

THE RELATIONSHIP BETWEEN PATIENT
DEATH RATES AND HOSPITAL NURSES' FEAR
OF DEATH

by

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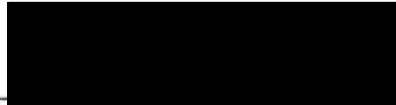
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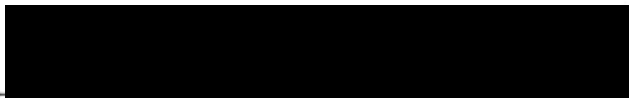
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TABLE OF CONTENTS

CHAPTER		PAGE
I	INTRODUCTION.	1
	Introduction to the Problem.	1
	Review of the Literature	3
	Death Anxiety and Fear of Death.	3
	Measurement of Fear of Death	4
	Variables Related to Death Anxiety and Fear of Death.	5
	Sex	
	Age	
	Religious Beliefs	
	Occupation	
	Educational Preparation	
	Contact with Death	
	The Concepts of Loss and Grief Within the Health Care Profession	11
	Coping Mechanisms of Health Care Pro- fessionals	14
	Death Education for Health Care Pro- fessionals	16
	Conceptual Framework	18
	Statement of the Hypotheses.	21
II	METHODS	22
	Study Design	22
	Setting.	22
	Subjects and Sampling.	26
	Instruments.	26
	The Collett-Lester Fear of Death Scale Background Questionnaire	
	Measurement of the Independent Variable.	28
	Procedure.	28
	Provision for Human Subjects	28
	Distribution of Questionnaires	29
	Analysis of Data	29
III	RESULTS	30
	Relationship Between Nurses' Fear of Death and Hospital Unit Death Rates.	30
	Hypothesis 1	30
	Hypothesis 2	33
	Correlations of Nurses' Fear of Death and Work Area with Selected Nurse Characteristics	35
	Other Findings	39

TABLE OF CONTENTS (continued)

CHAPTER	PAGE
IV DISCUSSION	43
Relationship between Nurses' Fear of Death and Hospital Unit Death Rates	43
Correlations of Nurses' Fear of Death and Work Area with Selected Nurse Characteristics	46
Other Findings	47
Sample	47
Instrument	49
Limitations of the Study	52
V SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	54
Summary	54
Conclusions	55
Recommendations	56
REFERENCES	58
APPENDICES	63
APPENDIX A	64
Cover Letters	
APPENDIX B	68
Questionnaire	
APPENDIX C	74
Subscale Items from the Collett-Lester Fear of Death Scale	
APPENDIX D	78
Scoring of the Collett-Lester Fear of Death Scale	
APPENDIX E	81
Internal Consistency of Collett-Lester Fear of Death Scale	
APPENDIX F	83
"Problem" Items from the Collett-Lester Fear of Death Scale	
ABSTRACT	

LIST OF TABLES

TABLE		PAGE
1	Patient Death Rates from July 1981 - June 1982 for the Selected Patient Care Areas.	23
2	Distribution and Response Rate of Nurses by Death Rate Area.	24
3	Demographic Data for the Nursing Sample.	25
4	Means and Standard Deviations of Nurses' Scores on the Collett-Lester Fear of Death Scale by Patient Death Rate Area	31
5	Summary Table for ANOVA: Relationship Between Low, Intermediate, and High Death Rate Areas and Nurses' Fear of Death Scores	32
6	Summary of Planned Comparisons between Death Rate Areas and Scores on the Collett-Lester Fear of Death Scale	34
7	Pearson Correlation Coefficients between Scores on Collett-Lester Fear of Death Scales and Extraneous Variables	36
8	Summary Table for ANOVA: Relationship between Low, Intermediate, and High Death Rate Areas and Extraneous Variables	37
9	Means and Standard Deviations of Extraneous Variables by Patient Death Rate Area	38
10	Means and Standard Deviations of Nurses' Scores on the Collett-Lester Fear of Death Scale by Shift	40
11	Summary Table for ANOVA: Relationship between Day, Evening, and Night Shift and Nurses' Fear of Death Scores	41
12	Summary of Pearson's Correlation Coefficients between Extraneous Variables	42

LIST OF TABLES (continued)

TABLE		PAGE
13	Comparison of Current Sample to other Samples on Variables of Age and Total Work Experience . . .	50
14	Comparison of Scores on Collett-Lester Fear of Death Scale	51

LIST OF FIGURES

FIGURE		PAGE
1	Interaction of Closeness of Relationship and Perception of Preventibility as Predictors of Grief	13
2	Conceptual Framework	20
3	Revised Conceptual Framework	48

CHAPTER I
INTRODUCTION

Loss and grief are a part of each individual's life experience and are encountered daily. Depending on the perceived importance and consequences of the loss, the grieving response to each will vary in severity. Losses perceived as unimportant will usually result in a very rapid resolution of grief. In contrast, more serious losses, such as failure to receive a desired job promotion, may cause feelings of acute distress. The death of a significant other or separation due to divorce or prolonged illness, generally produces an extreme grief response. For most individuals, these extreme losses are encountered infrequently. Given time and the opportunity to express their emotions, people usually are able to reach an acceptance and resolution of their loss within one to two years (Schulz, 1978).

Nurses working in health care settings are exposed to death and dying more frequently than other individuals. Yet, little is known about the cumulative effects of such prolonged exposure to death and dying. Recent studies indicate that nurses perceive their contact with death and dying as very stressful. Indeed, it is cited as a contributing factor in "burn-out". However, Schulz (1978) concluded that no study has shown a direct relationship between amount of contact with death and fear of death.

Despite acknowledging the stressfulness many educational programs in nursing still do not offer specific courses or classes on death and dying. Apparently it is assumed that work experience will adequately

prepare the nurse practitioner for managing the care of dying patients and for resolving emotional reactions to death events. This assumption is being challenged as educators and researchers address the issue of patients' death and dying experiences and their resulting impact on health care providers. Many questions remain unanswered. How can fear of death be measured? What factors contribute to fear of death? What degree of fear of death is harmful to both nurses and patients? What effect does nurses' and/or physicians' fear of death have on quality of patient care? What coping mechanisms are most effective for dealing with exposure to death and dying? Can fear of death be reduced? If so, how? Obviously, more research on these questions is needed. As health care professionals become increasingly aware of the stressors encountered in their work environment, perhaps they will take a more active role in seeking guidance and education for developing more effective coping mechanisms to counteract these stressors. Hospitals and educational institutions must be prepared to offer this support, especially in the area of coping with patients' death and dying.

This study was designed to determine the impact of exposure to death on nurses' fear of death. Specifically, the relationship between patient death rates on designated hospital units and fear of death of nurses employed on those same units was investigated.

Review of the Literature

Individual experiences with death, dying, and life-after-death have been subjects of interest to mankind for thousands of years. Over the past century, a systematic approach has been used to study death and its impact on various individuals. Studies using patient interviews and anecdotal reports, such as the work of Kubler-Ross (1969), are widely known. Although valuable data have been obtained with this method, interpretation of the information has been difficult and subject to bias. However, the contribution of Kubler-Ross cannot be underestimated. Her published interviews with dying patients contributed to a more open view of the subject of death and provided the impetus to study death and dying in a more exact manner. Initial research emphasized the dying individual, and only recently has there been a focus on the effects of death and dying on the survivors, i.e., family, friends, and health care providers.

The literature review covers the following topics: 1) the concepts of death anxiety vs. fear of death; 2) measurement of fear of death; 3) variables related to fear of death; 4) the concepts of grief and loss within the health care profession; 5) coping mechanisms of health care professionals, and 6) death education for health care professionals.

Death Anxiety and Fear of Death

The concepts of death anxiety and fear of death differ significantly, and have been defined by Schulz (1978, p. 21) as follows: "... fear is experienced in reference to specific environmental events or objects, while anxiety is a negative emotional state that lacks a specific object." Some of the specific fears involved with death include those of pain, humiliation, separation, loss of achievement and purpose,

loss of control, and loss of being (Kalish, 1981; Schulz, 1978). Since thoughts of death and dying usually include both specific fears and vague feelings of uneasiness, most researchers have not differentiated between fear of death and death anxiety, and these two terms are used interchangeably in the literature.

Measurement of Fear of Death

Fear of death and death anxiety have been measured in a variety of ways. Direct methods are used more frequently, and include questionnaires, interviews, checklists, and rating scales. Indirect methods include use of the galvanic skin response, word association tests, sentence completion tests, and projective tests.

Schulz (1978), in his review of the literature, lists six death anxiety and/or fear of death questionnaires in popular use. They are those of Sarnoff and Corwin (1959), Boyar (1964), Tolor (1967), Lester (1967a), Collett-Lester (1969), and Templer (1970). With the exception of the Collett-Lester scale, these tools treat death anxiety or fear of death as unidimensional concepts. All of these scales have been criticized for the lack of data supporting their reliability and validity (Pollak, 1980; Simpson, 1980). Simpson (1980) further questions the assumption that people are able to adequately verbalize their attitudes towards death. He also believes that subjects used in previous studies have not been representative of the general population, and that many over-generalizations have been made. Agatstein (1980) and Simpson (1980) state that current tools focus on the negative attitudes towards death, i.e., fear and anxiety, and do not allow the respondent an opportunity to express alternative emotions. Most

experts agree that current methods for studying attitudes toward death are inadequate. However, existing tools have enabled researchers to gather a great deal of information on the subject, which will be discussed in the following section.

Variables Related to Death Anxiety and Fear of Death

Lester (1967b), Schulz (1978), and Pollak (1979) have reviewed the literature regarding the correlation between numerous variables and death anxiety or fear of death. Their findings will be presented, together with the results of other studies investigating the effects of sex, age, religious beliefs, occupation, educational preparation, and contact with death.

Sex. Conflicting findings are reported in the literature regarding the relationship between sex and death anxiety or fear of death. Perkes and Schildt (1979) surveyed the death-related attitudes of 152 junior high school students using their own 22-item Likert-type scale. The researchers found that females expressed more concern than males over what would happen to their bodies after death.

McDonald (1976) surveyed 58 undergraduate students and reported that females had higher death anxiety scores than males. These findings are consistent with those of Templer, Ruff, and Franks (1971) who investigated the attitudes of over 2500 subjects with widely varied backgrounds (upper-middle class apartment residents, state hospital aides, psychiatric patients, and high school students and their parents). Templer et al. found that females consistently demonstrated higher death anxiety scores than males. Both the McDonald study and the study by Templer et al. utilized Templer's DAS instrument to measure death anxiety.

Lester (1972) measured fear of death in 46 psychology students. He used the multidimensional Collett-Lester Fear of Death Scale and obtained the following results: females had significantly higher scores than males on scales measuring fear of death of self, fear of death of others, and fear of dying of self. No differences were reported on scales measuring fear of dying of others or general fear of death.

Two studies that surveyed older subjects reported different findings. Rhudick and Dibner (1961) used a projective test in an attempt to overcome denial which may operate in responses to questionnaires and Swenson (1961) devised his own check-list of death attitudes and administered the scale to 210 subjects. Neither of these studies found a significant relationship between sex and fear of death.

Similarly, Lester (1967), Schulz (1978), and Pollak (1979) report inconsistent findings in their reviews, and advance several explanations for the attitudinal differences. One explanation is that death may have both emotional and cognitive components, with current questionnaires emphasizing the emotional aspect. If one believes that females are more emotionally expressive than males, then the difference in death attitudes may only be a reflection of the tool used to measure death attitudes. Another proposed explanation is that it is more socially acceptable for women to express their fears and therefore they obtain higher scores on the evaluation tools.

Age. The studies of Rhudick and Dibner (1961), Swenson (1961), and Templer et al. (1971) report no significant correlations between age and fear of death. In a more recent study, Kalish and Reynolds

(1977) conducted interviews on the subject of death and dying with 434 adults. Their sample was carefully selected to include several ethnic groups and equal numbers of males and females within the age groups of 20-39, 40-59, and over 60 years of age. When asked directly if they were afraid of dying, only 10% of the older subjects answered in the affirmative as compared to 40% of the young group and 26% of the middle-aged group. Kalish and Reynolds stated that they accepted all responses at face value and assumed that denial, repression, and distortion would affect all age groups equally. Their conclusion was that fear of death decreased with age.

In their reviews, Lester (1967), Schulz (1978), and Pollak (1979) all concluded that no significant correlation between age and fear of death can be consistently demonstrated.

Religious Beliefs. Kalish (1963) formulated a 32 item Likert-type scale on social issues which included 16 items related to death and religious beliefs. Two hundred twenty students in an advanced psychology course completed the scale and the results demonstrated no significant correlation between fear of death and belief in God or belief in after-life. McDonald (1976), likewise found no significant relationship between fear of death and religious beliefs when he investigated the attitudes of 58 undergraduate students of Mormon faith using Templer's DAS. Berman and Hays (1973) found no significant correlation between religious beliefs and death anxiety based on scores from Templer's DAS, but a small, significant correlation ($r = .24$) existed between belief in after-life and fear of death when Lester's Fear of Death Scale was used to measure attitudes.

Swenson (1961), Martin and Wrightsman (1965), and Templer (1972) utilized various tools with adult populations and found that increased participation in religious events was related to a decreased fear of death.

One might conclude, as did Lester (1967) and Schulz (1978), that participation in religious activities leads to a decreased fear of death, but that no relationship between specific religious beliefs, i.e., belief in God or belief in life-after-death, and fear of death has been demonstrated. However, interpretation of findings is limited because many studies used college students as subjects whose beliefs and attitudes have been shown to change over time.

Occupation. Swenson (1961) and Rhudick and Dibner (1961) reported no differences in attitude toward death between subjects who were working and those who were retired. Pollak (1979) described a study by Feifel (1956) that investigated death anxiety in groups of physicians and medical students. The physician group showed a higher fear of death than the medical student group, and both physician and medical student groups showed a higher fear of death than control groups. Two hypotheses have been formulated to explain these findings. The first is that some individuals with a high fear of death become physicians in an attempt to gain control or mastery over death. The second explanation is that increased experience in the medical field leads to an increased fear of death. However, a study of undergraduate and graduate nursing faculty by Lester, Getty, and Kneisel (1974) obtained opposite results, i.e., fear of death decreased with increased academic and professional experience.

Educational Preparation. Rhudick and Dibner (1961) and Christ (1961) reported no relationship between fear of death and years of schooling in their elderly subjects. Swenson (1961) found that the less educated subjects in his study tended to evade the issue of death, while those subjects with a college education were able to express their attitudes, either fearful or non-fearful, more specifically.

Contact with Death. Only a few studies investigating the effect of actual exposure to death with fear of death could be located in the current literature. These include studies by Shusterman and Sechrest (1973), Denton and Wisenbaker (1977), Hoelter and Hoelter (1980), Gorsuch (1982), and Popoff (1975). Shusterman and Sechrest (1973) investigated the attitudes of 188 hospital nurses toward death and dying, using a scale composed of 22 items from the Collett-Lester Fear of Death Scale and 34 additional items prepared by the researchers. Their results showed no correlation between fear of death and death rates on various hospital units. However, older, more experienced nurses tended to express less anxiety about death of others and an increased satisfaction with the traditional nursing care of dying patients. These findings have limitations for a number of reasons. First, the return rate was less than 50% which the investigators partially attributed to lack of support from hospital administration and head nurses. In addition, a number of the nurses contacted for participation in the study returned blank questionnaires with statements that the requested information was too personal and/or inappropriate for research with hospital employees. The information requested from subjects included a 92 item anxiety questionnaire (36 items were

later eliminated from analysis), the 50 item Taylor Manifest Anxiety Scale, the 320 item Jackson Personality Inventory, and a peer rating scale. Yet, the investigators did not include length of questionnaires as a potential contributing factor to their low response rate. A second weakness in this study was that the 17 units compared were not identified, nor were their calculated death rates specified in the findings. And third, the researchers were denied access to the O.B./Gynecology units which are low death rate units.

Denton and Wisenbaker (1977) analyzed data previously collected in 1974 on 76 registered nurses and baccalaureate nursing students enrolled at a Midwestern university. The subjects participated in a study of religious practices and attitudes toward death. Death anxiety was measured by the Templer Death Anxiety Scale. Two alternative hypotheses were put forth; an inverse relationship between death experience and death anxiety and a positive relationship between death experience and death anxiety. Death experiences were separated into three categories: "1) the death of a close friend or relative; 2) the actual experience of seeing a violent death, and 3) a subjective death experience." No significant correlation was found between the death of a close friend or relative and death anxiety, but a significant inverse relationship between the other two forms of death experiences and death anxiety was reported. The findings also suggested that increased work experience led to increased death anxiety, while increased age led to decreased death anxiety.

Hoelter and Hoelter (1980) collected data from 375 male and female undergraduates at a Midwestern university using their own multidimensional fear of death scale with 8 subscales. Results showed a positive and

significant correlation between fear of conscious death and exposure to death. Fear of the dying process and fear of premature death were positively and significantly related to exposure to dying, while fear of being destroyed had a significant, negative correlation with exposure to dying. It would be difficult to apply these findings to nurses working in a hospital setting because the actual number of deaths to which subjects were exposed were so low, i.e., 97.6% of the subjects had been exposed to less than 9 deaths over 5 years.

Gorsuch (1982) studied 99 registered nurses in a large Metropolitan hospital on the West Coast. The relationship between death anxiety and death rates on various hospital units was examined, using the Templer Death Anxiety Scale. Results showed that those nurses working in a low death rate unit had significantly higher death anxiety than nurses working in a high death rate unit.

Popoff (1975) interviewed over 15,000 nurses regarding their views of death. When asked the following question, "Do you feel you have come to terms with your own fear of your own death?", over 50% responded "yes, to a great extent", 33% stated "only in part", and about 12% answered "no". Contact with dying patients had no effect on answers to this question reflecting their fear of death.

The Concepts of Grief and Loss within the Health Care Profession

The grieving response has been studied extensively by sociologists, psychiatrists, psychologists, and physiologists. It is recognized as a normal reaction to any loss, and varies in severity, depending on the type of loss. Researchers have described the grieving process as occurring in phases. These phases are not absolutes and serve only as guidelines. Each person will respond to grief individually, and therefore

not everyone will pass through every phase in the same sequence, at the same pace, or with equal ease. Kubler-Ross (1969) describes five phases in the grieving process: 1) denial; 2) rage and anger; 3) bargaining; 4) depression, and 5) acceptance. With a severe loss, such as death of a close friend or relative, researchers believe that it takes an average of two years for an individual to arrive at the acceptance phase (Schulz, 1978). Delay and prolongation are two abnormal responses that might be seen (Speck, 1978). Delay is the most common abnormal response, in which expression of grief may be postponed for several weeks or even years. Prolongation of grief is another problem, especially when the fact of death has been denied. Some of the distorted reactions that may be encountered are: 1) excessive activity with no sense of loss; 2) development of symptoms similar to those of the deceased; 3) alterations in relationships with friends and relatives; 4) furious hostility against people associated with the death; 5) lack of emotional expression, and 6) severe depression with insomnia, guilt, and bitter self-reproaches (Speck, 1978).

It has been consistently documented that exposure to patient death and dying is perceived as very stressful by nurses (Cassem & Hackett, 1972; Hay & Oken, 1972; Price & Bergen, 1977; Vachon, Lyall & Freeman, 1978; Huckabay & Jagla, 1979; Lippincott, 1979; Campbell, 1980; Gray-Toft & Anderson, 1981). In addition, when a patient dies, the nurse may experience several types of loss (Glaser & Strauss, 1964). One is personal loss, i.e., the nurse may have become very attached to the patient and view him as a personal friend. The second type is work loss, as is frequently found in an emergency setting. The health care

professionals may spend a great deal of energy trying to save a patient's life, and have difficulty accepting unsuccessful attempts. The third type of loss is social loss. Americans tend to use age as an indicator of an individual's actual and potential social worth. Thus the death of a young, productive adult will usually be perceived as a more serious loss than that of an elderly person. Popoff (1975) confirmed these findings with a sample of over 15,000 nurses.

Bugen (1977) has proposed a model for predicting the type of grief reaction to a death. (See Figure 1).

	Preventable	Unpreventable
Central Relationship	Intense and Prolonged	Intense and Brief
Peripheral Relationship	Mild and Prolonged	Mild and Brief

Figure 1. Interaction of closeness of relationship and perception of preventability as predictors of grief.

In this framework, centrality refers to a relationship which provides daily nurturance and support. Usually this occurs between family members and/or close friends, but may occasionally be present with a central figure, such as the President, who represents our own hopes and beliefs. Peripherality describes more distant relationships which do not provide daily meaningful activities. Preventability refers to the belief that the death might have been prevented, or that the survivor may have actually contributed to the death in some way. Unpreventability encompasses the beliefs that nothing could have prevented the death and/or everything was done that could have changed the events leading to the death. This model has great potential for identifying

survivors who may need assistance in resolving their grief. Nurses and physicians who are faced with sudden, unexplained patient deaths may need assistance in coping with their feelings that the death may have been preventable. Without this assistance, their grieving responses may be unnecessarily prolonged.

Coping Mechanisms of Health Care Professionals

Many physicians reportedly have a difficult time dealing with dying patients. Their training may imply that death is unacceptable, or that it is a sign of personal failure or medical system failure. Kubler-Ross (1969) and Glaser and Strauss (1965) observed that physicians avoid patients who are dying. Shusterman and Sechrest (1973) and Pollak (1980) discuss Feifel's theory that physicians self-select their profession in an attempt to gain control over their own above-average fear of death. Data which show physicians as more fearful of death than control groups would seem to support this assumption. Shusterman (1973) and Schulz (1978) review several studies which indicate that although currently an increasing number of physicians are revealing fatal diagnoses to their patients, the majority still believe a dying patient should be protected from the knowledge of his true condition. This belief is in direct contradiction to the wishes of the majority of patients who state they want to be told when they are dying (Kubler-Ross, 1969). This practice could be viewed as an avoidance technique. Since 50% of medical students receive no formal training in the areas of death and dying, it is not surprising that physicians have a difficult time dealing with the complex problems presented by a dying patient and his family and develop avoidance and denial as coping mechanisms.

Schulz and Aderman (1979) interviewed 24 physicians by phone using Sarnoff and Corwin's Death Anxiety Scale. They subsequently reviewed hospital records and found that dying patients of physicians with high death anxiety had an average hospital stay of 14.5 days as compared to 8.5-10 days for dying patients of physicians with low to moderate death anxiety. No significant differences in hospital length of stay were found for non-dying patients. Although the sample size was small, the results of this study suggest that attitudes toward death and dying have an effect on patient care outcomes.

Nurses similarly experience conflicting emotions when working with dying patients. Quint (1966a, 1966b, 1967a, 1967b, 1969) has published numerous articles reflecting the nursing problems encountered in caring for dying patients. She noted that nurses adopt the same mechanisms as physicians, i.e., avoidance and denial, when working with dying patients. However, it is more difficult for nurses to maintain these behaviors. They have more contact with patients in their roles as direct care-providers. They are also frequently confronted by patients who may ask questions regarding their condition.

Stoller (1980) examined the impact of nurses' fear of death on their predicted behavior in various situations involving patients' dying or death. Nurses in their study reported more difficulty in situations which involved unstructured interaction with dying patients than in situations requiring provision of direct care to a dying patient or close proximity to a dead patient. It was suggested that avoidance strategies are easier to maintain in situations which allow the nurse to concentrate on specific tasks, rather than during informal

conversations with the patient which may force the nurse to discuss the realities of a patient's dying process and impending death. These findings are similar to the earlier study by Glaser and Strauss (1968). They investigated the behavior of nurses on various units with different treatment goals. Units, such as emergency rooms and intensive care units, may care for a large number of dying patients, but their main goal emphasizes recovery. Although all efforts are initially made towards saving lives, death is recognized as a constant threat and nurses in these units exhibit a high degree of denial and avoidance. Since their patients frequently are comatose or acutely ill, it is easier to maintain an impersonal attitude and to avoid uncomfortable conversations with patients who are dying. Nurses on other units, such as cancer wards, which emphasize comfort-till-death, also use denial and avoidance. It is more difficult to maintain an impersonal attitude in these areas, since many patients stay for weeks or even months, or may have frequent readmissions. Also, most patients on such wards are aware of their diagnoses and may wish to discuss their condition with staff members. Nurses, like physicians, receive little preparation in the area of death and dying and frequently feel inadequate in meeting the needs of dying patients, especially in the psychosocial area.

Death Education for Health Professionals

Despite the obvious need for education of health professionals in the area of death and dying, the majority of medical and nursing schools do not require such courses. Schulz and Sciabassi (1977) surveyed 113 medical schools in the United States and of the 65 that returned questionnaires, only 6% required a course on death and dying.

Approximately 40% reported exposure to death and dying in other required courses, 21% offered elective courses in death and dying, and 25% offered elective courses which included death and dying. In a survey of 226 nursing schools in the United States, Thrush, Thrush, and Paulus (1979) reported that of the 205 responding schools, 5% offered a required course in death and dying and 39.5% offered an elective course.

Studies assessing the availability and effectiveness of death education classes have shown such classes to be popular, but no correlation between death education and subsequent decreased death anxiety could be consistently shown (Shandfield, 1981; Miles, 1980; Hoelter & Epley, 1979; Bohart & Bergland, 1979; McClam, 1980). Agatstein (1980) suggests that decreased death anxiety is an inappropriate measure of death education effectiveness. He believes that insufficient information exists to categorize attitudes toward death as favorable or adaptive vs. unfavorable or maladaptive. Crase (1978) points out that death education is a new phenomenon and more emphasis must be placed on formulating behavioral and attitudinal objectives for such classes.

Summary. Although much information has been gathered regarding attitudes toward death and dying, few conclusions can be made. Results from one study frequently are not replicated when different methods, instruments, and/or subjects are utilized. One fact is very clear. Health care professionals are exposed to death and dying much more frequently than the general public. Yet few studies have attempted to identify and evaluate factors which influence nurses' attitudes toward death, and to systematically analyze mechanisms used by health care providers in coping with their exposure to death and dying.

Conceptual Framework

Attitudes toward death and dying are very complex and are the result of the interaction of multiple variables. In this study, the concepts of loss and grief are utilized to explain the potential effects of exposure to patients' death and dying on nurses' fear of death. Figure 2 summarizes the proposed relationships.

Exposure to death and dying leads to a grieving response. Various factors, i.e., age, sex, religious beliefs, previous experiences with death, etc., may all affect this response. The desired outcome is acceptance or resolution of the loss within a reasonable time frame, sometimes suggested as one to two years in cases of deaths of significant others. What happens to health care professionals who are frequently exposed to death? As mentioned earlier, research suggests that physicians and nurses demonstrate high degrees of denial and avoidance in care giving activities for patients who are dying. In addition, one of the few studies which investigated the relationship between fear of death and patient care outcomes (Schulz & Aderman, 1979) suggested that patient care will be affected by attitudes toward death and dying.

Currently, the effect of exposure to death and dying on fear of death is not known. In the hospital setting, nurses working in the ICU, CCU, or Oncology units are continually exposed to higher patient death rates while nurses employed on Obstetrics, Pediatric, or Nursery units experience very low patient death rates. In this study, it is hypothesized that both groups of nurses, i.e., those working in high death rate units and in low death rate units, will express a greater fear of death than those nurses working in patient care units with

intermediate death rates. The nurses from units with high patient death rates may be exposed to death and dying so frequently that even though they may have developed consistent coping patterns, they will have insufficient time to resolve their grieving responses and will therefore demonstrate a greater fear of death. In contrast, nurses from a low patient death rate unit may have a greater fear of death because they have not developed a mechanism for coping with patient deaths due to their limited exposure to the situation. Theoretically, those nurses from areas with neither a very high or very low patient death rate would have the lowest fear of death. They would have developed coping mechanisms for patient death situations and would also have adequate time between patient deaths to reach a resolution of their feelings.

In this study an attempt was made to investigate the relationship between exposure to patients' death and dying on nurses' fear of death, controlling for extraneous variables such as sex, age, years of experience, etc. Patient death rate was conceptualized as the independent variable, and categorized as high, intermediate, or low. Nurses' fear of death was conceptualized as the dependent variable and viewed as a continuum from high to low based on scores from Collett-Lester's Fear of Death Scale.

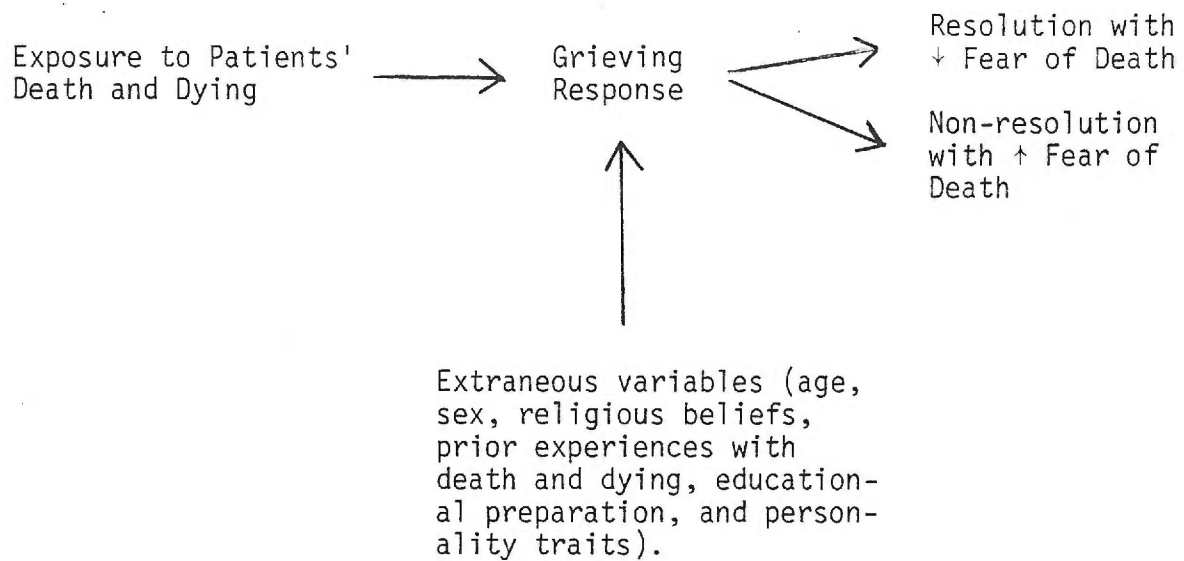


Figure 2. Conceptual Framework

Statement of the Hypotheses

The research hypotheses to be tested in this study are:

1. Nurses working in hospital units with a high patient death rate will have a greater fear of death than nurses working in hospital units with an intermediate patient death rate.
2. Nurses working in hospital units with a low patient death rate will have a greater fear of death than nurses working in hospital units with an intermediate patient death rate.

CHAPTER II

METHODS

Study Design

This was an ex post facto correlational field study to relate nurses' fear of death to the patient death rate of their current work unit. Fear of death was measured by the Collett-Lester Fear of Death Scale. Patient death rate of the unit was conceptualized as the independent variable and was trichotomized into low, intermediate, and high levels. Nurses' fear of death was the dependent variable. There could be no manipulation of either the dependent or independent variable. The study examined the degree of correlation between the two variables, rather than attempting to establish a causal relationship.

Setting

A 554-bed metropolitan medical center in the Northwest was chosen for the research setting. The hospital provides specialty care on 22 units: Pediatrics (1), Oncology (1), PCCU (1), CCU (1), Medical (3), Surgical (3), Orthopedic (3), Gynecology (1), Obstetrics (1), Nursery (1), NICU (1), ICU (2), Dialysis (1), Burn Center (1), and ER (1). Of these 22 patient care units, 8 were excluded from participation in the study for the following reasons: 1) The Gynecology unit and one Intensive Care Unit had been closed and the staff relocated on other units; 2) the Dialysis, O.R., Short Stay, and ER units were judged to be unusual in that patients were not present on a 24-hour basis and thus introduced variables that would be difficult to interpret, and 3) the Rehabilitation and Pain Center units were located in facilities separate from the hospital which made them less accessible to the researcher. The Rehabilitation and Pain Center

were also judged by the researcher to be not representative of a typical hospital setting. The remaining 18 units were identified as high, intermediate, or low patient death rate areas based on the number of patient deaths per patient admissions over a 12 month period (Table 1). By this method, 7 units were identified as low death rate areas, 6 units were identified as intermediate death rate areas, and 5 units were identified as high death rate areas.

TABLE 1

Patient Death Rates from July 1981 - June 1982 for the Selected Patient Care Areas

Units	Number of patient Deaths	Number of Patient Admissions and Transfers - In	Death Rates	Category
Orthopedic I	0	978 + 65	0%	low
O.B.	0	3087	0%	low
Nursery	0	2261 + 172	0%	low
Orthopedic II	1	633 + 117	0.13%	low
Orthopedic III	4	703 + 125	0.48%	low
Surgical I	6	928 + 234	0.52%	low
Pediatrics	14	1708 + 38	0.80%	low
Surgical II (Neurological)	9	535 + 257	1.14%	int.
Surgical III	14	901 + 271	1.19%	int.
P.C.C.U.	26	824 + 746	1.66%	int.
Medical I	21	874 + 233	1.90%	int.
Medical II	23	860 + 179	2.21%	int.
Medical III	28	790 + 252	2.69%	int.
C.C.U.	36	415 + 255	5.37%	high
Burn	9	160 + 2	5.56%	high
N.I.C.U.	30	294 + 70	8.24%	high
I.C.U.	84	421 + 492	9.2 %	high
Oncology	81	747 + 108	9.47%	high

TABLE 2

Distribution and Response Rate of Nurses by Death Rate Area

Category	Unit		Number of Nurses in Sample	Number of Nurses Re- sponding	Response Rate (%)
Low Death Rate Area	Orthopedics	(3)	17	15	88.2
	O.B.	(1)	7	5	71.4
	Nursery	(1)	5	1	20.0
	Surgical	(1)	8	6	75.0
	Pediatrics	(1)	9	9	100.0
	TOTAL	7	46	36	78.3%
Interme- diate Death Rate Area	Medical	(3)	23	19	82.6
	Surgical	(2)	12	8	66.7
	P.C.C.U.	(1)	9	6	66.7
	TOTAL	6	45	33	73.3%
High Death Rate Area	C.C.U.	(1)	4	3	75.0
	Burn	(1)	8	7	87.5
	N.I.C.U.	(1)	9	5	55.6
	I.C.U.	(1)	14	11	78.6
	Oncology	(1)	9	8	88.9
	TOTAL	5	44	32	72.9%
<u>GRAND TOTAL:</u>		18	135	101	74.8%

TABLE 3
Demographic Data for the Nursing Sample

Variable	Result
Sex	
Female	89
Male	9
Age in Years	
Range	23-64
Mean	33.2
Median	29.1
Total Work Experience in Years	
Range	1-40
Mean	8.5
Median	5.3
Current Work Experience in Years	
Range	1-36
Mean	4.3
Median	2.2
Shift	
Day (7-3)	41
Evening (3-11)	39
Night (11-7)	18
Religious	
Yes	70
No	18
Personal Deaths over Past Year	
Yes	48
Range	0-8
No	53
Professional Deaths over Past Year	
Range	1-50
Mean	6.8
Median	3.5
Death Education Class	
No	47
Yes	51
During Past Year	3
Between 1-4 years ago	29
Over four years ago	14

Subjects and Sampling

A list of all registered nurses employed on a full-time basis for a minimum of six months on their current unit was compiled. Full-time employment was operationally defined as 32-40 hours per week. Registered nurses working on a part-time basis, or for less than six months, were excluded because their actual exposure to patient deaths would have been difficult to establish. The hospital units were stratified into high, intermediate, or low death rate areas and a sample of 50 nurses was randomly selected from each death rate area for a total sample size of 150. Fifteen of the selected nurses were not available during the data collection period, which reduced the actual sample size to 135. The overall response rate was 74.8%, with minor variations between areas (Table 2).

The subjects were predominately young females (mean age = 33 years) who had been employed in nursing for an average of 8 1/2 years and worked either the day or evening shift. The majority considered themselves to be religious and believed in life-after-death. Less than half of the sample had experienced a death in their personal life over the past year, but almost all had experienced one or more patient deaths (mean = 7 deaths) over the same time period. Approximately half of the sample stated they had attended a class or seminar on death or dying. Refer to Table 3 for a complete summary of background characteristics.

Instruments

The Collett-Lester Fear of Death Scale. This tool is a Likert-type scale consisting of 36 items, each with a 6 point range from strong agreement (+3) to strong disagreement (-3) (see Appendix B). It was originally developed in 1969 with two samples of 25 undergraduate students each. The scale uses a multidimensional approach to fear of

death with four subscales (see Appendix C): 1) fear of death of self, 2) fear of death of others, 3) fear of dying of self, and 4) fear of dying of others. Subscale 1, fear of death of self, contains 9 items with a range of scores from +27 (high fear) to -27 (low fear). Subscale 2, fear of death of others, contains 10 items with a score range of +30 to -30. Subscale 3, fear of dying of self, contains 6 items with a score range of +18 to -18, and subscale 4, fear of dying of others, contains 11 items with a score range of +33 to -33. These subscales may be studied individually, and then a total fear of death score may be calculated by adding the individual subscale scores (Appendix D).

The Collett-Lester Scale has not been independently validated, but Durlak (1973) reported a high correlation of the Collett-Lester Scale with four other current fear of death scales (Boyar, 1964; Lester, 1967; Sornoff & Corwin, 1959; Tolor, 1967), which supports its concurrent validity. The highest correlations were found with the subscale, fear of death of self. The reliability of this scale has not been adequately tested at the present time. However, an inter-item correlation done with this study yielded an alpha of .80, which strongly supports the reliability of this scale. (Appendix E).

Background Questionnaire. Data were obtained by questionnaire (see Appendix B) on the variables of sex, age, years of total work experience, years of current work experience, religiosity, belief in life-after-death, number of death experiences over the past year (personal and professional), and prior death education. These data were gathered both in order to describe the sample population and to determine their relationship to nurses' fear of death.

Measurement of the Independent Variable

The number of patient admissions, transfers-in, and deaths for each of the selected 18 units were obtained from hospital records for a 12 month period beginning July 1, 1981 and ending June 30, 1982. From these data the death rate for each unit was calculated using the following formula:

$$\text{Death Rate} = \frac{\# \text{ pt. deaths per unit}}{\# \text{ pt. admissions} + \text{transfers-in per unit}} \times 100$$

Death rates were categorized as low, intermediate, or high using the "naturally" occurring breaks in the death rates as division points (see Table 1). A death rate of under 1% was considered low, 1% to 3% was considered intermediate, and greater than 3% was considered high.

Procedure

Provision for Human Subjects

Permission was obtained from the vice-president of nursing at a large Northwest medical center to conduct the research project. Nursing supervisors and head nurses on units where data would be collected were informed about the study by the vice-president prior to initial contact by the researcher. A cover letter briefly describing the research project was sent to all units selected for participation, and a second more detailed explanation was attached to the questionnaires distributed to individual subjects (see Appendix A). Confidentiality was guaranteed by coding each questionnaire by number and destroying the master list of subjects and subjects' code numbers upon completion of the project.

Distribution of Questionnaires

Questionnaires were distributed to 135 randomly selected subjects either by the researcher or unit head nurse. An envelope was provided with each questionnaire so that subjects could seal their returns and place them in a manila folder posted on each unit. The completed forms were collected daily by the investigator. Subjects were informed when they received the questionnaire that they had one week to complete and return the form. Daily reminder notices were posted on each unit over the final three days of the week. Data from all units were gathered within an 11 day period, from July 27 - August 6, 1982.

Analysis of Data

A one-way analysis of variance was used to test the difference in the mean fear-of-death scores of nurses on the three categories of units, low, intermediate, and high patient death rates.

Pearson's correlation coefficient was computed to examine both the magnitude and direction of the relationships between fear of death scores and the variables of age, sex, work experience, religiosity, belief in life-after-death, personal and professional death experiences, and death education. In addition, a one-way analysis of variance was used to test the difference in the mean values of the demographic variables on the three categories of units by patient death rates.

CHAPTER III

RESULTS

Relationship Between Nurses' Fear of Death and Hospital Unit Death Rates

The study focused on the relationship between nurses' fear of death and the patient death rates on hospital units where they were employed. Two hypotheses were tested:

1. Nurses working in hospital units with high patient death rates will have a greater fear of death than nurses working in hospital units with intermediate patient death rates.
2. Nurses working in hospital units with low patient death rates will have a greater fear of death than nurses working in hospital units with intermediate death rates.

Hypothesis 1. The individual nurses' scores varied considerably, with nurses in the high patient death rate area consistently demonstrating lower fear of death and dying scores than nurses in the low death rate area (see Table 4). The scores from the high death rate area were lower than those from the intermediate death rate area except for the subscale, Fear of Death of Others. On this subscale, the scores from the intermediate death rate area were lower. However, these differences were not significant when analyzed using a one-way analysis of variance (see Table 5). Thus, the hypothesis was not supported.

TABLE 4

Means and Standard Deviations of Nurses' Scores on the Collett-Lester
Fear of Death Scale by Patient Death Rate Area

Outcome Measures: Subscales of Collett-Lester Fear of Death Scale	Scores by Area			
	Combined Death Rate Areas (n = 101)	Low Death Rate Areas (n = 36)	Int. Death Rate Areas (n = 33)	High Death Rate Areas (n = 32)
Fear of Death of Self				
Mean	-3.12	-2.63	-1.45	-5.41
S.D.	9.97	10.40	8.53	10.70
Fear of Death of Others				
Mean	1.44	2.33	.67	1.25
S.D.	7.86	8.13	7.84	7.73
Fear of Dying of Self				
Mean	2.74	2.47	3.47	2.29
S.D.	5.53	5.87	5.05	5.70
Fear of Dying of Others				
Mean	-15.78	-13.68	-15.93	-17.99
S.D.	7.91	8.38	7.01	7.84
Total Fear of Death				
Mean	-14.68	-11.56	-13.30	-19.62
S.D.	21.23	22.93	19.20	21.00

TABLE 5

Summary Table for ANOVA: Relationship Between Low, Intermediate, and High Death Rate Areas and Nurses' Fear of Death Scores

Source	SS	df	MS	F*
Fear of Death of Self Score				
Between Groups	268.48	2	134.24	1.361
Within Groups	9667.16	98	98.64	p=.26
Total	9933.65	100		
Fear of Death of Others Score				
Between Groups	49.22	2	24.61	.393
Within Groups	6132.76	98	65.58	p=.68
Total	6181.99	100		
Fear of Dying of Self Score				
Between Groups	26.56	2	13.28	.430
Within Groups	3028.38	98	30.90	p=.65
Total	3054.94	100		
Fear of Dying of Others Score				
Between Groups	317.11	2	158.56	2.617
Within Groups	5936.88	98	60.58	p=.08
Total	6253.99	100		
Total Fear of Death Score				
Between Groups	1194.27	2	597.14	1.334
Within Groups	43872.11	98	447.67	p=.27
Total	45066.38	100		

* $F \geq 3.09$ is significant at .05 level.

Hypothesis 2. Nurses working in the low patient death rate area scored lower than the nurses in the intermediate death rate area on the subscales measuring Fear of Death of Self and Fear of Dying of Self. On the subscales measuring Fear of Death of Others, Fear of Dying of Others, and Total Fear of Death, the nurses' scores from the low death rate area were greater than those of nurses from the intermediate death rate area. Again, none of these differences were statistically significant based on the results of the oneway analysis of variance (see Table 5). Thus, the hypothesis was not supported.

Additional Analyses. Planned comparisons between groups for each subscale and the overall scale yielded a significant difference between the high and low death rate areas on the Subscale Fear of Dying of Others ($t = 2.28, p < .05$). Nurses from the low death rate area had higher scores on this subscale than nurses from the high death rate area (see Table 6). No significant differences were found between areas for any of the other subscales or for the total score.

TABLE 6

Summary of Planned Comparisons Between Death Rate Areas and Scores on
The Collett-Lester Fear of Death Scale

Outcome Measures: Subscales of the Collett-Lester Fear of Death Scale	Death Rate Areas Compared		
	Low vs Intermediate	Intermediate vs High	High vs Low
Fear of Death of Self Scores	low >int. ^a t = -.4936 p=.31	int.< high t = -1.61 p=.055	b t = 1.15 p=.25
Fear of Death of Others Scores	low >int. t = .8710 p=.19	int.< high t = .2972 p=.38	b t = .5605 p=.58
Fear of Dying of Self Scores	low >int. t = -.7423 p=.23	int.< high t = -.8550 p=.20	b t = .1368 p=.89
Fear of Dying of Others Scores	low >int. t = 1.2039 p=.17	int.< high t = -1.0670 p=.14	b t = 2.2838* p=.03
Total Fear of Death Scores	low >int. t = .3417 p=.37	int.< high t = -1.2037 p=.12	t = 1.5681 p=.12

Note: The degrees of freedom for the planned comparisons are 98. The means and standard deviations for these planned comparisons are presented in Table 4.

a: Direction of hypotheses

b: No hypothesized differences

*: Significant, $p < .05$

Correlations of Nurses' Fear of Death and Work Area with Selected Nurse Characteristics

Pearson correlation coefficients were computed to analyze the relationship between the nurses' scores on the Collett-Lester Fear of Death subscales and the variables of sex, religiosity, belief in life-after-death, age, total years of work experience, years of experience on current work unit, personal (relatives or close friends) deaths, professional (patient) deaths, work area (low, intermediate, or high patient death rate), and death education. Results are presented in Table 7. It may be seen that significant correlations were found between many of the variables and the fear of death subscales, however work area was the only variable significantly correlated with either of the two fear of dying subscales ($r = .23, p < .01$). The total fear of death scale was significantly related with the variables of total work experience ($r = .26, p < .01$) and professional deaths ($r = -.25, p < .05$). The variables of religiosity and death education were not significantly related to any of the subscales or the overall fear of death scale.

In order to study the relationships between work area and the extraneous variables in more detail, a one-way analysis of variance was performed which revealed some significant differences between areas on the variables of current work experience ($F = 6.46, p < .01$), professional deaths ($F = 10.84, p < .001$), and death education ($F = 3.38, p < .05$) (see Tables 8 and 9). Because no predictions were made, the Student-Newman-Keuls procedure, a multiple range test, was performed which showed that nurses working in the low death rate area had significantly more years of experience on their current unit than nurses

TABLE 7

Pearson Correlation Coefficients Between Scores on Collett-Lester Fear of Death Scales and Extraneous Variables

Variables	Fear of Death of Self	Fear of Death of Others	Fear of Dying of Self	Fear of Dying of Others	Total Fear of Death
Sex	-.08 (98)	-.36*** (98)	-.01 (98)	.04 (98)	-.15 (98)
Religiosity	-0.10 (97)	.04 (97)	-.05 (97)	-.12 (97)	-.09 (97)
Belief in Life- After-Death	.01 (93)	.40*** (93)	-.06 (93)	.005 (93)	.14 (93)
Age	-.38*** (91)	-.21* (91)	-.02 (91)	-.004 (91)	-.26 (91)
Total Work Experience	-.34*** (99)	-.19* (99)	-.08 (99)	-.04 (99)	-.26** (99)
Current Work Experience	-.21* (91)	-.07 (99)	-.01 (99)	-.02 (99)	-.13 (99)
Personal Deaths	-.21* (97)	-.08 (97)	-.07 (97)	-.04 (97)	-.17 (97)
Professional Deaths	-.13 (82)	-.17 (82)	-.17 (82)	-.22 (82)	-.25* (82)
Work Area	-.11 (101)	-.06 (101)	-.01 (101)	-.23** (101)	-.15 (101)
Death Education	.10 (98)	.16 (98)	-.14 (98)	-.14 (98)	.02 (98)

Note: Numbers in parentheses represent the number of cases.

* Significant at .05 level

** Significant at .01 level

*** Significant at .001 level

TABLE 8

Summary Table for ANOVA: Relationship Between Low, Intermediate, and High Death Rate Areas and Extraneous Variables

Source	SS	df	MS	F
Age				
Between Groups	88.05	2	44.02	.399 ^a
Within Groups	9707.14	88	110.31	p=.67
Total	9795.19	90		
Sex				
Between Groups	.09	2	.04	.50 ^b
Within Groups	8.09	95	.09	p=.61
Total	8.18	97		
Total Work Experience				
Between Groups	275.87	2	137.93	1.714 ^b
Within Groups	7726.86	96	80.49	p=.19
Total	8002.73	98		
Current Work Experience				
Between Groups	355.23	2	177.61	6.463 ^{b**}
Within Groups	2638.41	96	27.48	p=.002
Total	2993.64	98		
Religiosity				
Between Groups	.10	2	.05	.242 ^b
Within Groups	19.38	94	.21	p=.79
Total	19.48	96		
Belief in Life-After-Death				
Between Groups	.32	2	.16	.999 ^c
Within Groups	14.20	90	.16	p=.37
Total	14.52	92		
Personal Deaths				
Between Groups	2.72	2	1.36	1.305 ^b
Within Groups	97.84	94	1.04	p=.28
Total	100.56	96		
Professional Deaths				
Between Groups	1498.33	2	749.17	10.844 ^{a***}
Within Groups	5388.51	78	69.08	p=.0001
Total	6886.84	80		
Class				
Between Groups	1.63	2	.81	3.382 ^{b*}
Within Groups	22.83	95	.24	p=.04
Total	24.46	97		

- ^a $F \geq 3.12$ Significant at .05 level * Significant at .05 level
^b $F \geq 3.10$ Significant at .05 level ** Significant at .01 level
^c $F \geq 3.11$ Significant at .05 level *** Significant at .001 level

TABLE 9

Means and Standard Deviations of Extraneous Variables by Patient Death Rate Area

Outcome Measures	Low Death Rate Area	Intermediate Death Rate Area	High Death Rate Area
Age	(32)	(28)	(31)
Mean	34.25	33.36	31.90
S.D.	12.79	9.57	8.48
Sex ^a	(35)	(32)	(31)
Mean	.06	.09	.13
S.D.	.24	.30	.34
Total Work Experience	(35)	(32)	(32)
Mean	10.77	7.22	7.34
S.D.	11.34	6.91	7.77
Current Work Experience	(35)	(32)	(32)
Mean	6.83	3.03	2.72
S.D.	7.90	2.51	3.23
Religiosity ^b	(35)	(32)	(30)
Mean	.71	.69	.77
S.D.	.46	.47	.43
Belief in Life-After-Death ^b	(34)	(29)	(30)
Mean	.82	.72	.87
S.D.	.39	.45	.35
Personal Deaths	(35)	(30)	(32)
Mean	1.57	1.70	1.97
S.D.	.65	.92	1.38
Professional Deaths	(34)	(26)	(21)
Mean	2.41	7.46	13.10
S.D.	2.26	6.87	14.22
Class ^b	(35)	(32)	(31)
Mean	.43	.44	.71
S.D.	.50	.50	.46

Note: Numbers in parentheses represent the number of cases.

^a Coding: 0 = female, 1 = male

^b Coding: 0 = no, 1 = yes

from either the intermediate or high death rate units ($p < .05$). The same procedure demonstrated significant differences between all three areas on the variable of professional deaths ($p < .05$). However, no significant differences between areas based on death education were demonstrated by the Student-Newman-Keuls procedure.

An additional oneway analysis of variance was performed to examine the relationship between fear of death and shift, i.e., day (7-3), evening (3-11), or night (11-7). No significant differences were demonstrated. (see Tables 10 and 11).

Other Findings

Pearson correlation coefficients were computed to determine the relationship between extraneous variables themselves (see Table 12). The nine male nurses included in the study sample had fewer years of total work experience ($r = -.18, p < .05$) and fewer of them expressed a belief in life-after-death ($r = -.41, p < .001$). Religiosity was positively correlated with belief in life-after-death ($r = .44, p < .001$), but not with any of the other variables. Age, total work experience, and current work experience were all positively related, as could be expected. Older nurses had more years of total work experience ($r = .85, p < .001$) and current work experience ($r = .63, p < .001$), but they reported less participation in death education classes ($r = -.23, p < .05$). In contrast, nurses with fewer years of work experience on their currently assigned hospital units were employed in areas with high patient death rates ($r = -.31, p < .001$), had experienced more professional deaths ($r = -.21, p < .05$), and reported more exposure to some type of death education ($r = -.19, p < .05$). Personal deaths were not significantly correlated with any of the other variables.

TABLE 10

Means and Standard Deviations of Nurses' Scores on the Collett-Lester
Fear of Death Scale by Shift.

Outcome Measures	Scores According to Work Shift		
	Day Shift (n = 41)	Evening Shift (n = 39)	Night Shift (n = 18)
Fear of Death of Self			
Mean	-3.44	-1.30	-6.00
S.D.	10.02	11.01	7.65
Fear of Death of Others			
Mean	.54	2.81	.17
S.D.	6.30	9.58	7.42
Fear of Dying of Self			
Mean	1.94	3.23	3.39
S.D.	5.88	5.16	5.77
Fear of Dying of Others			
Mean	-15.71	-15.56	-16.39
S.D.	9.30	7.69	5.42
Total Fear of Death			
Mean	-16.58	-10.83	-18.83
S.D.	22.29	22.42	17.16

TABLE 11

Summary Table for ANOVA: Relationship Between Day, Evening, and Night Shift and Nurses' Fear of Death Scores

Source	SS	df	MS	F*
Fear of Death of Self Score				
Between Groups	282.41	2	141.21	1.395
Within Groups	9615.60	95	101.22	p=.25
Total	9898.01	97		
Fear of Death of Others Score				
Between Groups	134.94	2	67.47	1.066
Within Groups	6011.10	95	63.27	p=.35
Total	6146.04	97		
Fear of Dying of Self Score				
Between Groups	43.08	2	21.54	.691
Within Groups	2962.10	95	31.18	p=.50
Total	3005.18	97		
Fear of Dying of Others Score				
Between Groups	8.78	2	4.39	.067
Within Groups	6213.07	95	65.40	p=.94
Total	6221.85	97		
Total Fear of Death Score				
Between Groups	1036.37	2	518.19	1.119
Within Groups	43976.68	95	462.91	p=.33
Total	45013.05	97		

Note: The means and standard deviations for these values are reported in Table 10.

* $F \geq 3.10$ is significant @ .05 level

TABLE 12

Summary of Pearson's Correlation Coefficients
Between Extraneous Variables

	Sex	Religi- osity	Belief in Life-After Death	Age	Total Work Exper.	Current Work Exper.	Person- al Deaths	Profes- sional Deaths	Work Area	Death Educa- tion
Sex	-.12 (95)		-.41*** (91)	-.10 (90)	-.18* (97)	-.14 (97)	-.05 (95)	.07 (80)	.10 (98)	.03 (96)
Religiosity		-	.44*** (92)	-.01 (89)	.11 (97)	.03 (97)	.16 (95)	.15 (79)	.05 (97)	-.01 (96)
Belief in Life- After Death			-	.06 (85)	.04 (93)	-.05 (93)	-.02 (91)	.10 (75)	.04 (93)	.03 (92)
Age				-	.85*** (91)	.63*** (91)	-.01 (89)	-.08 (77)	-.09 (91)	-.23* (90)
Total Work Experience					-	.70*** (99)	.01 (97)	.01 (81)	-.16 (99)	-.21* (98)
Current Work Experience						-	-.02 (97)	-.21* (81)	-.31*** (99)	-.19* (98)
Personal Deaths							-	.11 (80)	.16 (97)	.12 (96)
Professional Deaths								-	.47*** (81)	.07 (80)
Work Area									-	.23** (98)
Death Education										-

Note: Numbers in parentheses represent the numbers of cases.

* Significant at .05 level

** Significant at .01 level

*** Significant at .001 level

CHAPTER IV

DISCUSSION

Relationship Between Nurses' Fear of Death and Hospital Unit Death Rates

Neither study hypothesis was supported. This finding is important because conflicting results are reported in the current literature regarding the relationship between contact with death and fear of death. These variations in findings may be related to differences either in method and/or instruments used by researchers.

In addition to the current study, Shusterman and Sechrest (1973), Denton and Wisenbaker (1977), and Gorsuch (1982) have investigated this issue using nurses as subjects. The Shusterman and Sechrest Study, which measured fear of death with items from the Collett-Lester Fear of Death Scale and additional self-prepared items, reported no correlation between nurses' fear of death and death rates on various hospital units. However, as reported earlier, this study had several limitations which weaken the validity of their findings. The Denton and Wisenbaker and Gorsuch studies used a unidimensional scale, Templer's DAS, to measure death anxiety. Denton and Wisenbaker reported no relation between the death of a close friend or relative and death anxiety, but that death anxiety was significantly less in those individuals who had actually witnessed a violent death or been close to death themselves. Gorsuch found that nurses working in low death rate areas had significantly higher death anxiety and had experienced fewer losses of close friends or family members than nurses working in high death rate areas. Although the current study demonstrated no significant difference in nurses' fear of death based on calculated patient death rates per unit,

self-reported exposure to patient deaths, as measured by the question "How many deaths have you experienced in your professional work (death of a patient) over the past year?", had a significant negative correlation with total fear of death ($r = -.25, p < .05$). The magnitude of this correlation may have been greater if more complete data were available. Eleven of the 31 nurses from the high death rate units responded to the question of patient death experiences with non-quantifiable answers such as, "many", "I can't remember", or "I didn't count them". It is also interesting to compare the actual number of patient deaths which occurred over the past year for each area with the nurses' self-reported experiences. The low death rate area had numbers of patient deaths which varied from 0-14 deaths ($\bar{x} = 3.6$) over a 12 month period. The mean number of professional deaths reported by nurses from this area was 2.4 deaths. The actual number of patient deaths on the intermediate units ranged from 9 to 28 ($\bar{x} = 20.2$) and the nurses from these units reported an average of 7.5 professional deaths. On the high death rate units, patient deaths ranged from 9 to 84 ($\bar{x} = 48$) and the nurses reported an average of 13.1 deaths. Two study subjects from the high death rate area responded that they had "experienced" 50 professional deaths over the past year. Their overall fear of death scores were very low (-48 and -62) compared to the average score of -19 for other nurses from high death units. Although these are isolated examples, it may be that perceived exposure to patient death may be a more useful measure for investigating the relationship of contact with death and fear of death.

With the exception of the Shusterman and Sechrest study, research investigating the relationship between contact with death and nurses' fear of death indicates that nurses with more exposure to death have less fear of death than nurses with limited exposure to death. This difference might be explained by the process of desensitization. Huckabay and Jagla (1979) and Gorsuch (1982) both discuss this theory which is based on the work of Janis (1958). According to Janis, increased knowledge of a stressor reduces the severity of the stress reaction. Thus, increased exposure to death situations would lead to a decreased stress reaction, and therefore a decreased fear of death.

Livingston and Zimet (1965) discuss the concept of self-selection in choice of specialty area for medical students. They propose that values and attitudes, such as fear of death, are already an integral part of an individual's personality before he/she begins a health care career. Therefore, individuals with a high fear of death may select a work area with few patient deaths, which could explain the reported differences. No reported research has been conducted which would support the factor of self-selection, as related to fear of death, in nurses' choice of specialty area.

An additional consideration is the difficulty in assessing the effect of denial on responses to questionnaire items. Do nurses who frequently come in contact with patient death use denial as a coping mechanism? If so, would low scores on fear of death instruments reflect a decreased fear of death or an increased use of denial? This is a difficult question, and perhaps both assessments could be true.

Correlation of Nurses' Fear of Death and Work Area with Selected Nurse Characteristics

Statistical analyses of the relationship between scores on the Collett-Lester Fear of Death Scales and the independent and extraneous variables revealed several interesting findings. When Pearson correlation coefficients were computed, it was found that the older, more experienced nurses who had been employed on their current work unit for a longer time period and had experienced more personal deaths over the past year had a decreased fear of death of self as compared to the other nurses in the sample (see Table 7). However, the overall fear of death scores were related only to years of total work experience and numbers of professional deaths, not to age, years of current work experience, or personal deaths. These findings are consistent with findings of Shusterman and Sechrest (1973), Denton and Wisenbaker (1977), and Gorsuch (1982).

When the sample was divided according to work areas (low, intermediate, or high patient death rates) and analyzed by oneway analysis of variance, the groups of nurses demonstrated no differences regarding the variables of age, total years of work experience, or numbers of personal deaths over the past year (see Tables 8 and 9). A significant difference was demonstrated regarding years of work experience on current work units, numbers of professional deaths, and participation in death education classes. Nurses from the intermediate and high death rate units had an average of 2.7-3.0 years of experience on currently assigned units as compared to 6.8 years for nurses from the low death rate units. This finding reflects the increased turnover rate in the

higher death rate areas. In addition, nurses from high death rate units tended to report more attendance at death education classes. Thus, in the high death rate units, 13 out of 32 (41%) nurses had taken death education classes as part of their nursing education in comparison with 7 out of 33 nurses (21%) for the intermediate death rate units and 5 out of 36 nurses (14%) for the low death rate units. This finding could be interpreted to support the concept of self-selection in nurses' choice of work area, since there was no significant difference in age between work areas which might indicate difference in educational preparation.

Religiosity had no significant relationship to fear of death, nor did nurses in the various work areas differ in their religious beliefs. However, those nurses who expressed a belief in life-after-death had a significantly greater fear of death of others ($r = .40, p < .001$) than nurses who did not express that belief.

Based on the information obtained through the data analysis, the original conceptual framework was revised and is presented in Figure 3. In the revised model, fear of death is viewed as an extraneous variable which is significantly correlated with nurses' exposure to patients' death and dying. It represents only one of the many factors which influence nurses' grieving responses to patient deaths and thus their ultimate resolution or non-resolution of that loss.

Other Findings

Sample. The nurses who participated in this study were slightly older and more experienced than nurses who participated in some earlier studies (see Table 13). However, Gorsuch and Stoller reported similar

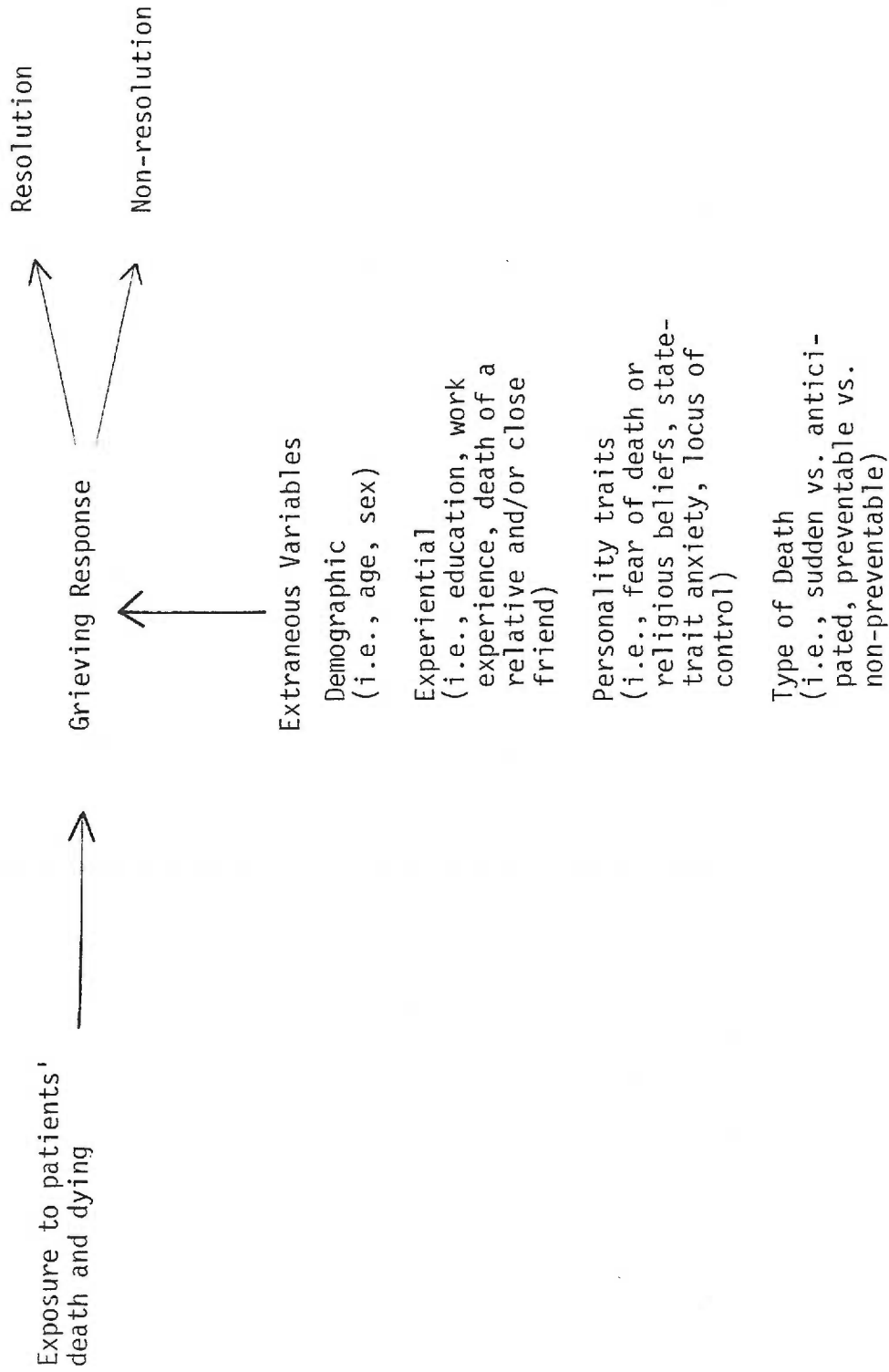


Figure 3. Revised Conceptual Framework

characteristics for their subjects, so this finding may represent a trend in the nursing profession rather than a difference in this particular sample. The majority of nurses in this study considered themselves religious as did those nurses interviewed by Gorsuch and Popoff. Data regarding the variables of race, marital status, and level of nursing education were not collected for this study, so comparison on these characteristics is not possible. The finding of Gorsuch (1982) that younger nurses tend to work in high death rate areas was not replicated in this sample.

Instrument. The items from the Collett-Lester Fear of Death Scale that were most often left unanswered or that elicited comments from the subjects in this study were # 1, 4, 6, 10, 12, 14, and 26 (see Appendix F.) Five of these statements are part of the subscale, Fear of Death of Self, indicating that subjects had more difficulty answering items which asked them to reflect on their own death vs. the death of others.

Few studies report the actual scores obtained from samples on the various fear of death instruments. This makes cross-comparison of studies difficult. Stoller (1980) utilized the Collett-Lester Fear of Death Scale with a sample of 44 nurses in a study investigating the impact of death-related fears on attitudes toward situations involving death and dying and reported the scores obtained for each subscale. Her findings are consistent with those of this study, i.e., lower scores for the subscales fear of dying of others and fear of death of self (see Table 14).

TABLE 13

Comparison of Current Sample to Other Samples on Variables of Age and
Total Work Experience

Sample	Variable	
	Age in Years (Mean)	Total Years of Work Experience (Mean)
Rathert (1983)	33.2	8.5
Gorsuch (1982)	32.8	10.4
Stoller (1980)	33.8	11.5
Denton and Wisembaker (1977)	25.8	-
Popoff (1975)	26	-
Shusterman and Sechrest (1973)	27.1	5.7

TABLE 14
Comparison of Scores on Collett-Lester Fear of Death Scale

Scale	Scores	
	Stoller n = 44	Rathert n = 101
Fear of Death of Self	-1.4 (10.5)	-3.1 (10.0)
Fear of Death of Others	0.6 (9.2)	1.4 (7.9)
Fear of Dying of Self	4.6 (5.9)	2.7 (5.5)
Fear of Dying of Others	-11.2 (8.2)	-15.8 (7.9)
Total Fear of Death	-	-14.7 (21.2)

Note: Numbers in parentheses represent the standard deviation.

Limitations of the Study

There are two major areas of limitation for this study. One is the general field of research on death attitudes and the second involves measurement of an individual's fear of death.

Current research on the topic of death and dying is limited by many factors. This is an emotional area which makes measurement and interpretation of data difficult. Questionnaires, such as the one used in this study, are an economical and efficient method of gathering information. However, it is assumed that participants will answer the items honestly and openly. Since death anxiety/fear of death have both conscious and unconscious aspects, this may be an unrealistic expectation. Also, insufficient data are available regarding the meaning of various levels of death anxiety/fear of death. It is not known whether decreased fear of death represents effective coping, increased use of denial, or some other unrecognized factor. In addition, the behavioral consequences of high vs. low fear of death have not been identified. Thus, the interpretation of the findings in this study and others have been limited to describing the correlations between variables rather than establishing a cause and effect relationship.

This study utilized a multidimensional approach, the Collett-Lester Fear of Death Scale. This tool measures four separate subscales; fear of death of self, fear of death of others, fear of dying of self, fear of dying of others. Patient death rate was conceptualized as the independent variable and calculated from hospital data on patient admissions, transfers, and deaths.

Information on nurses' perception of their exposure to patient deaths was also measured by directly questioning the subjects. However, the amount of contact with dying patients on various units was not measured, nor was the type of patient death identified. These are important variables which were not addressed in this study and which may have a significant effect on death-related fears.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study examined the relationship between patient death rates and hospital nurses' fear of death. This is an important area for research because nurses working in hospital settings are exposed to death and dying much more frequently than individuals in the general population. Nurses employed on intensive care or oncology units reportedly may experience over 50 patient deaths in a year. Yet, few studies have investigated the effect of contact with death on nurses' fear of death, although there is evidence that death-related fears of health care providers influence the plan of care for dying patients.

In this study, it was hypothesized that nurses working in both high and low patient death rate areas would have a greater fear of death than those employed in an intermediate death rate area. The rationale for these hypotheses are as follows: First, the "over-exposure" of nurses in high death rate units would not allow adequate time for resolution of the grieving responses. High levels of exposure would be associated with an increased fear of death. In contrast, nurses in low death rate units, who were "under-exposed" to patient deaths, would not develop effective coping mechanisms due to infrequent death and dying experiences. Thus, it was postulated that low levels of exposure would be associated with an increased fear of death. Based on concepts of loss and grief, it was conceptualized that nurses in high and low patient death rate areas would demonstrate a greater fear of death than nurses in intermediate death rate areas.

To test these hypotheses, a correlational field study was conducted. One hundred and thirty-five subjects were randomly selected from 18 units in a 554-bed metropolitan hospital. Study participants completed the Collett-Lester Fear of Death Scale and a background questionnaire. Analyses of these data demonstrated no significant relationship between low, intermediate, and high patient death rate areas and nurses' overall fear of death scores. However, more experienced nurses who reported greater exposure to patient deaths over the past year had less fear of death (overall scale) than those nurses with less experience and minimal contact with patient death and dying. Also, nurses from the low death rate units had significantly more years of experience on their current unit than nurses from the intermediate and high death rate units.

Conclusions

Stoller (1980) concluded that "the uneasiness nurses report in work situations involving dying and death in the hospital is more than a simple reflection of the nurses' own fears." Similarly, this research study indicates that nurses' death related fears are more than a simple reflection of their contact with death and dying. Past research has focused on the relationships between demographic and experiential variables and attitudes toward death. Their findings and the results of this study suggest that although these characteristics may demonstrate significant correlations with fear of death as measured by various instruments, they explain only a small percentage of the reported variance in individual scores. Perhaps future research in this field, should focus on the impact of personality traits and

type of death on death attitudes and fears. This information would be particularly relevant to nurse educators, as it would facilitate the development of death education classes appropriate to nurses from various settings. For example, nurses employed on an oncology unit encounter patient losses which differ significantly from those of a neonatal intensive care unit. As Bugen (1977) suggests, different types of patient deaths will elicit different types of grieving responses. Thus, it is important to identify those additional factors which will affect nurses' attitudes toward death. With the development of a broader knowledge base in this area, interventions aimed at assisting health care providers cope with the stressors of hospital nursing will be more effective.

Recommendations

Future research relating contact with death and fear of death might yield more useful information if a longitudinal approach was utilized. Nurses' attitudes toward death could be measured prior to entering schools of nursing and periodically throughout their professional careers. This method would allow researchers to investigate causal relationships and to determine the presence or absence of self-selection in nurses' choice of specialty units.

Further refinement of instruments for measuring death attitudes is necessary. Currently, scores on the various fear of death/death anxiety tools provide information which must be interpreted very cautiously. It is not clear what constitutes a "normal" or "healthy" fear of death. Additional studies of large non-health care related populations are needed to establish baseline values from which to

compare findings. In addition, the behavioral consequences of nurses' high or low fear of death should be investigated since it has been suggested that patient care will be affected by nurses' attitudes toward death and dying.

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APPENDIX A

Cover Letters

1. Introductory Letter to the Units
Selected for Study
2. Letter to Nurse Participants

OREGON HEALTH SCIENCES UNIVERSITY

Your unit has been selected to participate in a master's research project conducted by Deborah K. Rathert, R.N., under the supervision of Shirley A. Murphy, R.N., Ph.D., Thesis Advisor. This study will investigate the attitudes of staff nurses on various hospital units toward death and dying.

Over the next week, _____, I will be personally distributing and collecting questionnaires on your hospital unit. If you are one of the nurses randomly selected to participate in this study, you will be asked to complete a form consisting of some background data and 36 questions regarding attitudes toward death and dying. This should take approximately 15-20 minutes. Participation will be voluntary, and an individual may withdraw from the study at any time. Participation or non-participation in the project will have no effect on an individual's job status with the hospital. All responses will be number coded to maintain anonymity. Results of the completed study will be made available to the hospital, and to individuals upon request.

If you have any questions regarding the project, please call me at any time.

Debby Rathert
Telephone: 666-6901

OREGON HEALTH SCIENCES UNIVERSITY

As a full-time registered nurse on unit _____, you have been selected to participate in a master's research project conducted by Deborah K. Rathert, R.N., under the supervision of Shirley A. Murphy, R.N., Ph.D., Thesis Advisor. This study will investigate the attitudes of registered nurses on various hospital units toward death and dying.

If you choose to participate, you will be asked to complete the following form, which consists of some background data and 36 questions regarding attitudes toward death and dying. This should take approximately 15-20 minutes. It will be important that you answer as honestly as possible, and that you do not discuss your responses with other nurses until after the questionnaires have been completed and returned. During this study, you will be asked to reflect on your own attitudes toward death and dying, and Deborah Rathert, R.N., will be available on your unit to discuss the questionnaire and/or your feelings about the study.

There is no direct benefit to you as a subject in this study, other than an increased personal awareness of your attitudes toward death and dying. However, the information obtained through this project should help nursing and other health professions establish guidelines for education and support in this area.

All individual responses will remain anonymous. You may refuse to participate, or may withdraw from this study at any time without affecting your relationship with, or treatment at, the Oregon Health Sciences University and/or Emanuel Hospital. Results of the completed study will be made available to the hospital, and to individuals upon request.

Your assistance in this research project is greatly appreciated.
If you have any further questions, please contact me.

Debby Rathert
Telephone: 666-6901

APPENDIX B

Questionnaire

Section I: Collett-Lester Fear of Death
Scale (1969)
(obtained from Dr. David Lester;
Stockton State College)

Section II: Background Data

QUESTIONNAIRE

Section I.

Here is a series of general statements. You are to indicate how much you agree or disagree with them. Record your opinion in one of the spaces to the right of each item according to the following scale:

strong agreement	slight disagreement
moderate agreement	moderate disagreement
slight agreement	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 by placing an (X) in one of the boxes to the right of the item.

	Strong Agreement	Moderate Agreement	Slight Agreement	Slight Disagreement	Moderate Disagreement	Strong Disagreement
1. I would avoid death at all costs.	1.					
2. I would experience a great loss if someone close to me died.	2.					
3. I would not feel anxious in the presence of someone I knew was dying.	3.					
4. The total isolation of death frightens me.	4.					
5. I am disturbed by the physical degeneration involved in a slow death.	5.					
6. I would not mind dying young.	6.					
7. I accept the death of others as the end of their life on earth.	7.					
8. I would not mind visiting a senile friend.	8.					

	Strong Agreement	Moderate Agreement	Slight Agreement	Slight Disagreement	Moderate Disagreement	Strong Disagreement
9. I would easily adjust after the death of someone close to me.	9.					
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.	10.					
11. I would avoid a friend who was dying.	11.					
12. Dying might be an interesting experience.	12.					
13. I would like to be able to communicate with the spirit of a friend who has died.	13.					
14. I view death as a release from earthly suffering.	14.					
15. The pain involved in dying frightens me.	15.					
16. I would want to know if a friend were dying.	16.					
17. I am disturbed by the shortness of life.	17.					
18. I would not mind having to identify the corpse of someone I knew.	18.					
19. I would never get over the death of someone close to me.	19.					
20. The feeling that I might be missing out on so much after I die bothers me.	20.					
21. I do not think of dead people as having an existence of some kind.	21.					

	Strong Agreement	Moderate Agreement	Slight Agreement	Slight Disagreement	Moderate Disagreement	Strong Disagreement
22. I would feel uneasy if someone talked to me about the approaching death of a common friend.	22.					
23. Not knowing what it feels like to be dead does not bother me.	23.					
24. If I had a fatal disease, I would like to be told.	24.					
25. I would visit a friend on his/her deathbed.	25.					
26. The idea of never thinking or experiencing again after I die does not bother me.	26.					
27. If someone close to me died I would miss him/her very much.	27.					
28. I am not disturbed by death being the end of life as I know it.	28.					
29. I would feel anxious if someone who was dying talked to me about it.	29.					
30. The intellectual degeneration of old age disturbs me.	30.					
31. If a friend were dying I would not want to be told.	31.					
32. I could not accept the finality of the death of a friend.	32.					
33. It would upset me to have to see someone who was dead.	33.					

	Strong Agreement	Moderate Agreement	Slight Agreement	Slight Disagreement	Moderate Disagreement	Strong Disagreement
34. If I knew a friend were dying, I would not know what to say to him/her.	34.					
35. I would not like to see the physical degeneration of a friend who was dying.	35.					
36. I am disturbed by the thought that my abilities will be limited while I lie dying.	36.					

Section II.

1. Date of birth: _____ / _____ /19 _____
2. Sex: male female
3. How long have you worked as a registered nurse? _____ years _____ months
4. In what specialty areas have you worked and for how long?

_____ CCU/ ICU	_____ years	_____ months
_____ Emergency Room	_____ years	_____ months
_____ Medical	_____ years	_____ months
_____ Surgical	_____ years	_____ months
_____ Orthopedics	_____ years	_____ months
_____ OB/Gynecology	_____ years	_____ months
_____ Pediatrics	_____ years	_____ months
_____ OR/RR	_____ years	_____ months
_____ Psychiatric	_____ years	_____ months
_____ Other (Specify)		
_____	_____ years	_____ months
5. How long have you worked on this unit? _____ years _____ months
6. Do you consider yourself a religious person? yes no
7. Do you believe in life-after-death? yes no
8. How many deaths have you experienced in your personal life (death of a relative or close friend) over the past year? _____
9. How many deaths have you experienced in your professional work (death of a patient) over the past year? _____
10. Have you ever attended death and dying classes or seminars? yes no
 If yes, when did you attend the class or seminar? _____
 Who sponsored the class or seminar? _____
 How many hours were spent in class or seminar? _____
11. Additional comments:

APPENDIX C

Subscale Items from the
Collett-Lester Fear of Death Scale

Subscale 1:

Fear of Death of Self

1. I would avoid death at all costs.
4. The total isolation of death frightens me.
- *6. I would not mind dying young.
- *14. I view death as a release from earthly suffering.
17. I am disturbed by the shortness of life.
20. The feeling that I might be missing out on so much after I die bothers me.
- *23. Not knowing what it feels like to be dead does not bother me.
- *26. The idea of never thinking or experiencing again after I die does not bother me.
- *28. I am not disturbed by death being the end of life as I know it.

Subscale 2:

Fear of Death of Others

2. I would experience a great loss if someone close to me died.
- *7. I accept the death of others as the end of their life on earth.
- *9. I would easily adjust after the death of someone close to me.
13. I would like to be able to communicate with the spirit of a friend who has died.
- *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.
- *21. I do not think of dead people as having an existence of some kind.
27. If someone close to me died, I would miss him/her very much.
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.

Subscale 3:

Fear of Dying of Self

- 5. I am disturbed by the physical degeneration involved in a slow death.
- *12. Dying might be an interesting experience.
- 15. The pain involved in dying frightens me.
- *24. If I had a fatal disease, I would like to be told.
- 30. The intellectual degeneration of old age disturbs me.
- 36. I am disturbed by the thought that my abilities will be limited while I lie dying.

Subscale 4:

Fear of Dying of Others

- *3. I would not feel anxious in the presence of someone I knew was dying.
- *8. I would not mind visiting a senile friend.
- *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.
- *16. I would want to know if a friend were dying.
- 22. I would feel uneasy if someone talked to me about the approaching death of a common friend.
- *25. I would visit a friend on his/her deathbed.
- 29. I would feel anxious if someone who was dying talked to me about it.
- 31. If a friend were dying I would not want to be told.
- 34. If I knew a friend were 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.

* These items are reverse scored.

APPENDIX D

Scoring of the Collett-Lester

Fear of Death Scale

1. Scoring Key (obtained from Dr. David Lester, Stockton State College)
2. Calculation of Scores

SCORING OF TOOL

This scale is designed to assess four separate fears of death:

- fear of death of self
- fear of death of others
- fear of dying of self
- fear of dying of others

Each subscale contains items keyed positively and items keyed negatively. Although the scale is scored as any conventional Likert-type scale, care is needed in distinguishing the items of each scale and in distinguishing the positively keyed and the negatively keyed items.

The distribution of items is as follows:

	Positive	Negative
death of self	1,4,17,20	6,14,23,26,28
death of others	2,13,19,27,32,33	7,9,18,21
dying of self	5,15,30,36	12,24
dying of others	11,22,29,31,34,35	3,8,10,16,25

NOTE: The final score you get for any subject for each scale has no meaning by itself. It has meaning only in relation to the scores of other subjects. The items have not been constructed so that a score of, say +A, means that the subject has a fear of death while a score of -A means that the subject has no fear of death. The only kind of statement that is logically possible with this scale is that subject X has a higher (or lower) score than subject Y.

All of the statistical analyses for this study were computed with scores which were calculated by the following method:

1. A total score for each subscale was obtained by adding the individual item scores.
2. The total number of items completed within each subscale was divided by the total number of items in the scale, resulting in a percentage of completed items.
3. The subscale score was multiplied by the percentage of completed items which provided a more accurate score for each respondent.

No respondent was given a score unless he/she answered 75% of the items on each subscale. Overall, 81% of the subjects completed all of the items and an additional 12% completed 35 out of the 36 items on the Collett-Lester Scale.

Only one subject answered less than 32 of the items and that questionnaire was eliminated from the study.

APPENDIX E

Internal Consistency of Collett-Lester

Fear of Death Scale

APPENDIX E

Internal Consistency of Subscales and Total Scale of
Collett-Lester Fear of Death Scales

Scale	# Items	Alpha	Sample Size	Mean Inter-item Correlation Coefficient
Fear of Death of Self	9	.68	91	.19
Fear of Death of Others	10	.59	97	.11
Fear of Dying of Self	6	.55	98	.17
Fear of Dying of Others	11	.65	95	.17
Total Fear of Death	36	.80	82	.10

Note: Based on scores from 82 subjects who completed 100% of the 36 fear of death items.

APPENDIX F

"Problem" Items from the
Collett-Lester Fear of Death Scale

APPENDIX F

Summary of "Problem" Items from the
Collett-Lester Fear of Death Scale

Item	Blank	Response
		Comment
#1	1	"Myself" (-3) "Friend" (+1) "Whose? Mine? Friend? Patient?" (-3) "Impossible!" "My own" (+3)
#4	2	None
#6	2	None
#10	5	"Depends" (+2)
#12	3	"I'll wait" (-1) "Mine? Or a patient?"
#14	4	"Depends on what suffering." (-3) "At times" "If suffering has been occurring" (+3) "Plus more" (+2)
#26	5	"Unable to answer due to conflict in philosophy of my belief in life-after-death" "I don't believe death stops here. I don't know what I'll experience, but something yes!" "N.A."

Note: Numbers in parentheses represent the answer chosen for that particular item.

ABSTRACT


AN ABSTRACT OF THE THESIS OF

DEBORAH K. RATHERT

For the MASTER OF NURSING

Title: THE RELATIONSHIP BETWEEN PATIENT DEATH RATES AND HOSPITAL
NURSES' FEAR OF DEATH

Approved:

 Shirley Murphy, R.N., Ph.D., Thesis Advisor

Although nurses employed in an institutional setting are exposed to death and dying more frequently than other individuals, very little is known about the cumulative effects of prolonged exposure to death and dying. This study investigated the relationship between nurses' fear of death and their current work unit experience, i.e. low, intermediate, or high patient death rate area. One hundred and one registered nurses employed on a full-time basis at a 554 bed metropolitan hospital in the northwest participated in the study. They completed a questionnaire consisting of background data and the Collett-Lester Fear of Death Scale. Statistical analyses of the data demonstrated no significant differences in nurses' overall fear of death scores by work area. However, a significant negative correlation existed between nurses' self-reported exposure to patient deaths and fear of death. These results suggest that contact with death may have less effect on fear of death than has been previously suggested, and that future research should focus on other factors, such as personality traits and type of death.