided a context for examining the current state of knowledge of death education in nursing. Changes in health care and in sociocultural attitudes to death and dying and how this impacts on nurses in their role of caring for dying patients and their families were briefly discussed. Approaches to death education were identified and the effects of various teaching strategies were explored. Problems inherent in research into death education were examined as well as other variables which might have an impact on death anxiety and attitudes to care of the dying. There continue to be many questions with regard to the reliability and validity of instruments available for evaluating death education. Possibly the use of subjective data can be useful in confirming the results obtained from objective data. This

review provides a basis for the conceptual framework and research decisions made with regard to design and method in this study.

CHAPTER 3: CONCEPTUAL FRAMEWORK

The conceptual framework for this study is taken from several sources. The views of social scientists on attitudes and attitude change, learning theorists on how learning takes place and nurse theorists on how nurses learn to care for the dying are all useful in this study.

Attitude Change

A basic premise of social scientists is that attitudes are learned through life experiences and contribute to how we behave or act (Lemon, 1973; Triandis, Adamopoulos, & Brinberg, 1984). Some theorists take the view that attitudes consist of several components. Triandis (1971) defined attitude as "an idea charged with emotion which predisposes a class of actions to a particular class of social behaviors" (p 2). This definition includes "the idea (cognitive component), the emotion attached to it (affective component), and the predisposition to action (behavioral component)" (Triandis et al., 1984). Actions or behaviors which occur with regard to a specific attitude object will generally reflect our ideas/beliefs and feelings toward the object. One can move toward or away from the attitude object.

Of concern in this study are attitudes to death and dying. If attitudes are learned through life experiences and contribute to how we behave and act, it can be assumed that nursing students will in general reflect the current sociocultural attitudes toward death and dying and that they will tend to shy away from experiences with dying and grieving clients.

By assuming that attitudes toward specific objects are learned, it follows that attitudes can be changed by further learning (Lemon, 1973). Triandis (1971) suggested that such "change can occur by changing the cognitive component (new information), the affective component (pleasant or unpleasant experiences in the presence of the attitude object), or the behavioral component (by norm change or the legal imposition of behavioral changes)" (p.143). We can assume that this also holds true for attitudes to death and dying. Templer, Ruff and Franks (cited in Yarber et al., 1981) made the point that death anxiety is not fixed but is subject to change.

Attitude Change and Learning

If attitudes can be changed by further learning, what type of learning is most effective to bring this about? Learning theorists classified learning objectives into three major categories or domains, namely, the cognitive, affective and psychomotor domains (Bloom, Engelhart, Furst,

Hill, & Kratwohl, 1956). These three domains correspond with the attitude components as described by Triandis et al. (1984), and the factors affecting attitude change correspond with the learning behaviors in the three domains. In her discussion of teaching and learning in nursing, Guinea (1978) indicated that in nursing "often all three types of behaviors - cognitive, affective and psychomotor - must be combined to produce a competency" (p. 30). It is then reasonable to assume that learning experiences in the cognitive, affective and psychomotor domains will not only produce competencies in nursing but will also result in attitude change.

Quint (1967), following extensive study into how nurses learn to care for the dying, observed that nursing students without educational support continue to demonstrate the learned sociocultural attitudes of avoiding the issues of death and dying. They observed the avoidance behaviors of the staff and very quickly learned to limit their own involvement with dying patients. She contended that if nursing students were provided with death education along with planned clinical assignments, they would be less likely to avoid the care of the dying. Thus it would seem that classroom input should correlate with the opportunity to care for the dying in the clinical practice arena. Rogers (1969) stated that "significant learning takes place when the subject matter is perceived by the student as having

relevance for his own purposes" (p. 158). This would support the ideas of Quint that planned experiences with systematic assignment to dying clients would make these experiences more relevant and thus result in greater learning than care experiences that occur haphazardly or by chance throughout the program. In longitudinal research with undergraduate nursing students exposed to a required palliative care course and those exposed to an integrated approach, Degner (1995) found support for these ideas. It would seem that the interaction of the three components would be advantageous and essential in accomplishing a change in attitudes and the skills of caring for the dying.

According to this framework, death education or new learning along with systematic assignment to the care of the dying can have a significant impact on students' and subsequently practicing nurses' ability to cope with the issues of death and dying. Given cognitive content or new input about death and dying; an opportunity to explore and confront their own fears, attitudes and anxieties toward dying and death (new affective skills); and the opportunity to integrate this learning in the care of dying patients and their families, can lead to attitude change in nursing students toward death and dying. The task of the educator is to structure death education in the curriculum so that the learning results in attitude change which will ultimately accomplish the goal of therapeutic and sensitive

comfort care to dying patients and their families. Figure 1 illustrates these ideas:

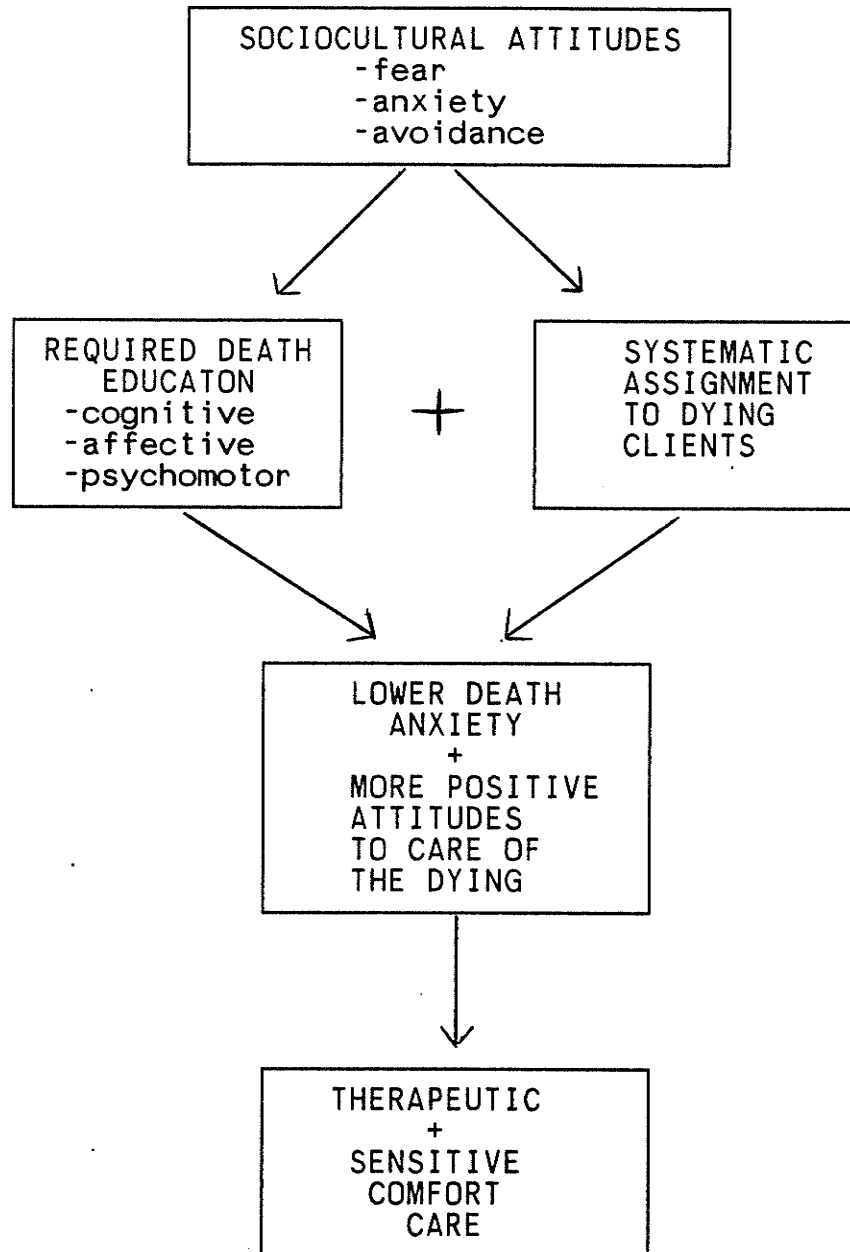


Figure 1: Conceptual Framework

Assumptions which follow from this framework include:

1. Basic attitudes are learned through life experiences.
2. Nursing students reflect basic societal attitudes of fear, anxiety and avoidance with regard to dying and death.
3. Attitudes can be modified by further learning.
4. Death anxiety is sensitive to various influences and therefore is subject to change.
5. Attitude change requires a cognitive, affective and psychomotor/clinical component.

The question which remains to be answered is how to structure death education so that it will most effectively accomplish the desired attitude change and lead to the ultimate goal of therapeutic comfort care to dying patients and their families.

CHAPTER 4: METHODS

Overview

This chapter describes the quasi-experiment designed to detect differences in death anxiety and in attitudes to care of the dying following a palliative care course and specifically following experience in a Palliative Care Unit (PCU) as opposed to experience in a general medical/surgical unit. The research questions and hypothesis are outlined. The setting, sample, overall treatment, and independent and dependent variables are identified. The process of data collection and method of data analysis are described. Limitations of the study are acknowledged and ethical considerations are described.

Design

This evaluation research was designed as a quasi-experiment with one experimental group and one control group. The untreated control group pretest-posttest design is the one most frequently adopted in social science research (Cook & Campbell, 1979). A quasi-experimental design was chosen over an experimental design because randomization was not possible due to predetermined groups

in the program. However, in the pretest-posttest design, pretest data provide information with regard to group similarities and differences. If pretest scores are similar, then posttest differences can, with some degree of confidence, be assumed to be due to the effects of the treatment (Polit & Hungler, 1985).

Purpose

The purpose of this study was to evaluate whether clinical experience in a palliative care course had an effect on death anxiety and attitudes to care of the dying in diploma nursing students. The primary objective was to determine whether or not learning to care for the dying and bereaved was more effectively accomplished when students are assigned to a PCU where they experienced caring for a dying client, as opposed to assignment to adult medical/surgical units where they may/may not have had this experience. This study is a partial replication of a longitudinal study by Degner and Gow (in press).

Hypothesis

Students will have lower death anxiety and more positive attitudes to care of the dying following a palliative care course with systematic assignment to dying clients than students who were assigned to the medical surgical nursing units.

Definition of Terms

Clinical Experience: time spent by students providing care to clients in a health care institution.

Systematic Assignment to Dying Clients: is the assignment of students to a PCU at an extended treatment hospital.

Palliative Care Unit: a unit at an extended treatment hospital where the focus of nursing care is no longer the prolongation of life but is aimed at improving the quality of the remaining life. This includes supportive care for families, friends and significant others.

Medical/Surgical Units: units at an acute care community hospital which have either medical or surgical patients or a combination of both and may or may not have patients who are dying. The focus of care is generally treatment and cure.

Objective Data: is the data obtained from the Collett-Lester and Winget scales used in the measurement of the dependent variables.

Subjective Data: data which represent the students' own perception of their attitude change.

Setting and Sample

The setting was a hospital based school of nursing which offers a two-year diploma nursing program in Winnipeg, Manitoba, Canada. The time frame of the study was the spring session of 1986-87. Classes were held in the school of nursing. Clinical experience was provided in the home hospital, an acute care facility, and a PCU located in an extended treatment facility in the community. The target population consisted of the total number of students (72) enrolled in the first year of the diploma nursing program. Due to the size of the class, the total population was used rather than a sample, and it will be considered to represent the population of all possible first year diploma nursing students at the hospital based school of nursing. One-half of the population was assigned to the control group and one-half to the experimental group. The assignment of students to the experimental and control groups was based on their assignment to clinical groups in the program. Randomization was not possible as students were assigned to clinical groups in the first term of the program which then determined the clinical groups to which they were assigned in the remainder of first year.

The Experimental Group: First year diploma nursing students who were enrolled in a required palliative care course in the spring of 1987. For clinical experience, students were assigned to a PCU in an extended treatment facility.

The Control Group: First year diploma nursing students who were enrolled in a required palliative care course in the spring of 1987. For clinical experience, students were assigned to medical/surgical nursing units in their home hospital where they may/may not be assigned to care for a dying patient.

The Treatment

The overall treatment to which both experimental and control groups were assigned was a required course in palliative care. Any content taught in the classroom and in small groups was the same for both groups; however, the clinical experience was different. One-half of the class was assigned to care for patients both on the PCU and on a medical/surgical unit while the other half was assigned to the general medical/surgical units where they may/may not be assigned to care for a dying patient.

Course Description

The course was scheduled in the spring of the first year of the two-year diploma nursing program. It dealt with client situations where there is need for adjustment to progressive and irreversible alterations in health. The client may need assistance in adjusting to continual depletion of available resources. The broad goal of palliative nursing is to facilitate adjustment to and soften

the impact of loss by providing sensitive comfort care and assisting the client to maintain some sense of control in the situation. The course content was organized into four units:

1. Introduction to Palliative Nursing Practice.

In this unit the student was introduced to the concept of palliation, to nursing actions which palliate and to the overall course objectives. (Time frame - 1.5 hours)

2. Adjustment to Situations of Actual or Impending Loss.

This unit consisted of six two-hour seminars scheduled weekly. Content for discussion included concepts of loss, sociocultural attitudes toward death and dying, grief and bereavement. Although there was some didactic input to the total group, the emphasis was on the small group sessions. Students had the opportunity to confront their own fears, feelings and attitudes about death and dying, to share personal loss experiences, and then to move toward a client focus with the application of the nursing process to dying and bereaved adults and children. Situations from films were used for the latter, and strategies such as role play were used. These seminars were under the direction of a first year teacher and the hospital chaplain. Each first year teacher had her own clinical group for the small group sessions. At times there was need to continue the discussions beyond the scheduled class time. Frequently

teachers saw students on an individual basis because the seminars had helped students to identify their own unresolved grief or their need for assistance in a current situation of loss. (Time frame - 12 hours)

3. Adjustment to the Impact of Cell Alterations.

Course content included the concept of cell growth, the pathogenesis of cancer, treatment modalities for patients with cancer and effects of such treatment. Case studies included clients with a variety of cancers who experience the need for adjustment to progressive and often irreversible alterations/losses in health. (Time frame - 24 hours)

4. Adjustment to Loss of Control.

Course content included loss of control which may be physiological, neurological and psychosocial. Case studies included clients with Alzheimers, Parkinsons and Multiple Sclerosis. (Time frame - 6 hours)

Clinical Practice

The class was divided into eight groups for clinical practice. Students were assigned to two different clinical areas during the spring session. Two of the groups were assigned to the PCU as their first clinical area and then to a medical/surgical unit as their their second clinical area.

A further two groups were assigned to a medical/surgical area as their first clinical area and to the PCU as their second. The length of the PCU experience was fourteen days (6 hrs/day). The remaining four groups were assigned to medical/surgical units for both experiences.

The Independent Variable

The independent variable in this study was "systematic assignment to dying clients". For the purposes of this study, systematic assignment to dying clients was defined as assignment to a PCU for clinical experience.

The Dependent Variables

The first dependent variable was death anxiety. The following theoretical definitions as found in Degner (1985) were used for the purposes of this study:

1. Anxiety: "refers to an expression of diffuse apprehension the object of which is not clearly understood or recognized, the result being that the quality of the danger is to some extent unknown. Anxiety occurs in situations in which the individual feels that his biological and/or his physiological well-being are threatened" (Folta, 1965, p. 16).
2. Death anxiety: refers to "amorphous and unspecified anxieties about the many unknowns associated with

death: we do not know when, where, or how we will die, or if there is any afterlife" (Schulz, 1979, p. 69-70).

In this study, death anxiety was operationalized as scores on the Collett-Lester Fear of Death scale (Appendix A, Part I). The scale contains 36 items, responses on a six-point scale range from +3 to -3, and could range from a low of -108 to a high of +108 with the minus scores signifying lower death anxiety. The Collett-Lester scale measures four different dimensions of this concept: including fear of death of self, fear of death of others, fear of dying of self and fear of dying of others. Degner (1985) found that subscores had low levels of internal consistency reliability and concluded that the scale was more likely measuring a unidimensional as opposed to a multidimensional construct. For this reason, the Collett-Lester scale was used as a unidimensional scale in this study.

The second dependent variable was "attitudes to care of the dying". The following theoretical and operational definitions as used by Degner (1985) were used for the purposes of this study.

1. Attitude: "is an evaluative, affective reaction based upon and reflecting the evaluative concepts and beliefs which have been learned about the characteristics of a social object or class of social

objects" (Shaw & Wright, cited in Degner, 1985, p. 48).

2. Attitudes to care of the dying: "are assessed in terms of flexibility in interpersonal relations, desire for open communication about critical issues and 'psychological mindedness' in relation to patients and families of dying patients" (Ward & Lindeman, 1978, p.54).

Scores on the Winget Questionnaire for Understanding the Dying Person and his Family (Appendix A, Part II) were used to operationalize attitudes to the care of the dying. The questionnaire consists of 50 Likert-type items which are answered on a five point scale. Seventeen of the items are fillers. Scores can range from 33-165. Low scores reflect flexibility in interpersonal relations and a desire for open communication, while high scores reflect rigidity of attitude and lack of insight into psychological factors influencing self and others (Ward & Lindeman, 1978).

Although numerous scales measure death anxiety/attitudes, the Winget scale appears to be the only useful tool for measuring attitudes to the care of the dying which is of particular interest in this study. An internal consistency reliability of .72 was reported by Ward and Lindeman, (1978). Gow and Degner (cited in Degner, 1985) found that reliability was adequate ($\alpha = .82$). They also found that it was able to detect differences in attitudes to care

of the dying between seniors and sophomores and that the construct it measures is different from death anxiety (Degner, 1985).

Since there are many questions regarding the validity and the reliability of available instruments for the measurement of death anxiety/attitudes in nursing, the posttest included a section on the students' subjective evaluation of the palliative care course (Appendix A, Part IV). Students were asked whether they perceived that their attitude to death and dying had changed since the beginning of the course and if so, how it had changed. They were also asked to identify those factors which they perceived as being most influential in this change.

Data Analysis

Data were analyzed in keeping with the methodology and the variables under study. Descriptive statistics were used to establish means and standard deviations. Bivariate plotting was used to detect pretest-posttest differences and treatment and control group effects. Screening for outliers was used and a test for normality was performed. Correlational measures were used to identify potential covariates. Contingency table analysis (chi square) and measures of association such as Cramer's V statistic and the contingency coefficient were used to check for sampling bias between experimental and control groups.

The major analytic model used to answer the research question was analysis of covariance (ANCOVA). ANCOVA was used to construct the model representing the relationship between the two dependent measures and the two factors, i.e. the treatment and pretest. Statistical analysis was expanded to include other relevant covariates. In addition, chi square and Cramer's V statistic were used to measure congruence between subjective and objective data at the posttest with the intent of increasing confidence in the objective measures. Data from questionnaires for each student were entered into the computer using a data dictionary. Scoring instructions outlined by Collett and Lester and Winget were followed. Data were analyzed using the SAS and SPSS-X statistical software packages. The significance level was set at 0.05.

Method of Data Collection

Data was collected by means of a self-administered questionnaire (Appendix A). The pretest consisted of Parts I, II and III. Part I contained the the Collett-Lester Fear of Death scale while Part II contained the Winget Questionnaire for Understanding the Dying Person and His Family. Part III consisted of questions related to demographic data and factors relating to potentially confounding variables such as age, sex, religion, religiosity, education and personal or previous program

experience with death and dying. The posttest consisted of Parts I, II and IV. Part IV solicited information about the students' own perception of attitude change and of the factors which have influenced this attitude change (Martin & Collier, 1975).

Ethical Considerations

Once the study had received the approval of the University of Manitoba School of Nursing Ethical Review Committee with regard to protection of the rights of subjects and of the Executive Director of the hospital to carry out the study (Appendix B), arrangements were made with the Coordinator, Year I, for a suitable time to administer the questionnaire. Time was requested at the end of a scheduled class so that all students would be present. Due to the relationship of the investigator to the diploma school of nursing (Director), an out of institution colleague administered the questionnaire. The students were given a brief verbal explanation of the study and its voluntary nature (Appendix C). Each student was given a consent form (Appendix D) and those who signed the consent and thereby agreed to participate in the study were given the questionnaire. The questionnaire took approximately 30-35 minutes to complete. Signed consent forms and completed questionnaires were collected as the students left the room. A similar process was followed at the posttest.

Each subject's participation was one of free and informed consent. There was no risk to the subjects at any time as a result of the research. It had no effect on a student's status in the diploma nursing program either positively or negatively. Subjects were permitted to withdraw from the project at any time. As well, a decision not to participate had no effect on a student's status in the diploma nursing program. Although the participants were known to the researcher, their identity was protected by coding the questionnaire. The code consisted of the first two letters of their mother's first name and the day of their own birth. This code was essential for allowing the researcher to pair pretest-posttest results and was used for no other purpose. Data were analyzed as group data and no individual responses were identified. Completed questionnaires and consent forms were stored in a locked file in the researcher's office. Since an extension of the study appears advisable, raw data will be retained for the necessary period of time. Following data analysis, questionnaires will be destroyed. Those students requesting feedback will be provided with a summary of the results.

CHAPTER 5: FINDINGS

Overview

The findings of this study are presented to facilitate the interpretation of the research question for nursing education as well as for further research. First the size of the sample is discussed with explanations for the loss of subjects which occurred during the study. Then the characteristics of the total sample are provided, as well as the similarities and differences between the experimental and control groups. This is followed by the reliability statistics for the instruments. The major findings of the study are then presented to support the decision made with respect to the hypothesis of the study. These data are then checked for congruency with respect to the subjects' personal evaluations of attitude change and those course factors which they feel may have influenced these changes.

Description of the Sample

Sample Size

The potential sample size consisted of 72 members of the first year class of diploma nursing students. Subjects in the sample were divided equally between the experimental and

the control groups according to their assignment to clinical groups in the nursing program. Sixty seven (93%) of the students volunteered to participate in the pretest and of these, 57 (79%) participated in the posttest. However, actual paired responses at the posttest were 52 or 72% of the potential sample size and 77.6% of the total pretest group.

There are several reasons for attrition at the time of the posttest. The investigator was unable to match five posttest identification codes with those in the pretest. As well, four students withdrew from the program during this time, and one was absent due to family illness at the time of the posttest. Another reason for attrition between the pretest and the posttest includes the voluntary nature of the study and subjects exercised their right to withdraw. Scheduling of the posttest may have affected the posttest participation, but since it was the end of the school year, and there were only two days from which to choose prior to school closing, the options were limited.

The number of students who participated in both the pretest and the posttest consisted of 29 students in the experimental group assigned to the PCU, and 23 students in the control group assigned to the acute care medical/surgical units in the home hospital. One of the students assigned to the experimental group did not complete the demographic section (Part III) of the questionnaire.

Demographic Data for the Total Sample

Demographic variables for the total sample (N=66) reflected the trend in diploma schools today. The number of students who come directly from high school has dropped considerably in the last ten years. The majority have been out of school from one to five years. Others enter nursing as a second career or as a first after raising a family. This was reflected by a positively skewed age distribution. The mean age was 24.5. Only seven (10.6%) of the subjects came directly from high school at age 19. Thirty two (48.5%) were in the 20-23 age range, 15 (22.7%) were in the 24-29 age range and 12 (18.2%) are age 30 and over. The age range in the total pretest group was 22 (19-41). There were four males in the sample. As expected, most of the subjects were single (77.3%).

The majority of the subjects (43) had high school education, one was a licensed practical nurse (LPN) and 22 had some education beyond high school. This included five with university degrees.

Although the institution has a Catholic affiliation, slightly more of the subjects identified their religion as Protestant than Roman Catholic (30 and 24). As well, only seven identified themselves as "very" religious while the majority (44) identified themselves as "somewhat" and "slightly" and 15 as "not very" or "not at all".

With regard to previous death experience, most subjects (54) had experienced the death of a family member. Twenty six had experienced the death of a close friend. Twenty six had seen a death and 29 had been in a situation where they thought they might die. The majority of the students (38) reported having cared for a dying patient during the program prior to the commencement of the palliative care course.

Demographic Data by Experimental and Control Groups

Although the students were not randomly assigned to the experimental and control groups, the groups were generally very similar with regard to demographic variables and therefore interference by concomitant demographic variables was slight. This was demonstrated by the use of the chi square test in contingency table analysis. Whenever two by two tables were used, Fischer's Exact test was used in place of the chi square test. Hence p-values attached to the two by two tables are for the Fischer's Exact test. Those attached to the larger tables represent the usual chi square test. The average age for the total, experimental and the control groups was 24.5, 24.9, 24.8 respectively. The distribution of the various age categories was similar as well (Table 1). With regard to education (Table 2), the groups were similar also. In the experimental group, the "other" category or those with some education beyond high school included all the subjects with university degrees (4)

TABLE 1
Age of Subjects at the Pretest

Age	Experimental Group	Control Group
19-23	15 (53.6)*	14 (60.9)
24-29	7 (25.0)	5 (21.7)
30-41	6 (21.4)	4 (17.4)
Total	28 (100.0)	23 (100.0)

*column percent $\chi^2 = .26, p > .05$

and one licensed practical nurse with previous nursing experience.

TABLE 2
Education of Subjects at the Pretest

Education	Experimental Group	Control Group
High School	17 (60.7)*	14 (60.9)
Other	11 (39.3)	9 (39.1)
Total	28 (100.0)	23 (100.0)

*column percent, Fisher's Exact Test, p-value = 1.00

A greater percentage of the two dominant religions was assigned to the control group (91%) than to the experimental group (75%) leaving 25% in the "other" category (Table 3).

TABLE 3
Religion of Subjects at the Pretest

Religion	Experimental Group	Control Group
Protestant	12 (42.9)*	11 (47.8)
Roman Catholic	9 (32.1)	10 (43.5)
Other	7 (25.0)	2 (8.7)
Total	28 (100.0)	23 (100.0)

*column percent $\chi^2 = 2.41$, p -value = 0.30

A greater percentage of the control group (65%) described themselves as very or somewhat religious than did the experimental group (50%). As well, there were no students in the control group in the "not at all" category (Table 4).

TABLE 4
Strength of Religion of Subjects at the Pretest

Religious Strength	Experimental Group	Control Group
Very	3 (10.7)*	3 (13.0)
Somewhat	11 (39.3)	12 (52.2)
Slightly	12 (42.9)	8 (34.8)
Not at all	2 (7.1)	0 (00.0)
Total	28 (100.0)	23 (100.0)

*column percent $\chi^2 = 2.34$, p -value > .05

There was no significant difference with regard to marital status by experimental and control group (Table 5).

TABLE 5
Marital Status of Subjects at the Pretest

Marital Status	Experimental Group	Control Group
Single	21 (75.0)	17 (73.9)
Married	5 (17.9)	5 (21.7)
Other	2 (7.1)	1 (4.4)
Total	28 (100.0)	23 (100.0)

*column percent, $\chi^2 = .27$, p-value = 0.88

Death Related Experiences by Experimental and Control Groups

The two groups were generally similar with respect to the distribution of death related experiences. This was demonstrated by the use of the Fischer's Exact test in the contingency table analysis. Table 6 indicates that 85.7% of the experimental and 82.6% of the control group have experienced the death of a family member. It was noted however that more of the students in the control group (5) than in the experimental group (1) experienced the death of a family member over the past year and thus had a more recent death experience. Although not significant, there was

TABLE 6

Experience of Death of a Family Member Among Subjects at the Pretest

Death Experience	Experimental Group	Control Group
Yes	24 (85.7)*	19 (82.6)
No	4 (14.3)	4 (17.4)
Total	28 (100.0)	23 (100.0)

* column percent, Fisher's Exact Test, p-value =1.00

an observable difference between the two groups in the average age of family members who died. The age of deceased family members for the control group was lower (50.5) than for the experimental group (64.5, $p = .07$).

There was a difference in the number of subjects who had experienced the death of a close friend, with more of the subjects in the experimental group having had this experience (Table 7).

TABLE 7

Experience of Death of a Close Friend Among Subjects at the Pretest

Death Experience	Experimental Group	Control Group
Yes	15 (53.6)*	7 (30.4)
No	13 (46.6)	16 (69.6)
Total	28 (100.0)	23 (100.0)

*column percent, Fisher's Exact Test, p-value =0.16

The groups were very similar with respect to having seen a

TABLE 8

Subjects Who Had Seen A Death Prior to the Pretest

Seen Death	Experimental Group	Control Group
Yes	13 (46.4)*	9 (40.9)
No	15 (53.6)	13 (59.1)
Total	28 (100.0)	22 (100.0)

*column percent, Fisher's Exact Test, p-value =0.78

death (Table 7) and to being in a situation where they thought that they might die (Table 9). There was a significant difference between the two groups with regard to care of the dying experience prior to the palliative care course (Table 10). Fifty percent of the experimental group

TABLE 9

Subjects Who Were in a Situation Where They Thought They Might Die, Prior to the Pretest

Death Possible	Experimental Group	Control group
Yes	11 (40.7)*	12 (54.6)
No	16 (59.3)	10 (45.4)
Total	27 (100.0)	22 (100.0)

*column percent, Fisher's Exact Test, p-value =0.39

and 82% of the control group reported that they had cared

TABLE 10

Subjects Who Had Cared for a Dying Patient Prior to the Palliative Care Course

Care of Dying	Experimental Group	Control Group
Yes	14 (50.0)*	19 (82.6)
No	14 (50.0)	4 (17.4)
Total	28 (100.0)	23 (100.0)

*column percent, Fisher's Exact Test, p-value =0.02

for a dying patient prior to the course.

In summary, despite the absence of randomization, the two groups were very similar with respect to demographic variables and generally similar with respect to previous

death experience. Potential sources of confounding variables arose in differences between the two groups with respect to age of the deceased family member, having experienced the death of a close friend and caring for a dying patient prior to the pretest. Of these, the variable which was most closely linked to the dependent measures was the experience of caring for a dying patient prior to the pretest.

Reliability of the Instruments

Levels of internal consistency reliability were calculated for the Winget, Collett-Lester and the Collett-Lester subscales. Standardized item alphas for the Winget were .74 and .68 and for the Collett-Lester were .78 and .79 at the pretest and posttest respectively. The mean inter-item correlation for the Winget scale was .08 (range of -.32 to .54) and for the Collett-Lester was .09 (range of -.34 to .54). The reliability for the Collett-Lester subscales was found to be acceptable, but as previously indicated, will not be used in this analysis. Cronbach's alphas ranged from .47 to .72 (Table 11). While pretest to posttest alphas on the Death of Self and Dying of Others showed some differences, these were not found to be significant (p -value = 0.076). In examining individual items, it was noted that there are no single items which have a significant effect on the alpha levels for either the total scale or any of the

TABLE 11

Internal Consistency Reliability of the Collett-Lester and Winget Scales for the Diploma and Bacalaureate Groups

Scale	Standardized Item Alpha		
	Diploma Group Pretest	Group Posttest	Bacalaureate Group *
	N=60	N=56	N=601
Winget	0.7354	0.6789	0.7727
Collett-Lester	0.7814	0.7862	0.6662
Collett-Lester Subscales			
Death of Others	0.4750	0.5444	0.3175
Death of Self	0.7233	0.5970	0.4585
Dying of Others	0.5993	0.7154	0.5471
Dying of Self	0.5260	0.4751	0.3142

*Degner, 1985, p.76

subscales. To provide further information about the reliability of the scales used in this research, significance testing for Cronbach's alpha was performed as laid out by Sloan (1986). Comparison of Cronbach's alpha on the pretest and posttest for the Winget and Collett-Lester scales revealed no significant differences. The p-value for the Winget is .23 and for the Collett-Lester is .46, indicating a consistency in the results obtained at the pretest and at the posttest.

Cronbach's Alpha was then compared with the findings of Degner (1985) on these scales for a sample of baccalaureate students (Table 11, right column). There was a significant difference in internal consistency reliability between the baccalaureate group ($n=601$, $\alpha=0.66618$) and the diploma group ($n=60$, $\alpha=0.7814$) on the Collett-Lester scale (p -value =0.005) at the pretest, indicating a greater reliability for the diploma group. There was no significant difference in internal consistency reliability on the Winget scale between the two groups ($p=0.229$).

Effect of the Type of Clinical Experience Objective/Statistical Data

The effect of the type of clinical experience was examined using the analysis of covariance (ANCOVA) model. Initially the normality of the dependent variables was examined by the use of descriptive statistics and the Shapiro-Wilk test for normality. The distribution of the scores for all subjects at the pretest was relatively normal for both the Collett-Lester and the Winget scales (Table 12). Pretest data indicated that the sample distribution of scores was relatively normal. Skewness and kurtosis for the Collett-Lester scores are comparable to those of a bell curve. Winget scores are negatively skewed and leptokurtic. Of note is that the mean scores for both the Collett-Lester and Winget scales for this diploma group are generally

TABLE 12

Pretest Data for the Collett-Lester and Winget Scales

Scale	Mean	SD	Skewness	Kurtosis	Range
Collett-Lester*	2.91	21.4	.072	-.087	102
Winget**	70.33	8.6	-.724	.752	45

n=67 *p-value =0.15 ** p value =0.098

similar to those of the baccalaureate group (Degner, 1985). The Collett-Lester mean score for the diploma group was 2.91 as compared with the baccalaureate group at -5.5. The Winget mean score for the diploma group was 70.3 as compared with the baccalaureate group at 66.9. Diploma students tended to show a slightly higher death anxiety than did baccalaureate students at the pretest. The difference with regard to attitude to the care of the dying was less marked.

The experimental and control groups were then compared for differences at the pretest and posttest. Analysis of variance results indicated no significant difference between the group means on the dependent measure, death anxiety, at the pretest (Table 13). There was however an observable difference on the mean scores at the pretest. The experimental group assigned to the PCU started the experience with a higher mean score on the Collett-Lester scale than the control group. This indicates the possibility

TABLE 13

One Way Analysis of Variance of Collett-Lester Scores at the Pretest

Group	Mean	SD	Source	df	MS	F
Experimental	3.90	18.09	between	1	382.6	0.81*
Control	-1.57	25.73	within	50	474.6	

*p-value = 0.3863

that the experimental group may have started their palliative care experience with a somewhat greater death anxiety as indicated by the scores on the Collett-Lester scale than the control group or those students assigned to the general medical surgical units in the acute care hospital. Analysis of variance indicates that there was no significant difference between the groups on the other dependent measure, attitude toward care of the dying, at the pretest (Table 14).

TABLE 14

One Way Analysis of Variance of Winget Scores at the Pretest

Group	Mean	SD	Source	df	MS	F
Experimental	71.72	8.16	between	1	55.06	.84*
Control	69.65	8.05	within	50	65.82	

*p-value = .3278

Before analysis of covariance (ANCOVA) was performed, the adequacy of the ANCOVA model was examined since it is crucial to choose an analytic model based on the statistical characteristics of the data, rather than one which will make the results look significant (Egger & Miller, 1984). For our purposes, the pretest score was to be used as a covariate for the posttest results. One assumption of ANCOVA is that the covariate is strongly related to the dependent variable. Pearson's correlation coefficient indicated that the pretest and the posttest for the Collett-Lester and Winget scales were strongly correlated ($r=0.694$, $p=0.0001$ and $r=0.591$, $p=0.0001$) yielding r^2 values of 48.3% and 34.9% of the variance respectively. A further assumption is that the effect of the group variable is unrelated to the covariate. In this study, assignment to the PCU was unrelated to the scores achieved at the pretest with $r=-0.125$, $p=0.37$ and $r=-0.128$, $p=0.36$ for the Collett-Lester and Winget scores respectively. It is also assumed that the regression slopes associated with the two treatment groups are the same. Figure 2 indicates that the regression lines for the Collett-Lester scale for both the experimental group and for the control group were similar and met the conditions for ANCOVA.

Exp. Group: Posttest (Y) = $-2.70 + 0.571(X)$ Pretest

Control Group: Posttest (Y) = $-7.33 + 0.648(X)$ Pretest

Figure 3 indicates that the regression lines for the Winget scale for both the experimental group and for the control group were similar as well and met the conditions for ANCOVA.

Exp. Group: Posttest (Y) = 31.19 + 0.510(X) Pretest

Control Group: Posttest (Y) = 20.42 + 0.660(X) Pretest

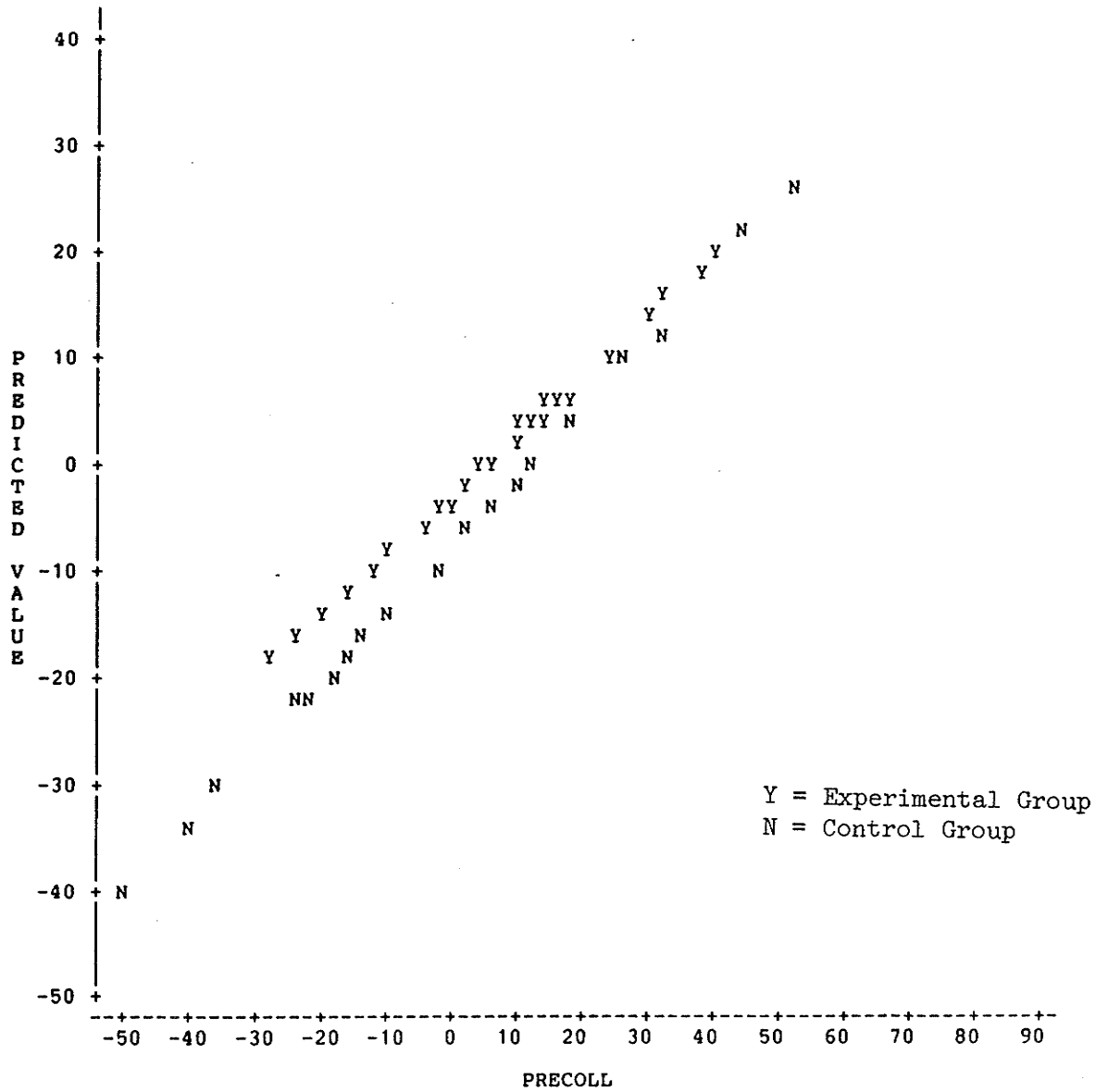


Figure 2: Pretest-Posttest Regression Lines of Collett-Lester Scores for the Experimental and Control Groups

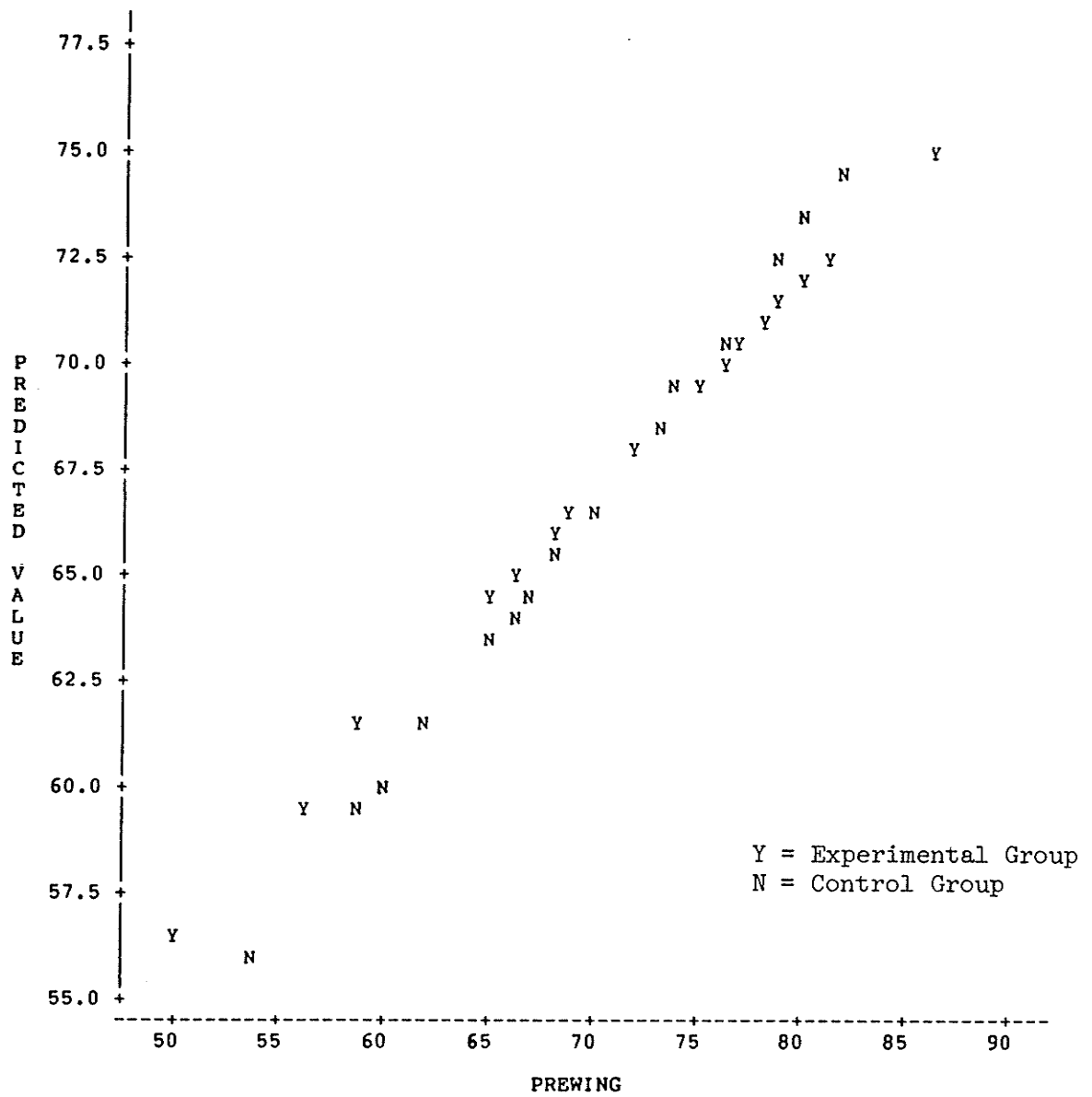


Figure 3: Pretest-Posttest Regression Lines of Winget Scores for the Experimental and Control Groups

ANCOVA of the Collett-Lester and Winget scores indicated that there was no difference between the experimental and control groups with respect to the dependent variables. No treatment effect for the type of clinical experience was demonstrated by either the Collett-Lester scores (Table 15).

TABLE 15
ANCOVA of Collett-Lester Scores

	Adjusted SS	df	MS	F	p-value
Assignment to PCU	254.42	1	254.42	1.24	0.2709
Pretest Error	9065.73 10054.72	1 49	9065.73 205.20	44.18	0.0001
Total	19913.92				

TABLE 16
ANCOVA of Winget Scores

	Adjusted SS	df	MS	F	p-value
Assignment to PCU	0.221	1	0.221	0.01	0.9427
Pretest Error	1088.34 2072.62	1 49	1088.34 42.30	25.73	0.0001
Total	3183.44				

or the Winget scores (Table 16). The means for the Collett-Lester scores including the adjusted posttest means are provided in Table 17.

TABLE 17
Collett-Lester Pretest-Posttest and ANCOVA Adjusted Means

Group	Posttest Mean	Adjusted Posttest Mean	Pretest Mean
Experimental	0.19	-1.98	3.90
Control	-7.16	-6.47	-1.57

The means for the Winget scores including the adjusted posttest means are provided in Table 18.

TABLE 18
Winget Pretest-Posttest and ANCOVA Adjusted Means

Group	Posttest Mean	Adjusted Posttest Mean	Pretest Mean
Experimental	67.1	67.2	71.7
Control	66.9	67.1	69.7

A profile of the pretest-posttest differences on the Collett-Lester scale showed that while the change was not significant, it was in the intended direction (Figure 4). Of note is that the experimental group had a higher mean at the pretest than the control group (Figure 4). There was also a greater decrease in posttest means for the control group than for the experimental group. Elimination of one low score (-66) would make these lines generally parallel.

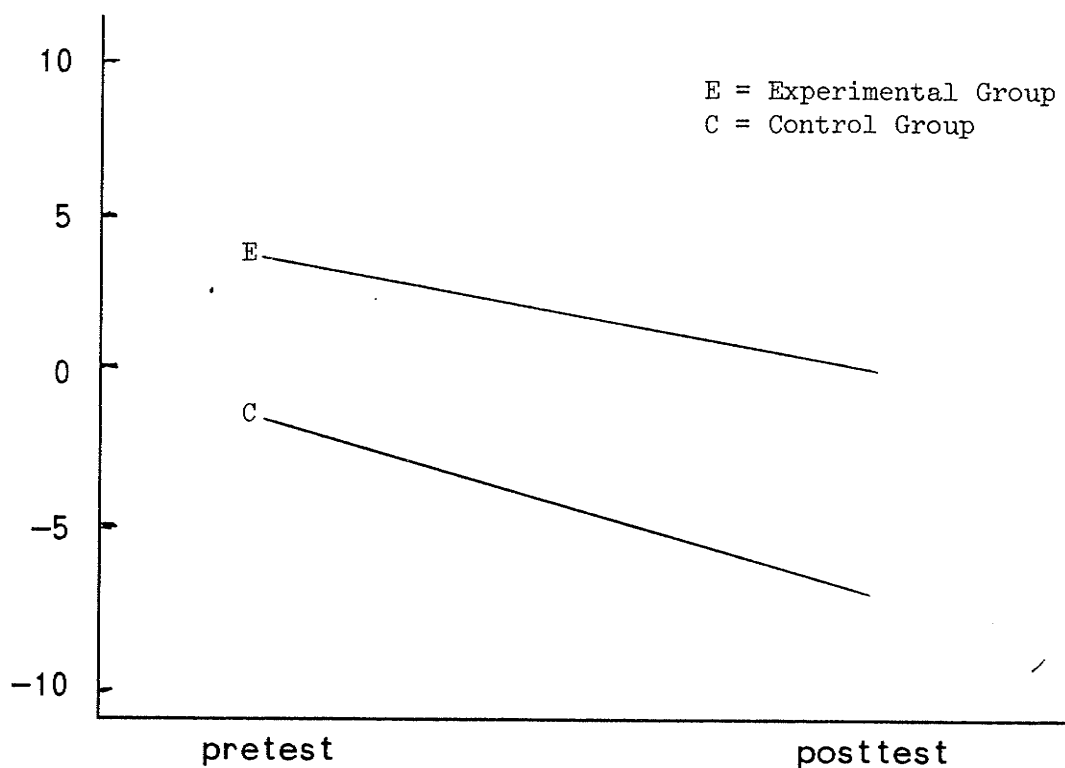


Figure 4: Collett-Lester Pretest-Posttest Means by Group

A profile of the pretest-posttest differences on the Winget scale showed that again the experimental group started out with a higher mean at the pretest than the control group. There was however a greater pretest-posttest difference in the experimental group and the means of the two groups converge to the same point at the posttest (Figure 5).

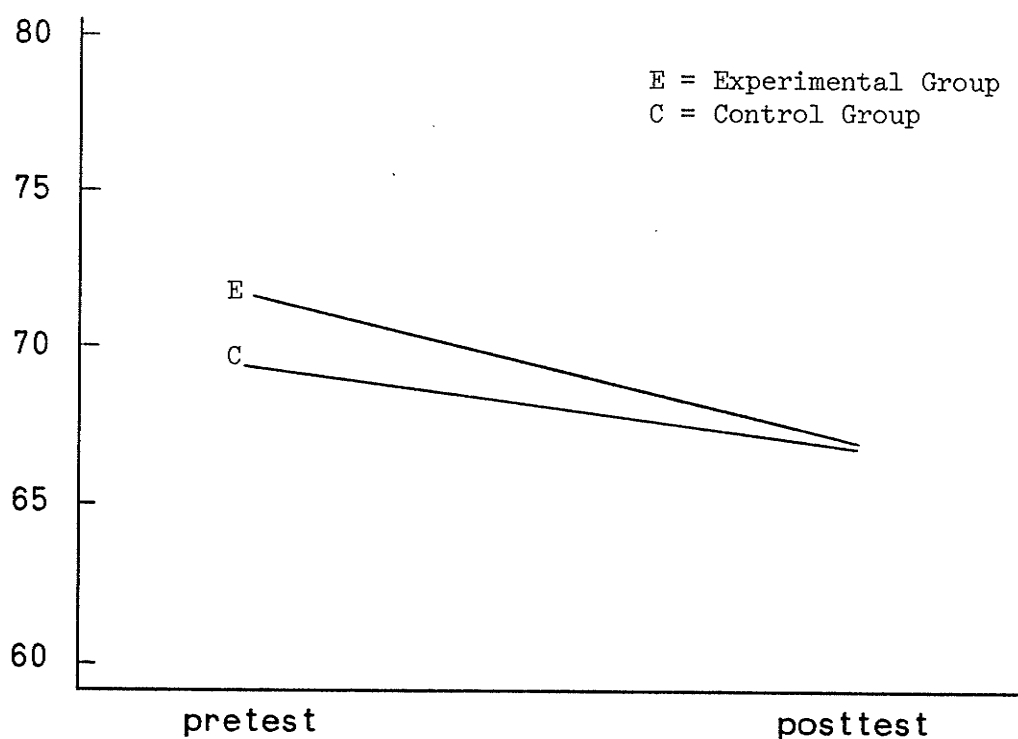


Figure 5: Winget Pretest-Posttest Means by Group

Since there was a significant difference between the groups with respect to previous care of the dying, ANCOVA was performed using previous care of the dying as a covariate. There was no significant difference noted between the groups when factoring out the effects of the previous care of the dying experience (Table 19).

TABLE 19
ANCOVA of the Collett-Lester Scores and Previous Care of the Dying

	Adjusted SS	df	MS	F	p-value
Assignment to PCU	283.09	1	283.09	1.33	0.2548
Previous Care of Dying	16.97	1	16.97	0.08	0.7789
Pretest	8842.65	1	8842.65	41.52	0.0001
Error	10010.80	47	212.99		
Total	19547.33				

Observable differences in pretest and posttest means were noted for three of four groups defined by group assignment and previous care of the dying (Table 20). In the experimental group, there was very little change from the pretest to the posttest mean score for the group who had previously cared for the dying. Those who had not had this experience demonstrated a greater difference in mean scores

TABLE 20

Pretest and Posttest Means on the Collett-Lester Scale by Group and Previous Care of the Dying

Means	Experimental Group		Control Group	
	Previous Care of Dying		Previous Care of Dying	
	Yes n=14	No n=14	Yes n=19	No n=4
Pretest	-1.71	7.14	-0.58	-6.25
Posttest	-2.85	0.79	-7.74	-11.25

F=.08 df=1 p-value = 0.78

following the palliative care course. This difference was not evident in the control group. The difference in the mean scores of both groups was similar to the mean difference of those subjects in the experimental group who had not previously experienced the care of the dying.

The age variable for the total group was also examined for its effect on the dependent variables. Table 21 reflects that the mean scores were not significantly different when subjects were categorized into age groups. The Winget means are virtually the same for the three groups. ANCOVA results indicated no significant difference between age groups on the Collett-Lester mean scores (Table 21). The Kendall Tau B Correlation Coefficient (0.125) confirmed that there was little correlation between age and Collett-Lester scores. The means for the first two age

TABLE 21

Differences in Means Scores on the Collett-Lester and Winget Scales by Age Categories at the Pretest

Scale	Mean scores		
	age 19-23 n=29	age 24-29 n=12	age 30-41 n=10
Collett- Lester*	-3.00	-2.08	15.20
Winget	71.24	70.83	70.70

* F= 3.74 p-value = 0.0642

categories were very similar. There was however an observable difference between these two groups and the 30-41 age group indicating a trend toward an increase in death anxiety with increasing age. The first two age groups were then collapsed as their means were very similar. Comparison of the remaining two groups indicated that there was a significant difference between the two groups on the mean

TABLE 22

Collett-Lester Pretest Means and Age Group

Age group	Mean	Std Error	t-value
age 19-29 n=41	-2.73	3.37	13.97
age 30-41 n=10	15.20	4.67	

df=49 p-value < 0.0001

scores as demonstrated by the t . test (Table 22). The plot of age and scores at the pretest confirmed this trend for the Collett-Lester scale (Figure 6). It is noted that the n for the age 30-41 group was only 10. The plot of age and the Winget scores showed no relationship as indicated by the Kendall Tau B Correlation Coefficient of 0.010 (Figure 7).

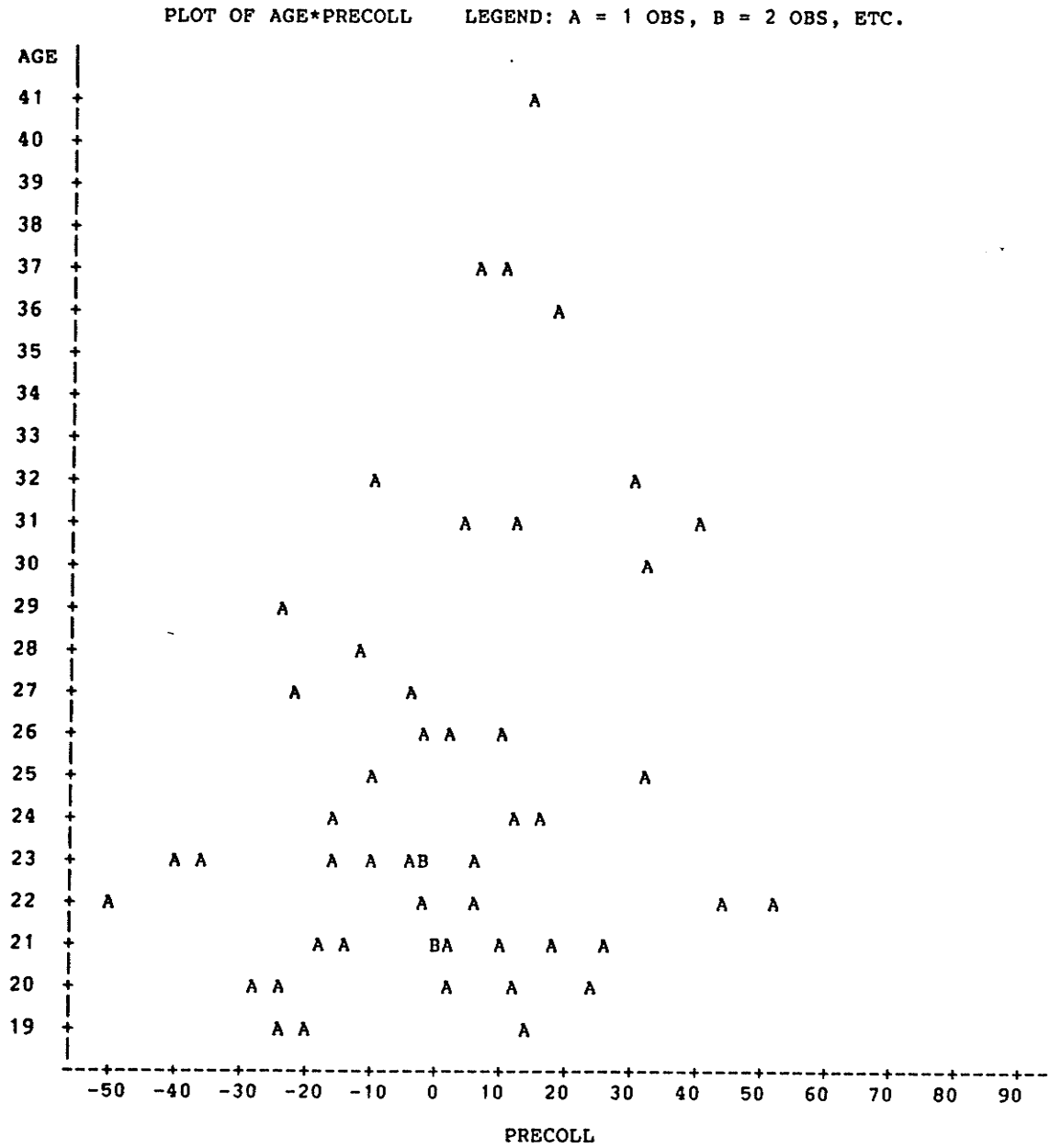


Figure 6: Plot of Collett-Lester Scores at the Pretest and Age

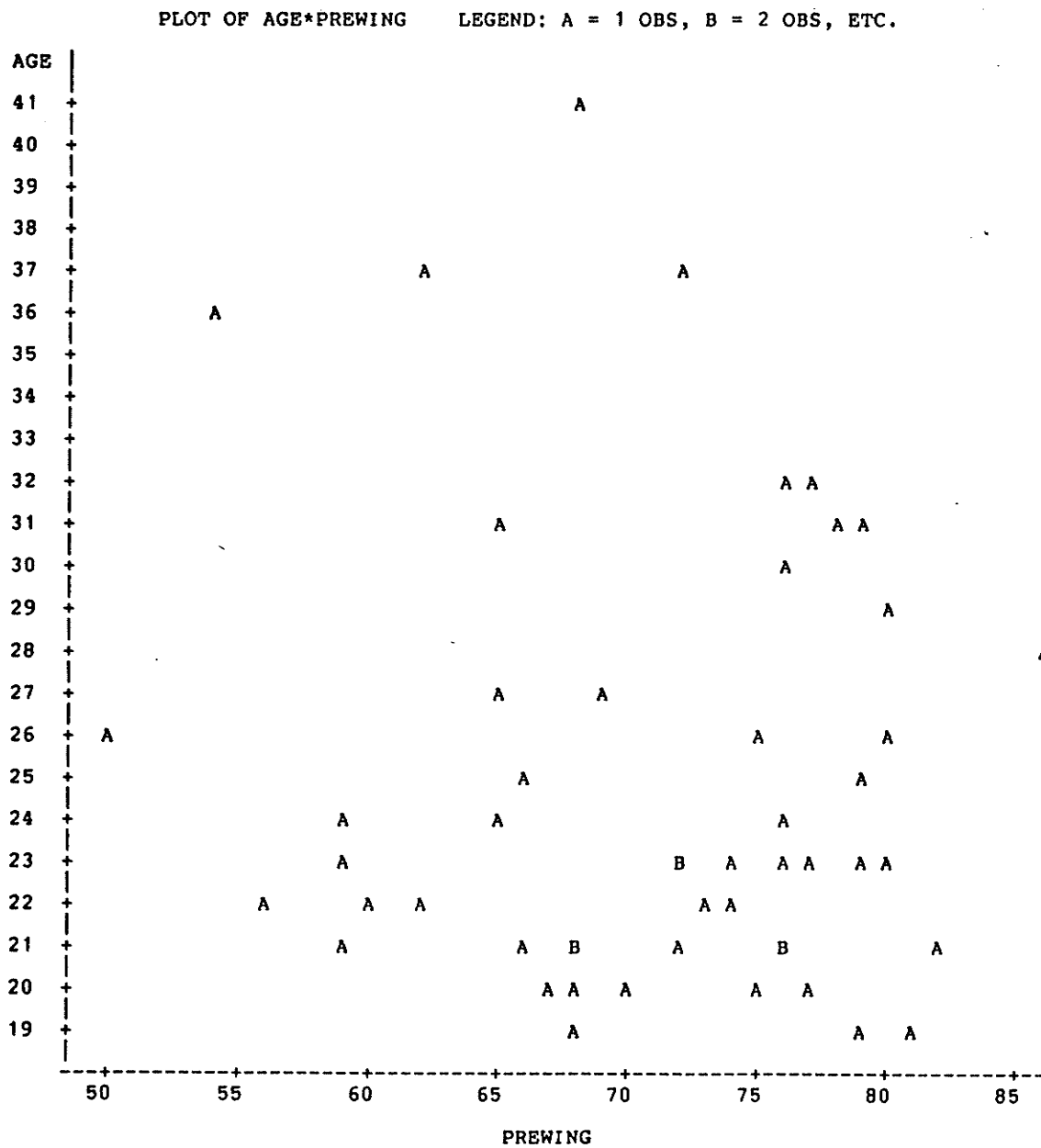


Figure 7: Plot of Winget Scores at the Pretest and Age

In summary, the data supported the null hypothesis of the study. There was no significant difference detected in death anxiety and attitudes to the care of the dying scores of

students who were assigned to a PCU and those who were assigned to the general medical surgical units during a palliative care course.

Subjective Data

Posttest information provided further data with respect to students' clinical experiences and their own subjective evaluation of a change in attitude at the completion of the palliative care course at the end of the first year of the diploma program. Students in the experimental group all had experience in caring for dying patients in the PCU. Twenty-two of 32 also cared for dying patients at the acute care hospital. All students in the control group also reported caring for a dying patient.

Perception of Attitude Change.

In response to the question whether their attitudes toward death and dying had changed since the pretest, 12 students (21%) indicated that they had changed very much, 34 (60%) that there was some change, seven (12%) were uncertain and four (7%) indicated that there was no change in attitudes (Table 23). In the group which indicated that their attitudes had changed "very much", all but one were assigned to the PCU for clinical practice.

Perception of attitude change was then compared with the mean scores on the Collett-Lester and Winget scales (Table

TABLE 23
 Student Responses to the Question of Attitude Change Since
 the Pretest

Group	Attitude Change			
	very much	some	uncertain	none
Experimental	11 (19.3)*	19 (33.3)	2 (3.5)	0 (0.0)
Control	1 (1.6)	15 (26.3)	5 (8.8)	4 (7.0)
Total	12 (21.1)	34 (59.6)	7 (12.3)	4 (7.0)

*cell percent

24). The Collett-Lester mean scores showed some congruency with perception of attitude change. There was an inverse relationship between scores and attitude change in the first three categories. There was a marked increase in death anxiety between the "some" and "uncertain" groups. The "none" group showed a markedly lower mean than any of the other groups. It is noted that there were only four subjects in the latter group, and one low score (-66) was responsible for this extreme mean. For the Winget scale, means varied only slightly with the change in the expected direction.

With respect to demographic and death related experience variables (Appendix E, Table 28), six of the students in the "very much" group were Protestant and three were Roman Catholic. Nine students had experienced the death of a

family member and six had previously cared for a dying patient. In the "none" group, all four had previously cared for a dying patient, had experienced the death of a family member, had seen a death and had been in a situation where

TABLE 24
Collett-Lester and Winget Posttest Means Related to
Perception of Attitude Change

Scale	Attitude Change			
	very much	some	uncertain	none
Collett-Lester*	-5.5	-3.6	15.1	-22.8
Winget**	66.0	67.0	68.1	68.0

Kruskal-Wallis Test, * $p > .036$, ** $p > .874$

they thought they might die.

A further comparison was made with perception of attitude change and pretest-posttest mean differences (Table 25). The mean Winget pretest-posttest differences reflected some congruency between perception of attitude change and differences from the pretest to the posttest (Table 25). Congruency between perception of attitude change and scores was not reflected in the Collett-Lester results. Both the "uncertain" and "none" groups showed a greater pretest-posttest difference than did the "very much" and "some" groups. This inconsistency between subjective perceptions

TABLE 25

Pretest to Posttest Mean Differences on the Collett-Lester and Winget Scales Categorized by Perception of Attitude Change

Scale	Attitude Change			
	very much	some	uncertain	none
Collett-Lester*	-5.75	-4.07	-7.17	-12.25
Winget**	-5.08	-3.30	-0.83	-6.00

Kruskal-Wallis Test, * $p > .689$, ** $p > .465$

and objective scores was further reflected on the Winget mean differences for the group of four who perceived no attitude change. Note that none of these were assigned to the PCU.

The mean pretest-posttest difference on the Winget for the group who indicated "some" attitude change was, as expected, smaller than for the "very much" group. Of these, 19 of 34 were assigned to the PCU. The group who were "uncertain" about their attitude change showed a very slight decrease between pretest-posttest mean scores (-0.83). However, on the Collett-Lester scale the group who were "uncertain" showed a greater pretest-posttest mean difference than did the "very much" and "some" groups.

Data with regard to how they perceived that their attitudes had changed is summarized in Table 26. Note that

TABLE 26

Responses to the Question of How Attitudes Had Changed Since the Pretest

How Attitudes Have Changed		n=57**
more positive in my attitude 50 (87.7)*	no change 3 (5.3)	more negative 1 (1.7)
less fearfull 34 (59.6)	no change 17 (28.8)	more fearful 3 (5.3)
more accepting of death 47 (82.5)	no change 7 (12.2)	less accepting ---
more comfortable in talking about death 49 (85.9)	no change 5 (8.7)	less comfortable ---
more prepared for own death 21 (36.8)	no change 32 (56.1)	more unprepared 1 (1.7)
more prepared to deal with others deaths 52 (91.2)	no change 2 (3.5)	more unprepared ---
more confident in providing care 53 (93.0)	no change 1 (1.7)	less confident ---
more comfortable in talking to patients about dying 43 (75.4)	no change 11 (19.3)	less comfortable ---

* row percent

** 3 (5.3) no response

most students indicated their attitudes had changed positively, and the number of students reporting a negative change is negligible, relating to only three of the eight options. A significant number indicated "no change" in attitude with regard to fear of death (17), being prepared for their own death (32), and being more comfortable in

talking to patients about dying (11). There was some incongruency between the overall question of attitude change (Table 23) and the questions of how their attitudes had changed (Table 26). Of the four subjects who indicated that their attitude had not changed (Table 23), two indicated they were more comfortable in talking about death, they were more prepared for their own death, they were more prepared to deal with others' deaths, that they were more comfortable in caring for the dying, and one of these indicated that her attitude was generally more positive.

In order to check further for congruency between scores on the dependent variables and students' perception of how their attitudes had changed, the pretest-posttest differences on both the Collett-Lester and Winget scales were charted for each of the eight attitude change questions presented in Table 26. A "positive" attitude should be reflected in a lower posttest score (labelled negative); "no change" in attitude should be reflected in a score which remains generally the same (labelled no chg); and a "negative" change should be reflected by an increase in scores (labelled positive) from the pretest to the posttest. Congruency would be found if frequencies fall primarily on a diagonal line in the tables. The tables (29-44) in Appendix E indicate the results of this tabulation with respect to each of the items in Table 26 for both the Collett-Lester and Winget scales. An arbitrary decision was made to use

one standard deviation (SD) as the indication of a positive or negative attitude change. A score within plus or minus one SD would indicate no change. The standard deviation for the Collett-Lester and Winget scores on the posttest was nineteen and eight respectively. Fifty four of 57 students completed both the scales and answered the subjective questions on the posttest.

With very few exceptions, student perceptions showed either a "positive" change or "no change" in their attitudes. For this reason the diagonal line is not evident in the tables, which means that there is little congruency between the change in scores from the pretest to the posttest on the dependent variables and the subjective data obtained by direct measures. The student who indicated a negative attitude change with respect to how attitudes had changed generally (Tables 29 & 30), had lower Collett-Lester and Winget scores, indicating less anxiety and more positive attitudes to the care of the dying. This is also true with respect to preparedness for own death (Tables 37 & 38). Three students who indicated a negative response to fear of death (Tables 31 & 32) reflected either lower Collett-Lester and Winget scores or no change. While none of the negative attitudes reflect higher scores on either scale, positive attitude change or no change frequently showed an increase in scores. This occurred most frequently in the positive attitude group.

Without exception, the tables reflect that the majority of the scores have not changed from the pretest to the posttest. One other trend reflected in the data is that the Winget scale would tend to reflect greater congruency on all the attitude change questions than the Collett-Lester scale in the group who indicated that their attitudes were more positive. For example, in Table 29 (Appendix E), only eleven of 50 students who indicated that their attitudes were more positive, had lower Collett-Lester scores, indicating less anxiety, while three showed an increase in anxiety. On the Winget scale (Table 30), 14 of 50 students' scores reflected a positive attitude change and only two reflected a negative change. Hence stark discrepancies were observed between the students' subjective and objective measures with regard to death anxiety and caring for the dying. This points to a possible lack of sensitivity in the objective measurement tools.

The students were also asked to describe in their own words their attitudes toward caring for dying patients. Forty-eight of fifty-seven responded. However, the majority of responses related to how the dying should be cared for rather than their own attitudes. Responses were concerned with patient comfort and freedom from pain, helping them to express their grief, need for maintaining their dignity, listening and answering their questions, and just being there. It seemed as though the students were anxious to

communicate what they had learned during the course of their experience. Possibly they were expressing what they thought they would be expected to say following the course.

Those responses (13 of 48) which expressed more of their own feelings about their experience with dying patients included such comments as more able to help a dying patient cope with impending death; not as afraid as they had expected; before the course was afraid of what to say to the dying patient and now felt much more comfortable; not afraid to show feelings and that it was an experience they would not have wanted to miss. Others felt "more reassured with myself", able to give emotional support, therapeutic communication had improved, more at ease and found it easier to talk to patients, and were still nervous but not nearly as nervous as before. These responses were generally in agreement with their previous answers with respect to attitude change. One student who indicated that it made her sad and depressed hoped that she could make a patient's last days better than if she had never been there. Another who expressed sadness added that she knew it was a valuable experience. One student expressed it as "a very scary feeling, also rewarding".

Factors Affecting Attitude Change.

The students were then asked to identify the three factors in the program which contributed most significantly

TABLE 27

Three Most Significant Factors Which Affected Attitudes to Death and to Care of the Dying

Program Factors	Students' Choice of Factors n=57			
	1	2	3	Totals
Seminars on death and dying	11(19.3)	9(15.8)	8(14.0)	28(49.1)
Caring for a dying patient	23(40.4)	17(29.8)	10(17.5)	50(87.7)
Sharing feelings about dying and death	5(8.8)	13(22.8)	15(26.3)	33(57.9)
Experience in the PCU	10(17.5)	6(10.5)	11(19.3)	27(47.4)
1:1 discussion with the teacher	4(7.0)	3(5.3)	6(10.5)	13(22.8)
Teacher role model	2(3.5)	6(10.5)	2(3.3)	10(17.5)
Staff nurse role model	2(3.5)	2(3.5)	3(5.3)	7(12.3)

to their attitude change (Table 27). Frequency tabulations of the factors listed leave little doubt that the students perceive "care of the dying patient" as the most important factor in their learning which contributed to attitude change. While "experience in the PCU" is only fourth, it must be remembered that only 32 of 57 students had this experience or were eligible to make this choice.

Five students who were assigned to the PCU did not check this as one of their choices. There is some overlap between "caring for the dying patient" and "experience in the PCU".

This may have caused some confusion and may be the reason why not all students with PCU experience checked this as a significant factor. However, all five checked caring for a dying patient as either their second or third choice. Of students not assigned to the PCU, only 2 did not check "caring for a dying patient" as a significant factor. Of those assigned to the PCU, 21 checked both "caring for a dying patient" and "experience in a PCU". The other important factors were "sharing feelings about death and dying" and "seminars on death and dying" as second and third choices respectively. The other choices, "one to one discussion with the teacher", "teacher role model" and "staff nurse role model", were seen as less important. Students were also invited to add their own choices. One student listed as her first choice, "the personal experience of death of someone close to me".

Summary

Statistical data indicated that there was no significant difference between the experimental and control groups with respect to death anxiety as measured by the Collett-Lester Fear of Death scale and attitudes to care of the dying as measured by the Winget Questionnaire for Understanding the Dying Person and His Family as a result of experience in a PCU. Subjective data, which were not statistically analyzed but discussed as descriptive data, provided reason to

question these conclusions. Students perceived that their attitudes had in fact changed in the desired direction. In addition, they indicated that "care of the dying" was the most influential factor in their learning.

CHAPTER 6: DISCUSSION AND CONCLUSIONS

Overview

The discussion of the results will focus initially on the findings of the study. Possible reasons for the lack of significance of the results will be discussed in conjunction with the limitations of the study and the results of the subjective data. The findings will also be compared with previous research on death education in nursing, and specific comparisons will be made with the findings of Degner (1985) about differences between baccalaureate and diploma students. Further, the implications of the findings for nurse educators will be highlighted. The implications of the findings for further research, specifically the use of the tools for the measurement of death anxiety and attitudes to the care of the dying, will be discussed.

In general, statistical results indicated that the hypothesis of the study should be rejected. No significant differences in death anxiety or in attitudes to care of the dying from the pretest to the posttest were found as a result of the palliative care course and specifically the assignment of students to the PCU. There are several possible reasons for these findings. One is that the

palliative care course and specifically the type of clinical experience in fact do not make a difference. Another reason may be that there was insufficient time for the students to internalize their learning between the pretest and the posttest. A further possibility is that the instruments used were not sensitive enough to detect pretest-posttest differences in this group and that subjective perceptions by the students with regard to attitude change should not be totally discounted.

Discussion of Results

Objective Data

Statistical conclusion validity may be in question for a number of reasons. Subjects were not randomly assigned to groups. However, as indicated in the findings, the groups were very comparable with respect to demographic variables and death experience generally. One exception was previous experience in caring for the dying. However, the statistical model chosen eliminates or adjusts for the effect of initial differences among the study groups (Abdellah & Levine, 1986). One other factor is that sample size is also approaching the lower limits considered adequate to ensure that the sampling distribution of the mean approximates the normal curve (Nieswiadomy, 1987). The experimental group (n=29) and the control group (n=23) are in fact below the suggested number of 30. The reliability of the tools was

found to be acceptable and generally comparable with that of the baccalaureate group (Degner, 1985) for the Winget and significantly better for the Collett-Lester scale. This may indicate that reliability of the Collett-Lester scale is not consistent among different groups. Other possible reasons for this finding may be that the diploma group was a more homogeneous group than the baccalaureate group. As well, the time interval between administration of the pretest and the posttest was approximately three and one-half months as compared with eight months between testing for the baccalaureate group. The possibility for recall exists for the diploma group while this is extremely remote for the baccalaureate group.

In searching for clues to the non-significance of the results it is noted that students assigned to the PCU started their experience with a slightly greater death anxiety than did the control group. Although statistically not significant, it may have affected the results. The reason for this group difference may be that the students assigned to the PCU did in fact have a higher death anxiety or it may have happened by chance. It could also be that they were anxious about their experience in a PCU in a strange institution as well as the fact that they would be caring for dying patients. Other students, although assigned to new clinical areas, were in a familiar setting. These differences may have affected anxiety/attitude scores

between the two groups at the pretest. This parallels the findings of Degner and Gow (in press) who also found higher death anxiety at the pretest in students taking the palliative care course than those taking the integrated course.

There is evidence in the literature to suggest that the length of exposure is significant and that reduced anxiety cannot be expected until the students have had an opportunity to internalize their learning (Yarber et al., 1981). In this study, the palliative care course was scheduled in the spring session of the first year of the program, a relatively brief period to expect first year students to internalize this learning and have it reflected in an objective type of measure. The results support the findings of some previous studies (Laube, 1977; Murray, 1974; Yarber et al., 1981), which found no change in death anxiety immediately following instruction. The former two studies found a decrease in anxiety four weeks following the first posttest. Similarly, the current study supports the findings of Caty and Tamlyn (1984) who found no significant difference in attitude change between pretest and first posttest three months following a two-day seminar for third year baccalaureate students. They did find a significant difference in the second posttest which was administered 11 months later. Abdellah and Levine (1986) pointed out that insufficient time between the application of the independent

variable and measurement of the dependent variable can at times result in a Type II error or in accepting the null hypothesis when it is in fact false. They caution researchers to allow for sufficient time between the pretest and posttest measure. Measurements in Degner (1985) were made prior to and at the end of the third year in the baccalaureate program which allows a considerably longer period of time for the students to internalize their learning. Data indicated a significant reduction in death anxiety in the experimental group at the first posttest. While the length of exposure is a limitation of this study, the lack of significant findings immediately following death education does not preclude the possibility of attitude change at some later point in time (Yarber et al., 1981).

This study further supports the idea that longitudinal data would be preferable to a one-time pretest-posttest design which would allow the researcher to place greater confidence in the results. As reported above, Caty and Tamlyn (1984) found a significant improvement in attitudes eleven months after the first posttest. In their longitudinal study, Degner and Gow (in press) administered a second posttest one year following graduation. While there was no significant difference at either of the posttests between the experimental and the nursing control group on death anxiety, attitudes to care of the dying were significantly better than the nursing control group at the

pretest and at both posttests indicating support for the special course approach in undergraduate nursing curricula. The one-time pretest-posttest design is a definite limitation of this study.

Another issue may be the timing of death education for the diploma student. In this study it was scheduled in first year. Although Quint (1967) speaks about the importance of exposure to the dying early in the program, baccalaureate programs described in the literature scheduled death education in the third year (Coty & Tamlyn, 1984; Degner & Gow, in press). Possibly maturation, professional socialization and the various other educational experiences could be expected to have had some effect on the significance of the results. A comparison between the diploma group and the second control group in the baccalaureate study (Degner, 1985) showed that diploma students had lower although probably not significantly different Collett-Lester mean scores than did the Home Economics group at both the pretest and the posttest. Although differences in mean scores between diploma and baccalaureate nursing groups on the Winget scale were small, they were substantially greater on the Collett-Lester Fear of Death scale for the diploma group. The scheduling of this experience early in the program could have accounted for some of this difference. While students at this point had had numerous hours of patient contact, their length of

time in the program was limited as was their socialization to nursing.

The course length, the length of exposure to the dying in their clinical practice, and the point of time in the program when it was scheduled may all have been significant factors in the results. The student was put in the difficult role of caring for a dying patient when she was more than likely still struggling with her own attitude to dying and death. It was unrealistic to expect any significant change to be present, especially on indirect measures such as the Collett-Lester and the Winget scales, after 14 days of clinical practice spread over a period of three to four weeks. Unfortunately, in a two year program, time is limited and since exposure to the dying is a reality, the placement of death education at the end of first year was deemed to be most appropriate.

The findings of this study point to care of the dying as the most influential factor in attitude change, confirming that the timing of the pretest is crucial. While time constraints of the researcher's academic program prohibited it, the preferred time to pretest the students would have been at the beginning of the program, prior to any clinical experience. Sixty-three percent of the students indicated that they had experienced the care of a dying patient in the program prior to the pretest. This may have been a prominent factor in the small differences seen between the pretest and

posttest means on the dependent variables and may have resulted in the nonsignificant findings in this study. Data in Table 18 indicated that the students in the experimental group who had previously cared for dying clients showed very little decrease in death anxiety at the posttest. The results for the control group were however not consistent with these findings as students in the control group who previously cared for the dying reflected similar differences in pretest-posttest scores as did the students in the experimental group who had not previously cared for the dying. Eliminating the confounding effects of having cared for the dying at the pretest would strengthen future research.

A confounding variable frequently discussed in the literature is age. Generally, previous studies have indicated that older nurses have less death anxiety (Gow & Williams, 1977; Murphy, 1986). In this study older students (30 and over) tended to have greater death anxiety than did those below age 30. The difference is possibly that subjects in the above-mentioned studies were registered nurses with varying length of nursing experience whereas subjects in the current study were still students with very limited experience. Although older students may well have had more personal death related experiences, these have not reduced their anxiety levels. This confirms the findings of Cook Coolbeth and Sullivan (1984) and Murphy (1986) who

found no significant effect for personal death experience on death anxiety. Similarly, Denton and Wisenbaker (1977) found that a death in the family or the death of a friend were not related to death anxiety.

Subjective Data

Statistical analysis of objective, dependent measures would lead the researcher to believe that the null hypothesis should be accepted. This decision was however complicated by the results of the subjective data. The results of subjective data, the students' own perceptions of attitude change obtained by direct measures, did in fact indicate an attitude change in the preferred direction. This puts in question the sensitivity of the scales used in the study to detect pretest-posttest changes in death anxiety and in attitudes to the care of the dying.

Subjective data provided support not only for overall improved attitudes to death and dying in general, but also they provided some support for the PCU experience (Table 23). There were 12 students who indicated that their attitudes had changed "very much". Of these, all but one had experience in the PCU. Of the four students who perceived that their attitudes had not changed, none had a PCU experience. Of the 34 who perceived "some" attitude change, more than half (19) were in the PCU group. Of the seven students who were "uncertain" whether their attitudes had

changed, only two were assigned to the PCU. A total of 30 (93.7%) students in the experimental group compared with 16 (64%) students in the control group indicated that their attitudes had changed "very much" or "some" since the pretest. In spite of the fact that the actual experience was only 14 days in length and that it included an orientation to a new institution, the trend seemed to be in favor of the PCU experience. This was confirmed by the students' perception of factors which had significantly influenced their changes in attitudes (Table 27). Twenty-seven of thirty-two (84%) assigned to the PCU chose this as a significant factor in attitude change. The remaining five in the group chose care of the dying which may have been related to the fact that these factors overlap.

With regard to the choice of factors which affected their attitudes, the most important choice was caring for a dying patient. This supports the premise of Quint (1967) who indicated that actual care of the dying must be included as a part of death education. The second and third choices were sharing of feelings about dying and death and seminars on death and dying. Similar results were reported by Martin and Collier (1975), who found "care of the dying" was the second most cited factor (25%) affecting students' attitudes toward death, with 30% advocating it as a beneficial learning experience for death education. Their most frequently cited factor (29.5%) was the "seminar on death,

grief and grieving" and 15% specified "exploration of personal feelings" as useful. These findings were consistent with Wheeler (1980) whose results indicated that learning experiences in the most recommended categories were representative of all three domains. This was also congruent with the conceptual framework of the present study, indicating that for attitude change to take place, learning experiences in all three domains must be provided, since attitudes as well have cognitive, affective and behavioral components (Yeaworth et al., 1974).

One question that needs to be raised is whether the students were responding in the way they thought they should respond (Lemon, 1973). This is difficult to answer. The explanation of the purpose of the study prior to the pretest should not have contributed to such a bias. The students were told that care of the dying is an aspect of nursing that many nurses find difficult and that nurses often indicate their education did not adequately prepare for them for this aspect of their role. They were further told that the purpose of the study was to evaluate this aspect of their program (Appendix C & D). It did not allude to the hypothesis that the type of clinical experience may make a difference.

The value of subjective perceptions in the assessment of attitudes needs to be raised as well. One view is that respondents can best tell the investigator what their

attitudes are and that they in fact have "privileged access" to this information (Lemon, 1973, p. 59). Although in this study one is tempted to accept this view, it is necessary to consider the other view that subjective measures are merely another form of behavior and that these data should not be given preferential status over other measures (Lemon, 1973). It is possible that the positive responses to the direct attitude change questions may be the result of their perception of expectations which are desirable. However in looking more closely at the question of how their attitudes had changed (Table 26), there seemed to be a pattern emerging. While students felt more positive in their attitudes generally and in being more accepting of and more comfortable in talking about death, they were less comfortable when they were directly involved. More students found no change with respect to fear and in feeling prepared for their own death. Some of these fears also carried over to their direct involvement with patients. While 53 were more confident in providing care, only 43 were more comfortable in talking to patients about dying. This again indicates that time is required for attitude change (Combs, 1981). These data would also support the position that students were not responding merely as they thought that they would be expected to respond.

Objective and Subjective Data

Comparison of objective and subjective data gives indication of some incongruency between these data. Such findings may relate to the length of the overall experience. Since it is possible that the learning has not yet been internalized (Yarber et al., 1981), pretest-posttest differences do not yet show up on an objective type of measure. Pretest-posttest differences related to perception of how their attitudes had changed showed only partial congruency (Tables 29-44). This may have been influenced to some extent by the definition of change with respect to the scores. Possibly the choice of plus or minus one SD as the cut-off between no change and positive or negative change for the scores on the dependent variables was somewhat high. The choice of an arbitrary number would have provided different results. However, the investigator decided that relating the cut-off to the variability of scores was more logical than simply choosing an arbitrary number.

In this study students have indicated that the experience of caring for a dying patient is the most important one (Table 27). This is supported by a greater negative difference in mean scores in the experimental group for those who had not had previous exposure to the dying (Table 20). Also, as noted earlier, of four students who perceived no change in attitudes, all had exposure to the dying prior to the pretest. They also demonstrated a substantial mean

difference from the pretest to the posttest. Although this group had only four students this might well point to care of the dying as an influencing factor in reducing death anxiety. It is also possible that this group entered the program with already better attitudes to dying and death. This may relate to changes in enrollment in schools of nursing today. The majority of entrants no longer come directly from high school but are individuals with a wide variation in age and experience which may include various death related experiences.

In summary, there seemed to be a strong indication that the experience of caring for the dying is a significant factor in learning to provide sensitive comfort care for dying patients and their families. Whether the PCU experience makes a difference is not as clear. However, if any credence is given to subjective data, this may well be a relevant factor which requires further study.

Limitations of the Study

The limitations of the study are summarized as follows:

1. The sample was small and consisted of the total target population of first year diploma nursing students in one diploma program. The results are therefore not generalizable to diploma students generally.

2. Enrollment in diploma nursing schools is no longer limited to entrants from high school but includes individuals with a wide variation in age, education and experience which may also include various death related experiences.
3. Random assignment to experimental and control groups was not possible due to predetermined clinical groups.
4. Due to the 20 month time frame of the diploma program, the students by this time have had a variety of clinical experiences in the first year and may have cared for a dying patient.
5. The literature review indicates that such learning is acquired over time and that students require time to internalize this of information in order to put it into practice. For this reason, longitudinal data is preferable to a one-time pretest posttest design.

Implications for Nursing Education

The challenge for nurse educators is to structure death education in their curricula so that the sociocultural attitudes which students bring to the nursing program will be changed with the result that ultimately as graduates, they will be comfortable and confident in providing care for the dying. The conceptual framework of this study suggested that change in attitude comes about when students

have the opportunity to provide care to the dying along with learning in the cognitive, affective and psychomotor domains. The findings of this study suggested that the specific course approach was effective in assisting students in learning to care for dying patients and their families. The three most significant factors in this study which were found to decrease anxiety and affect attitude change towards the dying, in order of importance, were:

1. The experience of caring for the dying.
2. Sharing of feelings and experiences related to dying and death in small group discussions which is primarily affective learning.
3. Seminars on dying and death which include cognitive and affective learning.

Of particular importance was the strong indication for the importance of caring for the dying as part of the student experience. Also of note is that this systematic assignment to dying clients occurred within the context of the palliative care course rather than in an integrated approach. While these conclusions are based on subjective data, they would seem to be worthy of consideration in the planning of nursing curricula.

Implications for Further Research

Many of the implications for further study arise from the limitations of this study. A larger sample would increase the probability of detecting pretest-posttest change and increase confidence in the results. Since diploma programs tend to use an integrated approach to death education, it may be difficult to obtain a larger sample for a replication of the study. The alternative would be to use two or more cohorts. This continues to limit the generalizability of the results.

Further research should ensure that the pretest is administered on entry into the program. This would eliminate the confounding effects of caring for the dying prior to the pretest as happened in this study. Consideration should also be given to the implementation of a longitudinal study since students require time to internalize their learning and provide the necessary time for attitude change. For this reason a second posttest is planned as an extension of the present research.

This study gives reason to question the validity and reliability of the measurement scales used. Exploration of other valid measures or the construction and testing of new instruments would be useful. One other alternative is to use more than one scale to measure each of the constructs since the use of one instrument may lead to "mono-operation bias"

(Degner & Gow, in press, p. 18). If subjective data is deemed to be of use, these questions should be restructured. Possibly they should be limited to open ended questions. This might avoid overlap as is present in the list of factors affecting attitudes (Table 27).

The data in this study gave rise to further questions about the best way to structure death education in diploma nursing education. Findings with respect to the dependent variables in this study did not confirm that experience in a PCU or that a special course approach might have any advantage over another approach. While the literature indicates a preference for a special course approach with systematic assignment to dying clients at the baccalaureate level (Degner & Gow, in press), the differences in these programs necessitate further study to confirm such an approach at the diploma level. A comparison between diploma programs using an integrated approach and a special course approach would be useful. The question of the placement of death education in the diploma program should also be addressed.

The purpose of death education is to prepare staff nurses to feel more comfortable in this aspect of their role and to provide better care for the dying. Extension of the research beyond the educational program is therefore essential in determining the relationship between death attitudes and subsequent clinical behaviors. While today a high percentage

of diploma graduates practice within institutions and have exposure to the dying, the current entry to practice issue raises a further question about the usefulness of carrying out extensive research at the diploma level.

Conclusions

The results of this study failed to support the hypothesized relationship between a PCU experience for diploma nursing students, and death anxiety and attitudes to the care of the dying. These findings must be interpreted in light of the limitations of the study. The one-time pretest posttest design was a limitation of this research since students require time to internalize their learning and may well have contributed to the nonsignificance of the findings.

There is a need to confirm the reliability and validity of the instruments as measures of death anxiety and attitudes to care of the dying as these were not congruent with the students' self reported perceptions of attitude change. The experimental group indicated that the PCU experience was influential in their attitude change. In addition, there was a strong indication by both the experimental and control groups that care of the dying was instrumental in bringing about a change in death anxiety and attitudes to care of the dying.

The challenge for nurse educators is to determine the most effective way to structure death education in their programs. If our programs truly meet the relevance criterion, then death education will be a planned rather than a haphazard aspect of our curricula. If we as educators do our part, then nurses will no longer need to feel that their education did not prepare them for this aspect of their role (Hamric, 1977; Hoggatt & Spilka, 1978). Even more important will be the implications for nursing practice. If nurses feel more comfortable in their role, then dying patients and their families will receive the sensitive comfort care that they have a right to expect and nurses will be able to find some satisfaction in helping the dying face death (Barbus, cited in Whitman & Lukes, 1975). Such care may well be instrumental in enhancing the quality of life of the dying and in restoring survivors to health (Degner, 1985; Freihofer & Felton, 1976).

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Appendix A
QUESTIONNAIRE

NURSING CARE OF THE DYING PATIENT QUESTIONNAIRE

Code _____

Please fill in the first blank above with the first two letters of your mother's name (e.g. if her name is Anne, use AN) and the second blank with the day of your birth (e.g. 2 or 16).

PART I: Here is a series of general statements. You are to indicate how much you agree or disagree with them. Record your opinion in the blank space in front of each item according to the following scale:

3 slight agreement	4 slight disagreement
2 moderate agreement	5 moderate disagreement
1 strong agreement	6 strong disagreement

Read each item and decide quickly how you feel about it; then record the extent of your agreement or disagreement. Put down your first impressions. Please answer every item.

- _____ 1. I would avoid death at all costs.
- _____ 2. I would experience a great loss if someone close to me died.
- _____ 3. I would not feel anxious in the presence of someone I knew was dying.
- _____ 4. The total isolation of death frightens me.
- _____ 5. I am disturbed by the physical degeneration involved in a slow death.
- _____ 6. I would not mind dying young.
- _____ 7. I accept the death of others at the end of their life on earth.
- _____ 8. I would not mind visiting a senile friend.
- _____ 9. I would easily adjust after the death of someone close to me.
- _____ 10. If I had a choice as to whether or not a friend should be informed he/she is dying, I would tell him/her.

- _____ 11. I would avoid a friend who was dying.
- _____ 12. Dying might be an interesting experience.
- _____ 13. I would like to be able to communicate with the spirit of a friend who has died.
- _____ 14. I view death as a release from earthly suffering.
- _____ 15. The pain involved in dying frightens me.
- _____ 16. I would want to know if a friend were dying.
- _____ 17. I am disturbed by the shortness of life.
- _____ 18. I would not mind having to identify the corpse of someone I knew.
- _____ 19. I would never get over the death of someone close to me.
- _____ 20. The feeling that I might be missing out on so much after I die bothers me.
- _____ 21. I do not think of dead people as having an existence of some kind.
- _____ 22. I would feel uneasy if someone talked to me about the approaching death of a common friend.
- _____ 23. Not knowing what it feels like to be dead, does not bother me.
- _____ 24. If I had a fatal disease, I would like to be told.
- _____ 25. I would visit a friend on his/her deathbed.
- _____ 26. The idea of never thinking or experiencing again after I die, does not bother me.
- _____ 27. If someone close to me died, I would miss him/her very much.
- _____ 28. I am not disturbed by death being the end of life as I know it.
- _____ 29. I would feel anxious if someone who was dying talked to me about it.
- _____ 30. The intellectual degeneration of old age disturbs me.
- _____ 31. If a friend were dying, I would not want to be told.
- _____ 32. I could not accept the finality of the death of a friend.
- _____ 33. It would upset me to have to see someone who was dead.
- _____ 34. If I knew a friend was dying, I would not know what to say to him/her.
- _____ 35. I would not like to see the physical degeneration of a friend who was dying.
- _____ 36. I am disturbed by the thought that my abilities will be limited while I lie dying.

PART II: Using the following code, please circle the response that best matches your actual current attitude for each of the following statements.

CODE: SA = Strongly agree
 A = Agree
 U = Undecided
 D = Disagree
 SD = Strongly disagree

- SA A U D SD 1. Regardless of his age, disabilities and personal preferences, a person should be kept alive as long as possible.
- SA A U D SD 2. Dying patients should be told they are dying.
- SA A U D SD 3. Medical personnel find it more satisfying to work with patients who are expected to improve rather than with patients who are likely to die.
- SA A U D SD 4. The dying patient is best served by a matter-of-fact focus on medical issues.
- SA A U D SD 5. Discussion among doctors, nurses and other health workers about the care of the dying may reveal differences in attitudes toward death and dying.
- SA A U D SD 6. It is important in the treatment of the dying patient to discuss his feelings with him.
- SA A U D SD 7. Doctors, nurses, family and friends, if they prefer, can keep knowledge of his status from the dying patient.
- SA A U D SD 8. Fear of death is natural in all of us.
- SA A U D SD 9. Feelings of depression in the dying patient are unusual.
- SA A U D SD 10. The patient is better off not knowing his diagnosis when it carries and implication of imminent death.
- SA A U D SD 11. If a patient talks about his fear of death, his doctors and nurses should reassure him that he has little to worry about.

- SA A U D SD 12. Nurses and doctors usually communicate easily with each other on issues relating to the needs of the dying patient.
- SA A U D SD 13. Those who support the principle of "death with dignity" endorse active as well as passive euthanasia.
- SA A U D SD 14. No matter what my personal beliefs, in my role as a medical professional, I would fight to keep the patient alive.
- SA A U D SD 15. The dying patient who talks about his future plans for work, family, trips, etc., does not realize the seriousness of his condition.
- SA A U D SD 16. Individual freedom of choice ultimately should mean freedom of choice to live or die within a context of responsibility for self and others.
- SA A U D SD 17. Even if they don't ask, relatives should be told when death is imminent in the ill patient.
- SA A U D SD 18. Dealing with a dying patient makes one aware of his own feelings regarding death.
- SA A U D SD 19. Family members who stay close to a dying patient often interfere with the professional's job with the patient.
- SA A U D SD 20. Death means annihilation of the physical, social and psychological self.
- SA A U D SD 21. Dying in Canada is handled more humanely than it is in other parts of the world.
- SA A U D SD 22. If given a choice, I prefer to avoid contact with dying people.
- SA A U D SD 23. It is natural for medical personnel to grieve for their patients who die.
- SA A U D SD 24. I rarely think of dying.
- SA A U D SD 25. The dying patient is physically ugly.
- SA A U D SD 26. It is possible for medical personnel to help patients prepare for death.
- SA A U D SD 27. Medical personnel tend to cut down on their visits to the dying patient if there is

- little that can be done for him medically.
- SA A U D SD 28. Patients are better off dying in a hospital than at home.
- SA A U D SD 29. Suicide is wrong.
- SA A U D SD 30. When thinking of dying, I fear the idea of disability and pain more than death itself.
- SA A U D SD 31. Dying patients feel less comfortable if they have frequent visitors during their final days.
- SA A U D SD 32. Nurses should be the primary professionals equipped to deal with the reaction of the dying patient.
- SA A U D SD 33. Some patients should be allowed to die without making heroic efforts to prolong their lives.
- SA A U D SD 34. Relatives who know the diagnosis of the terminally ill patient, make patient management more difficult.
- SA A U D SD 35. The terminally ill patient frequently turns to his doctor and nurse to discuss his feelings about dying.
- SA A U D SD 36. Our imagination about dying is harder to handle than the reality.
- SA A U D SD 37. The more intelligent a person is , the less he fears death.
- SA A U D SD 38. The dying patient mourns his own coming death.
- SA A U D SD 39. Dying is a painful process.
- SA A U D SD 40. Training medical personnel on attitudes toward dying is inappropriate because helping people to live is their goal.
- SA A U D SD 41. The dying patient should be separated from other patients during the final period.
- SA A U D SD 42. Many patients prefer to be told when their death is near.

- SA A U D SD 43. The term "pass away" is preferable to the term "die".
- SA A U D SD 44. It is all right for people to whisper to one another in the presence of a dying person.
- SA A U D SD 45. Doctors and nurses should be detached emotionally if they are to work in the best interests of the dying patient.
- SA A U D SD 46. Sometimes patients give up on themselves because the medical personnel have given up on them.
- SA A U D SD 47. It is a common tendency to "skip over" dying persons on teaching rounds.
- SA A U D SD 48. I usually feel at ease talking with physicians about dying patients for whom they are responsible.
- SA A U D SD 49. The physician ordinarily discusses frankly with the family the implications of a diagnosis of a usually fatal disease.
- SA A U D SD 50. Suicide may be justified in the terminally ill.

PART III: Background Information

Please answer questions by circling the number for the appropriate answer or by filling in the blanks.

1. In what year were you born? _____
2. Sex
 1. Female
 2. Male
3. Educational background at time of entry into program.
 1. High school graduate
 2. Licensed Practical Nurse
 3. University degree
 4. Other
4. To what religion do you belong, if any? _____
5. We know that some people are more religious than others. How religious are you?
 1. I am very religious
 2. I am somewhat religious
 3. I am slightly religious
 4. I am not very religious
 5. I am not at all religious
6. What is your current marital status?
 1. Never married
 2. Married
 3. Separated
 4. Divorced
 5. Widowed
7. Do you have any living children?
 1. Yes
 2. No (go to Q. 8)
- 7a. If YES, how many? _____
- 7b. How old is the eldest? _____
- 7c. How old is the youngest? _____
- 7d. How many children are currently living with you? _____

8. Have you ever experienced the death of a family member?
1. Yes
2. No (go to Q. 9)
- 8a. If yes, state your relationship to the family member.

- 8b. Approximate age of deceased _____
- 8c. How long ago did this death occur? _____
- 8d. How did the death occur?
1. Without warning
2. After a brief illness
3. after an extended illness
9. Have you ever experienced the death of a close friend?
1. Yes
2. No (go to Q. 10)
- 9a. If yes, what was the approximate age of the deceased? _____
- 9b. How long ago did this death occur? _____
- 9c. How did the death occur?
1. Without warning
2. after a brief illness
3. after an extended illness
10. Of the deaths identified above, which was the most significant to you personally? _____
- 10a. Have you experienced the death of significant persons other than those mentioned above?
1. Yes
2. No (go to Q.11)
- 10b. If yes, how many? _____
11. Have you ever seen a person die?
1. Yes
2. No
12. Have you ever experienced a situation in which you seriously thought you were going to die?
1. Yes
2. No
12. Have you cared for a dying patient since you came into the program?
1. Yes
2. No

Part IV: Please answer the questions by circling the most appropriate response or by filling in the blanks.

1. Were you assigned to a palliative care unit at Municipal Hospital for clinical experience?
 1. Yes
 2. No
2. Did you have the opportunity to care for a dying patient at Misericordia General Hospital since you began the Palliative Care course?
 1. Yes
 2. No
3. Since completion of the first questionnaire, do you feel your attitudes toward death and dying have changed?
 1. Yes, very much so
 2. Yes, to some degree
 3. Uncertain
 4. No, not at all

If you feel that your attitudes have changed, in general HOW have they changed?

2. I am:
 1. More positive in my attitudes
 2. no change
 3. more negative
3. I am:
 1. more fearful
 2. no change
 3. less fearful
4. I am:
 1. more accepting of death
 2. no change
 3. less accepting
5. I am:
 1. more comfortable in talking about death
 2. no change
 3. more uncomfortable
6. I am:
 1. more prepared for my own death
 2. no change
 3. more unprepared
7. I am:
 1. more prepared to deal with others deaths
 2. no change
 3. more unprepared

8. How would you describe, in your own words, your attitudes to death and to caring for patients who are dying?

9. The following factors may have affected your attitude to death and to care of the dying. Check the three factors which you feel were most significant?

- Seminars on death and dying, grief and grieving.
- Caring for a dying patient.
- Opportunity to share my own personal thoughts and feelings about death and dying.
- Experience on a palliative care unit.
- One to one discussions with my teacher.
- The teacher role-model in the clinical area.
- The staff nurse role-model in the clinical area.
- Other (please list)

Appendix B
LETTER OF PERMISSION

Winnipeg, Manitoba
March , 1987

Mr. T.I. Bartman
Executive Director
Misericordia General Hospital
99 Cornish Avenue
Winnipeg, Manitoba
R3C 1A2

Dear Mr. Bartman:

I am planning to conduct a study entitled "Effects of Systematic Assignment to Dying Clients in a Palliative Care Course on Death Anxiety and Attitudes Toward Care of the Dying in Diploma Nursing Students" in partial fulfillment of my program of studies at the University of Manitoba School of Nursing. The purpose of this study is to evaluate the effectiveness of our Palliative Care course in assisting students to feel comfortable in their role when caring for dying patients and their families. The nursing literature indicates that nurses often feel that their education does not adequately prepare them for this aspect of their role. It is my hope that this study will provide us with information which will assist us in planning appropriate learning experiences for our students. It is hoped that ultimately it will assist our students as graduates to feel more comfortable and consequently to provide better care to dying patients and their families.

To carry out this study, I am requesting your permission to approach the first year students in the school who will be taking the Palliative Care course, as my subjects. The intent is to administer a pretest on March 10, prior to the commencement of the course and a posttest on June 24.

Each student's participation will be one of free and informed consent. There will be no risk to the students at any time as a result of the study. It will have no effect on their status in the program either positively or negatively. Subjects may withdraw from the project at any time. As well,

a decision not to participate will have no effect on their status in the program. Their identity will be protected by the use of a code on the questionnaires which will consist of the first two letters of their mother's first name and the day of the student's birth. This code will be used only for the purpose of pairing pre and posttest data. Data will be analysed as group data and no individual results will be identifiable.

The study is under the supervision of my advisor, Professor Christina Gow, and Dr. L. Degner (Nursing) and Dr. Carol Harvey (Dept. of Family Studies). Professor Gow and Dr. Degner have both been involved in extensive research in this area. My proposal has also been reviewed and approved by the Ethical Review Committee in the School of Nursing, University of Manitoba.

Should you have any questions regarding this study or should you wish to review the proposal for my research, I will be pleased to forward a copy to you. I look forward to hearing from you. Thank you for your consideration of my request.

Yours truly,

Tina Enns

Appendix C

PROTOCOL FOR THE ADMINISTRATION OF THE QUESTIONNAIRE

I am here to invite you to participate in a study which is being conducted by Tina Enns, the Director at your school of nursing and a graduate student at the University of Manitoba.

The general purpose of this study is to evaluate the effectiveness of the experiences in your upcoming Palliative Care course in assisting you to feel more at ease when caring for dying patients and their families. The nursing literature indicates that nurses often find this aspect of their role very stressful and often say that their education did not adequately prepare them for it. By participating in this study, you can provide valuable information to nurse educators who are making decisions about this content in their programs. Ultimately, it is hoped that nurses will be helped to provide more sensitive care to dying patients and their families.

Each one of you is invited to participate in the study by answering a questionnaire today and again at the end of June. There are no risks to you personally and your participation will have no effect on your status in the school either positively or negatively. Your responses will not be used to evaluate you in the course. As well, you need not be concerned about your answers being identified in any way. Your questionnaires will be anonymous and any results will be reported as group data.

I will give each one of you a consent form and a questionnaire. Please read the consent form first. If you agree to participate, please sign your name on the second page and then proceed to answer the questionnaire. Once you are finished, please hand in the page with your signature and the questionnaire. The consent form is yours to keep.

If you do not wish to participate, please leave the consent form and questionnaire on the desk and exit quietly.

Your participation and your contribution to this study are greatly appreciated by the researcher. Should you have any questions, I will be pleased to answer them. If I am unable to do so, I would suggest that you contact Tina Enns, the researcher, in her office.

Appendix D
CONSENT FORM

This is an invitation to participate in a study about caring for dying patients. The nursing literature indicates that nurses often feel that their education does not adequately prepare them to care for dying patients and their families. The purpose of this study is to evaluate the effectiveness of the Palliative Care course in assisting you to feel more at ease when caring for dying patients and their families. Your input will assist nurse educators in planning this part of nursing education programs. Ultimately, it is hoped that nurses will be helped to provide more sensitive care to dying patients and their families.

This study is being conducted by Tina Enns, a graduate student at the University of Manitoba School of Nursing. The study is under the guidance of Professor Christina Gow and Dr. Lesley Degner of the School of Nursing and Dr. Carol Harvey of the Department of Family Studies.

All first year diploma nursing students who are going to take the Palliative Care course are being asked to participate in this study. Individuals agreeing to participate, will complete a questionnaire in early March and in late June of 1987. It will take approximately 30-40 minutes of your time on each occasion. There are no right or wrong answers to the questions included in Part I and Part II. Part III (pretest only) consists of demographic data and previous experience with death. Part IV (posttest only) invites your subjective evaluation of your learning experiences. Your responses will not be used to evaluate you in the program. As well, you are free to leave specific questions unanswered, if you so choose.

In order to pair the results from March and June, it is essential to code the questionnaire. You will identify your own code with the first two letters of your mother's first name and the day of your birth. This identification will be used for no other purpose. As well, any results will be reported as group data and no individual results will be reported in the study. Raw data will be stored in the researchers office in a locked file until the study is completed. If deemed useful, data will be kept for further follow-up after which it will be shredded and disposed of.

You are not obligated to take part in the study. Participation is voluntary and will be of no direct benefit to you. Should you wish to withdraw at any time, you may do so. A decision not to participate will have no effect on your status in the nursing program.

If you are interested, a summary of the results will be made available to you once the data are analyzed. Please give your name and address on the following page if you wish to obtain a copy of the results.

If you have any questions at any time during the the course of the study, I may be contacted in the school, Room #457W, or by telephone at 788-8325.

Your participation in this study is much appreciated. Thank you for volunteering your time.

- PARTICIPANT'S COPY -

I have read and understand the purpose of the study, what will be asked of me, of my rights as a participant and that my input will be in no way identifiable.

My signature below indicates that I am informed and that I agree to participate.

Date

Signature of Participant

Date

Signature of Researcher

I would like a summary of the results sent to me at the following address:

Name _____

Address _____

Postal Code _____

- RESEARCHER'S COPY -

Appendix E
SUPPLEMENTARY TABLES

TABLE 28

Attitude Change, Selected Demographics and Death Related Experiences

Selected Variables	very much (12)	some (34)	uncertain (7)	none (4)
Education				
High school	6	18	5	2
Other	6	12	1	2
Religion				
Roman Catholic	3	12	3	2
Protestant		13	2	1
Other	2	5	1	1
Religious strength				
Very	0	4	1	1
Somewhat	8	20	4	3
Slightly	3	6	1	0
Not at all		0	0	0
Family death				
Yes	8	26	5	4
No	3	4	1	0
Friend death				
Yes	7	11	2	2
No	4	19	4	2
Seen Death				
Yes	7	8	3	4
No	4	22	3	0
Expected to die				
Yes	4	11	4	4
No	7	19	2	0
Previously cared				
Yes	6	18	5	4
No	5	12	1	0
Assigned to PCU				
Yes	11	19	1	0
No	1	11	5	4

TABLE 29

Collett-Lester Pretest Posttest Differences and Perception of Attitude Change

COLLETT-LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIV	
NEGATIVE	11 20.37*	0 0.00	1 1.85	12 22.22
NO CHG	36 66.67	3 5.56	0 0.00	39 72.22
POSITIVE	3 5.56	0 0.00	0 0.00	3 5.56
TOTAL	50 92.59	3 5.56	1 1.85	54 100.00

*cell percent

TABLE 30

Winget Pretest Posttest Differences and Perception of Attitude Change

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	14 25.93*	0 0.00	1 1.85	15 27.78
NO CHG	34 62.96	3 5.56	0 0.00	37 68.52
POSITIVE	2 3.70	0 0.00	0 0.00	2 3.70
TOTAL	50 92.59	3 5.56	1 1.85	54 100.00

*cell percent

TABLE 31

Collett-Lester Pretest Posttest Differences and Fear of Death

COLLETT-LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	7 12.96*	4 7.41	1 1.85	12 22.22
NO CHG	24 44.44	13 24.07	2 3.70	39 72.22
POSITIVE	3 5.56	0 0.00	0 0.00	3 5.56
TOTAL	34 62.96	17 31.48	3 5.56	54 100.00

*cell percent

TABLE 32

Winget Pretest Posttest Differences and Fear of Death

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	9 16.67*	4 7.41	2 3.70	15 27.78
NO CHG	24 44.44	12 22.22	1 1.85	37 68.52
POSITIVE	1 1.85	1 1.85	0 0.00	2 3.70
TOTAL	34 62.96	17 31.48	3 5.56	54 100.00

*cell percent

TABLE 33

Collett-Lester Pretest Posttest Differences and Acceptance of Death

COLLETT-LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	11 20.37*	1 1.85	0 0.00	12 22.22
NO CHG	33 61.11	6 11.11	0 0.00	39 72.22
POSITIVE	3 5.56	0 0.00	0 0.00	3 5.56
TOTAL	47 87.04	7 12.96	0 0.00	54 100.00

*cell percent

TABLE 34

Winget Pretest Posttest Differences and Acceptance of Death

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	14 25.93*	1 1.85	0 0.00	15 27.78
NO CHG	32 59.26	5 9.26	0 0.00	37 68.52
POSITIVE	1 1.85	1 1.85	0 0.00	2 3.70
TOTAL	47 87.04	7 12.96	0 0.00	54 100.00

*cell percent

TABLE 35

Collett-Lester Pretest Posttest Differences and Comfort in Talking About Death

COLLETT-LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	11 20.37*	1 1.85	0 0.00	12 22.22
NO CHG	35 64.81	4 7.41	0 0.00	39 72.22
POSITIVE	3 5.56	0 0.00	0 0.00	3 5.56
TOTAL	49 90.74	5 9.26	0 0.00	54 100.00

*cell percent

TABLE 36

Winget Pretest Posttest Differences and Comfort in Talking About Death

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	14 25.93*	1 1.85	0 0.00	15 27.78
NO CHG	33 61.11	4 7.41	0 0.00	37 68.52
POSITIVE	2 3.70	0 0.00	0 0.00	2 3.70
TOTAL	49 90.74	5 9.26	0 0.00	54 100.00

*cell percent

TABLE 37

Collett-Lester Pretest Posttest Differences and Preparedness
for Own Death

COLLETT- LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	3 5.56*	8 14.81	1 1.85	12 22.22
NO CHG	16 29.63	23 42.59	0 0.00	39 72.22
POSITIVE	2 3.70	1 1.85	0 0.00	3 5.56
TOTAL	21 38.89	32 59.26	1 1.85	54 100.00

*cell percent

TABLE 38

Winget Pretest Posttest Differences and Preparedness for Own
Death

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	7 12.96*	7 12.96	1 1.85	15 27.78
NO CHG	14 25.93	23 42.59	0 0.00	37 68.52
POSITIVE	0 0.00	2 3.70	0 0.00	2 3.70
TOTAL	21 38.89	32 59.26	1 1.85	54 100.00

*cell percent

TABLE 39

Collett-Lester Pretest Posttest Differences and Preparedness
in Dealing With Others Death

COLLETT- LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	12 22.22*	0 0.00	0 0.00	12 22.22
NO CHG	37 68.52	2 3.70	0 0.00	39 72.22
POSITIVE	3 5.56	0 0.00	0 0.00	3 5.56
TOTAL	52 96.30	2 3.70	0 0.00	54 100.00

*cell percent

TABLE 40

Winget Pretest Posttest Differences and Preparedness in
Dealing With Others Death

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	15 27.78*	0 0.00	0 0.00	15 27.78
NO CHG	35 64.81	2 3.70	0 0.00	37 68.52
POSITIVE	2 3.70	0 0.00	0 0.00	2 3.70
TOTAL	52 96.30	2 3.70	0 0.00	54 100.00

*cell percent

TABLE 41

Collett-Lester Pretest Posttest Differences and Confidence
in Providing Care to the Dying

COLLETT- LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	12 22.22*	0 0.00	0 0.00	12 22.22
NO CHG	38 70.37	1 1.85	0 0.00	39 72.22
POSITIVE	3 5.56	0 0.00	0 0.00	3 5.56
TOTAL	53 98.15	1 1.85	0 0.00	54 100.00

*cell percent

TABLE 42

Winget Pretest Posttest Differences and Confidence in
Providing Care to the Dying

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	15 27.78*	0 0.00	0 0.00	15 27.78
NO CHG	36 66.67	1 1.85	0 0.00	37 68.52
POSITIVE	2 3.70	0 0.00	0 0.00	2 3.70
TOTAL	53 98.15	1 1.85	0 0.00	54 100.00

*cell percent

TABLE 43

Collett-Lester Pretest Posttest Differences and Comfort in Talking to the Dying

COLLETT-LESTER CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	11 20.37*	1 1.85	0 0.00	12 22.22
NO CHG	29 53.70	10 18.52	0 0.00	39 72.22
POSITIVE	3 5.56	0 0.00	0 0.00	3 5.56
TOTAL	43 79.63	11 20.37	0 0.00	54 100.00

*cell percent

TABLE 44

Winget Pretest Posttest Differences and Comfort in Talking to the Dying

WINGET CHANGE	ATTITUDE CHANGE			TOTAL
	POSITIVE	NO CHG	NEGATIVE	
NEGATIVE	13 24.07*	2 3.70	0 0.00	15 27.78
NO CHG	29 53.70	8 14.81	0 0.00	37 68.52
POSITIVE	1 1.85	1 1.85	0 0.00	2 3.70
TOTAL	43 79.63	11 20.37	0 0.00	54 100.00

*cell percent