

VERIFICATION OF STRESS FACTORS  
PERCEIVED BY HOSPICE NURSES:  
A DESCRIPTIVE STUDY

by

Linda Van Buren, B.S.N.

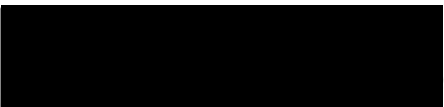
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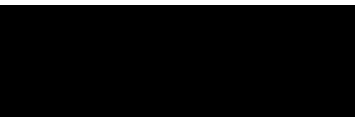
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APPROVED:

  
\_\_\_\_\_  
Patricia Archbold, D.N.Sc., Associate Professor, Thesis Advisor

  
\_\_\_\_\_  
Christine Tanner, Ph.D., Associate Professor, First Reader

  
\_\_\_\_\_  
Shirley Murphy, Ph.D., Associate Professor, Second Reader

  
\_\_\_\_\_  
Carol A. Lindeman, Ph.D., Dean, School of Nursing

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## CHAPTER I

### Introduction

Job-related stress can occur in any setting. However, it occurs with frequency in those settings in which the employee interacts extensively with other people. Nurses then, as well as social workers, physicians, lawyers, teachers, policemen, and others are highly vulnerable (Bishop, 1980). These people work intensely and intimately with other human beings. In any situation in which complex, intense interpersonal relationships are frequently used in a helping manner, there is risk of stress (Pines & Maslach, 1978). In nursing, the congregation of patients requiring the expenditure of both physical and emotional energy into one area, constitutes a high risk area (Holsclaw, 1965). Hospice nursing is one such area of high risk. Ivancevich and Matteson (1980) cite a study conducted in Tennessee by the National Institute for Occupational Safety and Health. Out of one hundred thirty occupational titles, nurses ranked twenty-seventh in admission rates to Tennessee mental health centers. Seven out of the top thirty were health related occupations. This led the authors to believe health care occupations including nursing in particular are stressful.

Nurses are given the responsibility in hospice care to establish, implement, and coordinate a comprehensive patient/family care plan. Further, nurses are responsible for the delivery of that care through intense, highly emotional interpersonal relationships. The stress generated in this area of nursing care is the concern of the present



study. There seems to be general agreement that stress exists in hospice care (Beszterczey, 1977; Vachon, 1979; Vachon, Lyall, Freeman, 1978). With the exception of one recent study (Barstow, 1980), the current literature identifying the stressors is based on clinical observations of researchers. It is not known, however, if the stressors identified by these researchers are actually stressful to those nurses working in hospice care areas. These nurses have not been asked to verify the stressors as perceived by them. Techniques employed to decrease or minimize stress based on inaccurate data would be of no value. It is therefore necessary in the present study to obtain accurate data from the involved nurses themselves.

The evidence of stress in hospice work may be seen in the behaviors of the staff. The behaviors discussed here are based on both personal clinical observations and experiences and those of other authors (Freudenberg, 1974; Oregon Comprehensive Cancer Program, 1980; Vachon, 1979). Conflicts arise between individual staff members and between groups of staff members. One team member can become critical of another member's performance. Sometimes they avoid real contact with each other. They can look, act and seem depressed. They appear and are fatigued and they lack interest in life. They are physically exhausted or drained and seem unable to move on to the next patient/family, or task that needs to be accomplished. They are unable to concentrate on the patient/family. They give only the required physical care but are not able to identify and/or simply choose to ignore the psychosocial needs. Some staff members become more and more involved in patient/families, making themselves available twenty-four hours a day seven days a week even though

all team members rotate taking calls. Staff indicate difficulty with sleeping. Various forms of pre-existing or chronic illness of staff are under control until members become stressed and an exacerbation of symptoms is experienced such as ulcers, headaches and muscle spasms. An increase in already-existing marital problems and a deterioration in social relationships outside of work can occur. If staff is displaying one or a number of these symptoms of stress, they are also less able to be productive and do the job that needs to be done.

Stress then interferes with these individuals' abilities to function on the job and at home. Dougherty (1980) reported that air traffic controllers identified some specific symptoms of stress: headaches, indigestion, ulcers, and chest pain. Work time is lost and some of these problems can lead to more serious, potentially debilitating, or life-threatening physical conditions for the individual. Cobb and Rose (1973) further concluded that air traffic controllers were at a higher risk of developing hypertension than non-air traffic controllers.

It is essential to know the causes of stress related behavior if stress is to be dealt with in an effective manner. Job-related stress should be managed from a humanitarian perspective, for the physical and psychological health of the staff. From management's perspective, job-related stress should be managed so staff is enabled to maintain productivity and be effective in handling patient/family care needs. Thereby, the objectives of the hospice for comprehensive patient/family care would be met.

The purpose of the present study is to verify the factors in hospice work that the nurses perceive as stressful.

### Conceptual Framework

The literature available in the area of stress is extensive. A large number of researchers have developed and produced numerous definitions and theories. For purposes of this paper, three key researchers will be reviewed. The first two, Selye and Helson, briefly provide a sense of history and development. The last, Lazarus, provides a conceptual framework for this study of stressors perceived by nurses in hospice work. These theories were selected because of their relevance to the problem under study.

Selye's Theory. Hans Selye first began looking at stress in the 1930s. Stress is defined as a non-specific response of the body to a demand. It is believed to be non-specific or general because certain changes in the structure of organs and chemical composition of the body occur with exposure to stress. Adrenocortical enlargement, atrophy of the thymicolymphatic organs, gastrointestinal ulcers, loss of body weight, disappearance of eosinophil cells from circulating blood, and chemical alterations in body fluids and tissues were shown to occur with stress (Selye, 1956). A variety of stimuli produce the same biological changes within the body in its effort to maintain its equilibrium (Selye, 1974).

Selye identifies three stages which occur during the body's response to stress: 1) the alarm reaction, 2) the stage of resistance, and 3) the stage of exhaustion. These responses are frequently viewed as negative. However, they need not necessarily be negative. Stress can assist the body to respond positively in a potentially dangerous situation by putting it on alert and channeling the energy toward positive action. On the negative side, this energy can be channeled inward to

create physical or psychological illnesses, and depletion of all reserves. Taken together, the three stages are called the general adaptation syndrome or G.A.S. (Selye, 1956). Stressors are those events or situations which put into action this stress response.

Helson's Theory. Helson (1964) has explored and expanded the concept of adaptation to stress. His initial definition of adaptation is that it is the process of making adjustments or accommodations to conditions in the individual's environment. This adjustment occurs in the context of a biological or physiological process as in homeostasis. This homeostatic process is one in which a steady state between the body and its environment is sought. The stimuli may be either internal or external. The individual becomes aware of the danger through perceptual and cognitive processes that then stimulate the endocrine and autonomic systems. Homeostasis is a fixed value that doesn't change to which the individual always attempts to return. This relates closely to Selye's general adaptation syndrome.

Helson, however, suggests that this state of equilibrium is a reference point for the individual's attempts at adaptation. The goal is not the absolute zero; rather equilibrium is the point from which behavior is measured, predicted, and understood. For Helson, adaptation is an active process with changing levels of activity. In other words, once adaptation to one set of stimuli has taken place, the individual has not gone back to point zero, but rather has progressed to a different level from which the next adaptation will occur. The term dynamic equilibrium has been used to refer to this process.

The adaptation process, however, is not just a stimulus-response

relationship. Individual factors must be included. Helson suggests three types of stimuli: 1) focal; 2) background or contextual; and 3) organic or residual. Focal stimuli are those that are most apparent at the moment. They are limited to a certain point or focus. The aggregate of stimuli that have been previously experienced are present but the contextual or background stimuli are interwoven and behind the focal stimuli. Organic or residual stimuli are those that form the state of the organism itself.

It is the pooled effect of these three classes of stimuli that affect the individual from without. The individual's behavior from within is adaptation, which is reflected in the individual's attitudes, values, judgments, behavior, and interpersonal relationships (Helson, 1964).

Lazarus' Theory. The stimulus-response relationship is used by Lazarus (1969) to define stress. Stress can be the external circumstance or situation (the stimulus) that is unusually difficult to deal with. Stress can be the manner in which the situation is interpreted (the response). It is not possible to define stress only in relation to the immediate situation (Lazarus, 1966). In any situation, the capacity for the production of a stress reaction is dependent on the characteristics of the individual. It has been demonstrated that one individual reacts to the same situation in a different way than another. A stress reaction elicited from one individual does not predict that a stress reaction will be elicited from the next individual in the same situation, or to the same degree. When individuals are presented with an event, they respond in a variety of ways and in greater or lesser degrees. The same appears to be true for an individual who is presented

the identical event at different times and responds differently each time. Stress then is defined in terms of transactions between the individual and the situation. Stress for Lazarus (1966) must have an individual component with the individual's personality as a factor. This led Lazarus to expand the idea of psychological stress, or as it is also known, the cognitive appraisal concept (McGrath, 1977).

Between the stimulus and the behavioral response there exists an intervening variable. It is the cognitive process by which meaning is given to the event or situation. In early human development, behavior was not dependent on learning but rather a product of instinct. As development progresses, stress is produced less by the physical impact of stimuli and more by cues with specific meanings for the individual. Events become more diverse and variable among individuals (Lazarus, 1966). Each event is evaluated, interpreted and judged. Stress occurs when an individual in a given situation makes the appraisal he is going to be harmed or there is the possibility of harm. Harm occurs when available resources are inadequate for coping. This constitutes a threat to the individual's well-being. Appraisal depends on the particular interpretation the individual places on what is known or believed. It is based on past experience and learning, and what may be communicated from others to the individual about the situation (Lazarus, 1969). Stress, then for Lazarus must have three components: 1) the stimulus, 2) the appraisal of situation, and 3) the response to the stimulus based on the appraisal of the situation.

## Review of the Literature

### Stress Literature

A large amount of literature was found which supports Lazarus' stress concept. A select sample will be reviewed here for purposes of this study.

In a laboratory experiment, Monat, Averill, and Lazarus (1972) found that different responses made by individuals under different conditions indicate that individuals perceive and appraise situations differently. Subjects who knew when electric shock would occur became increasingly more stressed as the time approached. Those subjects who did not know when to expect the shock immediately began coping behaviors which led to less stress as the time approached for the shock. It was suggested that those who knew when to expect shock evaluated the situation as being safe during the first two minutes, but recognized the increasing threat by demonstrating increasing anxiety. Those subjects who were not informed when to expect the shock judged there were only certain things they could do to prepare, so began doing them immediately, decreasing their stress throughout the waiting period.

If individuals attribute the cause of feelings and behavior to something other than themselves, stress is decreased. (Burrish, 1979). This projection of cause is a cognitive mental process by which the threat to the individual is decreased. Subjects in an introductory psychology class were given a test which they believed to be predictive of how well they would do in college. The grade, they believed, would be used by counselors in planning their college careers. Prior to being told the results of the test, a part of the students were given informa-

tion that examiners can affect how well students perform on a test. Thus, they were provided an opportunity to project the cause of a poor grade onto the examiner. They were asked to list the ways the examiner could have caused them or anyone else to do poorly; to rate on a scale of one to ten the extent to which the examiner had made the subject feel nervous or anxious; and select from a list of adjectives those which best described the examiner. Stress levels were tested prior to and following the testing. The results provided evidence that stress was less in subjects who could project the cause of the poor grade onto a source other than themselves.

Likewise, Gerdes (1979) provides strong evidence that individuals must become aware of the state of being stressed and attribute the stress to an emotionally relevant source. The individual becomes stressed after there is awareness of a reason. The amount of stress felt and demonstrated through behavior is directly related to the degree of stressfulness of the relevant source. In this study, actual autonomic arousal, arbitrary feedback of arousal, and attributions for arousal were manipulated for subjects in a dental clinic waiting for oral surgery. Epinephrine was given to one-half of the subjects which elevated the pulse and decreased the blood pressure. Some subjects were informed they were aroused, some were told they were not, and a third group were told nothing. Arousal was attributed to the drug administered for anesthesia. Stress levels were tested by means of a short questionnaire. Therefore, subjects who were given epinephrine and informed that any anxiety they might perceive could be due to the drug reported and demonstrated more anxiety than subjects in the other treatment conditions. This was true,



although to a lesser degree, with those subjects who were informed they were anxious and that it could be due to the drug. In both instances, a cognitive process was necessary to arrive at and report a feeling of anxiety.

The individual also seems to be able to cope better and decrease stress if information regarding the event is gained through sensory perception. This seems to provide a more meaningful representation of reality which allows the person to cognitively recognize the situation to be under his control and to experience less stress (Fuller, Enderess, & Johnson, 1978). Subjects were to undergo a routine pelvic examination. They were provided with sensory information only, sensory information plus relaxation instruction, health-education information only, or health-education information plus relaxation instruction. The study demonstrated that subjects who received sensory information prior to examination showed less distress as evidenced by overt distress behaviors and pulse rates.

The event in which an individual is involved provides information for that individual's participation. In addition, individuals enter these interpersonal situations with general expectations based on prior knowledge and experience (Russell, Gowarty, Harland, & Martin, 1979). A chain of information processing follows. Specific expectations about the relative effectiveness of a variety of responses are produced. Ultimately a response behavior is determined by the individual and acted upon. Thus a sequence of cognitive processes occurs. Two experiments were conducted in this study. A simulated tutoring task was used with the subject in the role of student. In the first experiment, one group

was given information that the amount of money to be earned was directly related to the amount of student learning; that a number of tutoring responses helped learning but that some specific ones were found to be the most effective. The second group was given the information that a number of responses facilitated learning, and that amount earned depended on the amount learned by the student. The general expectations formed were the several responses that could facilitate learning. The specific expectancies were those responses identified as better than others to increase learning. The study demonstrated a relationship between general and specific expectancies.

In the second experiment, the first was replicated with the addition of information from the situation. Feedback was provided to the tutor by the student's behavior. By observation, it was determined that the situational information combined with the general expectancies to produce specific expectancies regarding the relative effectiveness of different responses, thereby determining one's response.

Synthesizing the literature that has been reviewed here regarding Lazarus' concept of stress, it becomes clearer that perception of a situation and subsequent stress is mediated by a number of factors. Each individual perceives and appraises situations based on his unique background. Information from the situation itself, as well as the general and specific expectations that are formed, determine the response. It appears that an individual becomes stressed when aware of that state and attributes it to a source that is emotionally relevant.

The individual copes better if able to gain information through sensory perceptions from which the individual moves to a cognitive determination of control of the situation. Stress can further be coped with if the cause is projected onto a different source from the actual stress source. All of the above require a cognitive process to take place. There is mental movement from initial information, through appraisal, to a determination and response.

The nurse's perception of the situation is the important factor which determines whether stress is elicited and how nurses cope with the stressors of hospice nursing. The cognition involved is at a higher level than simple instinctual response. An evaluation is made based on previous experience and available knowledge and skills. If the nurse can conceive of a plan of action which will bring the desired results, little stress is perceived. If, on the other hand, through the above cognitive process the nurse perceives an inability to cope, stress is perceived and demonstrated through behavior.

#### Nursing Stress Literature

Research verifying stressors in hospice nursing is almost nonexistent. Further support for this study's framework is therefore derived from hypothesis-generating clinical reports, as well as literature pertaining to stress in nursing as a whole, the Intensive Care Unit, the operating room, oncology nursing, and hospice.

Stressors as perceived by ICU nurses have been discussed (Vreeland, 1969) and verified, categorized, and ranked (Huckabay & Jagla, 1979). Huckabay and Jagla believed that if the nurse felt more personally in control of events, stress was decreased. The study organized the

stressors into four general categories with four components in each as follows:

1. Interpersonal communication problems
  - a. between staff and physicians
  - b. between staff and nursing administration
  - c. between staff members
  - d. between staff and other departments
2. Knowledge base needed
  - a. patient teaching
  - b. cardiac arrest
  - c. number of rapid decisions that must be made
  - d. amount of knowledge needed to work in the ICU
3. Environmental
  - a. numerous pieces of equipment and their failure
  - b. physical injury to the nurse
  - c. physical setup
  - d. noise level
4. Patient care requirement
  - a. work load and amount of physical work required
  - b. meeting the psychological needs of the patient
  - c. meeting the needs of the family
  - d. death of the patient

The study method was the self-administration of two questionnaires to forty-six nurses from six metropolitan hospitals with over two hundred beds in Los Angeles and Orange Counties. In the first, two situational questions for each of the preceding sixteen components

were asked. Respondents verified and rank-ordered the situations according to the degree of stress they perceived on a five-point rating scale. One was "not stressful" and five was "always stressful." The second questionnaire obtained demographic data. Both questionnaires were distributed early in the shift and collected late in the same shift.

To verify and rank-order perceived stress factors, descriptive techniques of range, percentage, rank order, and median were used. To determine a relationship between stress factor levels and demographic data, Spearman Rho correlations were used. Components were rank-ordered as follows with the first found to be the most stressful: 1) patient care; 2) interpersonal communication; 3) environmental; and 4) knowledge base. The N was fairly small from each of the hospitals and the results can only be generalized to those hospitals. This was a convenience sample. The design was appropriate for the question. Since what was unknown was what factors were stressful to the nurses themselves, it is appropriate to obtain that information through a questionnaire. Content validity was established with a panel of judges with eighty percent agreement between them. Reliability was stated at .79 for consistency and .88 for the total tool.

Huckabay and Jagla (1979) believed that the more the ICU nurse knows about a stressor, the greater amount of control is felt. Lazarus believes that how a situation is perceived by the individual is a matter of a cognitive process. An appraisal is made, whereby a determination is made by the individual based on present knowledge and skills, and past experiences about possessed ability to cope with the present

situation. Stress occurs when the individual determines there are inadequate abilities to cope in the present situation. The categories classified by Huckabay and Jagla (1979), interpersonal communication, knowledge base, environment, and patient care, will be used to organize the review of the literature.

#### Interpersonal Communications

Nursing. A large part of any nurse's job is dependent on interpersonal communications. They take place within the staff group between the various members who work closely together. One source of stress is if members fail to perceive an adequate support system from the group structure. Some members recognize a need for assistance, but restrict themselves from reaching out to others. The individual may be stressed by concurrent personal life problems which are like the background or contextual stimuli discussed by Helson (1964). The individual's level of functioning in the group is decreased, causing other members to be stressed. Some jobs cause isolation from the group (Patrick, 1979). Other forces outside the group can cause stress (Scully, 1980). Not having enough staff to provide adequate care is particularly frustrating. Nursing administration is seen as directly responsible for this. If administration does not respond to the questions and concerns of staff, an adversary situation is established. Other ways that administration support nursing staff are through good orientation, on-going education and staff development, and an equitable reward system. Political power plays exist in nursing settings as well as other job settings. With the expanding nursing role, nurses and physicians more often have conflicts regarding appropriate roles (Ivancevich & Matteson, 1980).

Ivancevich and Matteson (1980) devised a Stress Diagnostic Survey with which they assessed job factors which created stress. It was a self-report survey study in which job factors they believed created stress were categorized as hospital-related and job-related. The hospital-related items included: 1) human resource development; 2) politics; 3) working conditions; 4) rewards; 5) communications; 6) underutilization of skills; 7) participation in decisions; 8) changes in hospital; 9) hospital procedures; 10) hospital environment; 11) supervisor's style; and 12) control. The job-related items were: 1) responsibility for people; 2) time pressures; 3) role conflict; 4) relationships with other nurses; 5) relationship with supervisor; 6) role overload--quantitative; 7) career progress; 8) relationships with subordinates; 9) role overload--qualitative; and 10) job security. The registered nurses were requested to rate each stressor in one of four areas from "never a source of stress" to "always a source of stress."

Ivancevich and Matteson (1980) found human resource development, politics, working conditions, rewards, and communications as the most stressful items of the hospital category. Responsibility for people, time pressures, role conflict, relations with other nurses, and relationships with supervisors as the most stressful of the job category. While this study cannot be generalized to all nurses, it does assist in identifying some proposed job-related stressors for nurses. Information regarding reliability and validity were not provided.

ICU and OR Nursing. In an ICU situation, patients are critically ill and the tension and concern of physicians and nurses is evident. Physicians may be openly suspicious of a nurse's ability to provide

critical care to clients. Personality conflicts may arise between various staff members. In the absence of the physician, nurses are required to make decisions that partially assume some of the physician's responsibilities (Vreeland & Ellis, 1969; Huckabay & Jagla, 1979). In the OR, physicians are irritable with those around them, becoming angry with the nurse or other staff (Olsen, 1977). In both situations the working relationships one has with other group members are important for smooth functioning of the unit. Nurses need to trust other nurses and believe they are doing the best possible job as a member of the group (Bailey, Steffan, Grout, 1980).

Understanding of the needs of ICU nurses and the unit is expected from administration. A feeling of lack of understanding by the administration is fostered when staff believe they are being forced to keep the unit functioning smoothly with either not enough staff or a high percentage of float or inexperienced nurses (Oskins, 1979). A lack of rewards or inappropriate rewards from supervisors also create a breakdown in interpersonal relationships (Bailey, Steffan, & Grout, 1980).

The nurse who is required to work when already under the stress of a life event or other personal problem will be more stressed on the job. In addition, the presence of that nurse can create stress for others (Bailey and associates, 1980; Oskins, 1979).

Bailey and associates (1980) administered a survey questionnaire to approximately 1800 ICU nurses on a national (1238) and regional (566) basis. Nurses in 89 ICUs in nine counties in the San Francisco Bay area were sampled. The investigators established a list of 43 possible work stressors. The respondents were asked to indicate: 1) whether



or not the item was perceived as a stressor; 2) the degree of intensity of the stressor; 3) the persistency of the stressor; and 4) who controls the changeability of the stressor for each of the items. The areas identified by the nurses as stressful were in rank-order; 1) management of the unit; 2) interpersonal relationships; 3) patient care; 4) knowledge and skill; 5) physical work environment; 6) life events; and 7) administrative rewards. Over 80% of the respondents perceived the first three as most stressful.

The identified stressors correspond closely with Huckabay and Jagla's findings and as such lend validity. There is, however, nothing known about the validity and reliability, the return, or administration method. This does not allow for an adequate critique.

Oskins (1979) using Lazarus' conceptual framework thinks that the source of stress, which might be either a threat or a challenge, came from either the ICU, the ICU nurse, the patient and his care, the patient's family, hospital administration, or ICU personnel. Both the perceived stressors in ICU nursing and the nurses' methods utilized for coping were studied. Problems in the work setting were seen as a potential threat because the nurse's goal of being effective and capable is perceived by the nurse as blocked.

Seventy-nine nurses from five acute care hospitals (38% of the sample) participated. They answered a narrative questionnaire designed to identify which of 12 potentially stressful situations actually were stressful to them. They were asked whether it was seen as a threat or a challenge. Twenty coping strategies that could possibly be utilized in meeting the stressors or threats were provided. Respondents

completed the Rahe Life-Change Event Scale for the previous year.

Six of the 12 situations were identified as stressful as follows:

1) poor staffing patterns; 2) working with inexperienced nurses; 3) suit threats by family; 4) need to counsel uninformed family of dying patient; 5) congested, busy, noisy environment; and 6) requiring nurse with personal crisis to work. Numbers 1, 2, 3 and 6 were seen as threatening. Four leading coping strategies were identified by the respondents, the first three of which were direct actions by the individual to clarify the perception of the situation for self and others and to use information obtained from similar past events. The top four coping strategies were: 1) talk it out with others, 2) take definite action on the basis of present understanding, 3) draw upon past experiences in similar situations, and 4) become anxious.

Again the identified stressors correspond to previous and current studies. No data were given for validity and reliability of the instrument. Sample size was small and response rate was low which decreased internal validity. The conceptual framework and study design were appropriate to the problem. The identification of coping strategies employed by ICU nurses is a significant addition to the ICU and nursing stress literature.

Operating room nurses are also thought to work under stressful conditions (Olsen, 1977). Like Huckabay and Jagla, Olsen attempted to verify the stressful elements for OR nurses as perceived by OR nurses themselves. A descriptive survey questionnaire was used with this convenience sample. From six Seattle hospitals, 104 nurses participated. The researcher did not state if the tool was self-administered or not.

The tool was not tested for reliability and the results cannot be generalized to other populations. Spearman Rho was used in data analysis.

On each of 68 items, the respondents indicated on a scale from one (no stress) to four (high stress) the amount of stress perceived. The group as a whole perceived the following 13 items as stressful:

- 1) the doctor is abusive to everyone; 2) equipment doesn't work;
- 3) student nurses don't need OR experience; 4) equipment has disappeared; 5) there is no need for nursing in OR; 6) supplies not available at time of need; 7) the nurse you are working with is lazy;
- 8) missing sponges; 9) cardiac arrest; 10) equipment thought to be clean is dirty; 11) RNs should be phased out of OR; 12) the doctor is angry with you; 13) two major emergencies at one time.

The analysis of the data indicated there was no decrease in the perception of stress with more nursing experience. However, length of time on the job was significant. The researcher found that the level of stress perceived is equal for the first three years of employment, then decreases. Olsen approached this study with the conceptual framework that the response to stress is a result of the perceptions, expectations, and cognitive appraisal the individual makes. This appraisal is based on past experience, learning, and individual differences. Some of the stressful factors (Numbers 1, 3 and 11) could be viewed as threats to the nurse's self-image and/or ability to maintain livelihood. Other factors (Numbers 1, 2, 4, 9 and 12) present a threat because the nurse perceives an inability to handle the situation. As in other studies, factors perceived as

harmful or a threat to the individual are stressful. This study although limited, contributes to the literature by asking the nurses themselves, and because it supports the concept of stress as a cognitive process.

Oncology Nursing. A lack of effective communication in which there is a sharing of ideas, wants, and needs can readily lead to stress and conflict. Staff feel frustrated when constructive criticism and positive reinforcement are not accepted, or when they are not allowed and encouraged to discuss negative feelings about the job. Staff morale is lowered by weak leadership and supervisors who oversee but fail to contribute meaningfully to patient care. A lack of staff support sessions in which staff are encouraged and assisted to identify and verbalize feelings lead to high stress situations eventually. Staff need to see administration as supportive of them (Oregon Comprehensive Cancer Program, 1980).

Within the staff group, alienation can be caused by gossip and idle talk. Some nurses distance themselves psychologically from patients to protect themselves. This leads to withdrawal from peers, friends, even family. Nurses don't assert themselves and ignore their own capabilities; such characteristics lead to professional insecurity. Some nurses seek to satisfy personal needs through the job. This puts an additional burden on other group members who may be unwilling or unable to meet the needs of the individual (Oregon Comprehensive Cancer Program, 1980).

Hospice Nursing. Because hospice is a new area, many communication problems occur. Some are due to role conflicts and the need for better

identification of various roles (Vachon, 1979). Nurses here are also expanding their roles and assuming responsibilities previously assumed by physicians (Vachon and associates, 1978). Expectations of physicians, nurses, patients, families, and institutions have often been implied rather than clearly defined. Lack of definition has led to discrepancies. Often when these things occur, a decrease in the openness of communications occurs which leads to group stress (Beszterczey, 1977).

Since a majority of the nurse's contact is directly with people, adequate social support systems are required to alleviate stress (Oregon Comprehensive Cancer Program, 1980). Staff members can also become aware of ambivalent feelings toward them by others in the nursing and medical professions. Some envy them their status, while others are defensive of their own less specialized area of practice. This decreased peer support is distressing to hospice nurses (Berzterczey, 1977). In hospice nursing, communications are with terminally ill patients. The interactions are often highly charged and emotionally draining. Because the nurse does this on a frequent and on-going basis, stress occurs. In the only hospice research available at present, Barstow (1980) investigated the type and extent of stress in hospice nursing, what produced stress, and what reduced stress. Her sample was small, 22 RNs and four LPNs, of which 10 were home care RNs and 16 were inpatient nurses (including the four LPNs). The respondents were interviewed briefly to determine stress level and stressors and completed a four-part self-administered questionnaire to determine stressors and reducers. This researcher will not discuss the author's

findings on reducers as it is not integral to the present study.

The stressors identified by interview by both inpatients and home care nurses (Barstow, 1980) were: dealing with families, identifying with patients, relationships with administration, and the difficult work schedule. Limitations in the physical environment of the facility were stressful for inpatient nurses. Inability to effectively control the patient's symptoms was stressful for home care nurses.

When asked if a lack of knowledge and skills was a source of stress, the following areas were identified as stressful by home care nurses:

- 1) the ability to monitor and guide patients in the use of medications;
- 2) the ability to help patients with respiratory problems;
- 3) the ability to identify various coping mechanisms used by patients and their families;
- and 4) the ability to explain death to children.

This investigator is unable to ascertain from reviewing the written report and the questionnaire which group of nurses felt that an inadequacy in their emotional readiness to handle difficult situations was more stressful than any lack of knowledge. However, in the area of knowledge and skill, a perceived deficit and the stress generated supports the use of Lazarus' framework.

Likewise, nurses were asked to describe how well they felt they were emotionally prepared to cope with 14 situations. The study found that both inpatient and home care nurses were stressed when a patient with whom they closely identified died and when they were unable to control physical symptoms. Inpatient nurses also were stressed when the situation was such that the patient was unable to remain at home and had to return to the hospital to die. Home care nurses had diffi-

culty caring for depressed and withdrawn patients.

The third area of the questionnaire presented 14 items and asked the nurses to indicate the amount of stress experienced. Both inpatient and home care nurses indicated they were stressed by difficult working hours, an inability to achieve the desired relief of physical symptoms, and a rapid succession of patient deaths. Home care nurses reported the misunderstanding of hospice work by outside health professionals and poor patient/family relationships as stressful.

It is especially interesting to note that Barstow (1980) found the stress level of this sample to be significantly lower than established norms for Spielberger's State-Trait Anxiety Inventory. A majority of the factors/situations rated as stressful were only moderately so rather than highly stressful. The author suggests this is due to increased job satisfaction because of the holistic approach to care, the increased time allowed for patients, and an increased opportunity for independent nursing practice. It is recognized by this researcher that these findings are contradictory to all other literature reviewed. This was a very small sample (26) which makes it difficult to generalize. No nurses from free-standing facilities were included. The method of data analysis is unknown with regard to determining the differences between inpatient and home care nurses. No validity or reliability was established for the tool. Further, the report was long, detailed, and confusing as was the tool. Even with these drawbacks, Barstow (1980) has identified some stressors which were previously identified as well as some new or more detailed factors. This cannot be considered a strong study, but it is significant in that it is the first research

that appears in the literature of hospice nursing.

Interpersonal communication problems create stress in all areas of nursing. They tend to be between the nurse and physician, the nurse and other departments including administration, and the nurse and other staff members.

### Knowledge

Based on Lazarus' conceptual framework, the nurse approaches a situation with knowledge and information from a variety of sources. If that knowledge proves adequate to provide the nurse a basis on which to make a decision, the appropriate intervention is understood, and stress does not occur. The nurse determines the situation can be satisfactorily handled without a need to seek more information.

Nursing. Nurses establish unrealistic expectations for themselves. They are taught and believe in total, holistic patient care. They feel guilty when they are unable to accomplish set goals with patients. Their self-image suffers. It becomes increasingly difficult to say they need to re-evaluate and establish achievable goals. This is one of the greatest sources of stress for nurses (Scully, 1980) in all areas of general nursing.

ICU and OR Nursing. As a specialized area of patient care, there is a need for nurses working in this area to possess a large amount of information in a wide variety of illnesses (Vreeland & Ellis, 1969). The nurse is not allowed the time to review knowledge in emergencies (such as a cardiac arrest) which occur routinely in the ICU. Not only does an ICU nurse need to know what treatment to perform in any emergency, but how to operate complicated machinery and perform intricate



procedures. She further needs to be able to teach patients needed information. Not having this knowledge and skill available when needed creates insecurity (Bailey and Associates, 1980; Huckabay & Jagla, 1979).

Nurses in the OR likewise need to be able to effectively handle cardiac arrests and two emergencies occurring at the same time (Olsen, 1977).

Oncology Nursing. The literature reviewed regarding oncology nurse stress did not mention the specialized knowledge required in this area. One would deduce it is a critical area, but not yet investigated. Perhaps it is an area for research since in all other specialized areas of nursing it is seen as a source of stress.

Hospice Nursing. The literature review in this area also did not reveal the need for a large variety and amount of knowledge and skills as a stressor. Barstow's (1980) nurses in fact indicated their knowledge and skills were generally adequate and did not cause significant stress. The only area they were able to identify as stressful was inadequate knowledge of the care of the dying child or adolescent. There is an acknowledged increase in the nursing role in medical decision-making in hospice nursing. This logically would indicate a need for greater knowledge in a discipline other than nursing, as well as the assumption of greater responsibilities. Berzterczey (1977) states this is a cause of stress. Nurses are assuming greater responsibility in patient care as coordinators, which can lead to making unrealistic expectations for themselves (Vachon, 1979; Oregon Comprehensive Cancer Program, 1980). Hospice nurses likewise seem to have greater difficulty identifying realistic limitations to their abilities and the amount of involvement with patients and their families. It seems difficult for them to say

no to a patient who will die soon or to their family member. The need for knowledge then is accompanied by several factors that cause stress, such as, the establishment of unrealistic goals, the assumption of a greater responsibility in decision-making and coordination of patient care. While the literature from oncology and hospice nursing does not verify lack of knowledge as a stressor it is logical to deduce that the need for a large amount of knowledge and skill is a stressor based on the literature from other areas of nursing. The proposed study will make a beginning inquiry into this area.

#### Environment

The environment in which a nurse works can be conducive to stress response. Based on Lazarus' framework, if factors in the environment are perceived as harmful or a threat either to the nurse physically or to ability to provide high quality care, stress is the result.

Nursing. Ivancevich and Matteson (1980) described a stressful environment as Type A in the hospital study he performed. In this environment, time pressures are seen as a major stressor. Requests and demands from physicians, patients, and the nurse's superior contribute to the stress by frequently putting demands on the nurse's time from all these people at the same time. Stress is created by policies and procedures which are not well-defined for handling such areas as schedules and conflicting demands. Such environmental factors as high noise levels, poor organization of transportation channels, and a setting that offers little visual stimulation are believed to be stressful (Patrick, 1979).

ICU and OR. The factors within the environment of the ICU or OR that create stress are sensory stimuli such as the noisiness, activity,

congestion, and lighting. The large number of pieces of complex equipment, and its failure to operate properly are frustrating (Bailey and Associates, 1980; Huckabay & Jagla, 1979; Oskins, 1979; Vreeland & Ellis, 1969). On occasion in the OR, the equipment may not be available when needed. Equipment that was thought to be clean, but found dirty, is a stressor. Even the general physical set-up and arrangement seems to create stress (Olsen, 1977).

Oncology and Hospice. The literature refers to the working conditions as stressful with little amplification. The newness of the hospice movement carries with it the need to prove its worth. This means there are frequent observers of the staff and their activity. They feel the pressure to perform well and to obtain good outcomes. Inpatient nurses are stressed by the limitations of the physical environment. They would prefer perhaps that the patient could die in more comfortable and personal surroundings.

#### Patient Care

The category of patient care is studied most. The literature contains much information that indicates the provision of patient care is a large area of stress for nurses. Considering Lazarus' belief, nurses in their involvement with patients base their perception of the situation on previous patient involvements, as well as the current situation.

Nursing. Nurses, by the nature of the job, are required to assume responsibility for the lives and well-being of a number of other human beings (Ivancevich & Matteson, 1980). In accepting this responsibility, nurses invest themselves in their patient and may repeatedly expend personal emotional resources. They become less aware of themselves and

their own psychosocial needs. This, coupled with time pressures and the physical and mental work load of the job, can lead to stress. Nurses are expected to do a wide variety of activities from planning, organizing, and coordinating care to the provision of patient care that can be physically demanding (Patrick, 1979). They may be required to work long hours, overtime, or rotate shifts (Scully, 1980).

ICU and OR. The care required by these patients consists of numerous procedures that can be difficult to carry out and painful to patients (Vreeland & Ellis, 1969). The physical work load is great. Nurses feel pressured by trying to meet the psychological needs of the patient and family. Both frequently seek the nurse's reassurance and comfort. The death of a patient can be interpreted as a failure on the nurse's part (Bailey and Associates, 1980; Huckabay & Jagla, 1979). Families sometimes threaten suit due to real or imagined problems (Oskins, 1979). Missing sponges (Olsen, 1977) create stress in the OR.

Oncology and Hospice Nursing. Nurses working in oncology and hospice face many of the same stressors. The nurse identifies with patients and feels guilty when she believes she has failed a patient (Newlin & Wellisch, 1978; Barstow, 1980). The time at which a patient dies with whom the nurse has strongly identified is particularly stressful as well as when several patients die in succession. It is also difficult for the nurse to complete the grieving process either for the one or many before it is necessary to assume responsibility for the care of new patient/families (Barstow, 1980). They assume too much responsibility and too great a work-load. Nurses become involved with patients, dealing with their feelings as well as those of distraught family members. They can

expend a large amount of psychic energy. When this energy is not renewed with time off, nurses tend to deny their own feelings and don't take care of themselves (Oregon Comprehensive Cancer Program, 1980; Barstow, 1980). The work may seem to become repetitive because of the frequent inevitable death. It may become frustrating to be involved only at the final stage of life which causes the work to assume a sense of meaninglessness (Oregon Comprehensive Cancer Program, 1980; Vachon, 1979).

There is a high frequency of difficult cases (Oregon Comprehensive Cancer Program, 1980) and therefore a lack of balance. Poor patient/family relationships are stressful (Barstow, 1980). An inability to facilitate the development or strengthening of supportive relationships between family members and patients would seem to be explained by the difficulty of resolving two major problems (a family member's death and poor interpersonal relationships) at one time. Nurses are concerned regarding their ability to adequately and accurately identify patient/family coping mechanisms. Barstow (1980) found that home care nurses identified a larger number of stressful factors than the inpatient nurse. This researcher believes this can be explained because these nurses work in a much less structured situation, with a wide variety of housing, family, social, and economic situations. This permits the home care nurse less control. This situation can be interpreted based on Lazarus' belief that the nurses' perception of ability to handle a situation is based on knowledge and skills from previous experiences. It is more difficult to monitor medications at home because the care-giver is responsible for administration and the nurse must rely on that person's report. The perceived inadequacy in emotional readiness to handle

difficult situations is stressful because it is uncertain what kind of a situation will be encountered at each home visit. Care for depressed patients and those with respiratory problems is more difficult to manage.

It is difficult for nurses to accept a patient's physical and psychosocial problems that cannot always be met. There is disappointment if the patient does not have a good death (Vachon, 1979). Inpatient nurses have a sense of failure if patients must return to the less comfortable and personal environment of the hospital to die (Barstow, 1980). Caregivers sometimes believe that they didn't do everything they possibly could. Patients and families may be unreconcilable or unaccepting of the death (Vachon, 1979). Physical symptoms may not always be able to be well-controlled (Vachon, 1979; Barstow, 1980). Many nurses find it stressful to explain death to children and perhaps this is due to less experience and knowledge in the area of either dying children or children's understanding and response to death (Barstow, 1980).

It is difficult for nurses to determine what their involvement with patients and families can or should be in their off-duty time. They have stress determining their role in bereavement care. Often nurses provide some activities on their own time because many components of hospice care are not reimbursable from third party payers (Vachon, 1979).

#### Summary of the Review of the Literature

The literature reviewed for the present study covered a large area. The cognitive appraisal theory of Lazarus is used as the conceptual framework. An individual's response to stress depends on the appraisal the individual makes of a situation. The appraisal is dependent on past experience and what is known or believed about the present situation.

If the situation constitutes harm or a threat of harm, a stress response results.

Stress exists in all job areas. It is suggested that stress is greater in jobs with greater interpersonal interactions such as nursing. Nurses experience stress when they appraise a situation as harmful or threatening.

Four areas of nursing were reviewed: 1) nursing as a whole; 2) ICU/OR; 3) oncology; and 4) hospice. The greater amount of information available in nursing as a whole, and ICU/OR in particular, demonstrates a greater depth of investigation. The lack of information in oncology and hospice nursing may be due to the relative newness of both areas.

The specific stressors are divided into four categories which were initially classified by Huckabay & Jagla (1979): 1) interpersonal communications; 2) knowledge base; 3) environment; and 4) patient care. The specific factors in the category of interpersonal communications are very similar in each of the nursing areas. The need for a large knowledge base is substantiated by studies (Vreeland & Ellis, 1969; Huckabay & Jagla, 1979) in the area of ICU nursing. In other areas, this need is not documented and remains an area for further investigation. A greater number of specific factors are identified in ICU/OR nursing. These are more technical than psychosocial.

There is a greater amount of information available with regard to stressors involved in patient care than in the other categories. This is a high stress area in each of the nursing fields reviewed. This seems reasonable as caring for patients is the primary focus of nursing's endeavors.

Research on work-related stress has been conducted in nursing as a whole and ICU/OR nursing. However, the literature reviewed in oncology and hospice nursing revealed only one research effort in hospice nursing (Barstow, 1980). The remainder of the available literature is based on clinical observations and experience.

The present study will add to the literature by addressing a gap in the knowledge of perceived stress factors in hospice nursing.



## CHAPTER II

### Method

#### Design

The purpose of this study is to verify and rank order the stressors of hospice nursing as perceived by nurses working in hospice. The study is a factor-searching, descriptive investigation utilizing a self-administered questionnaire for a national survey.

Because of the lack of previous research related to the phenomenon, and a lack of verification of the suggested stressors, a questionnaire is the logical place to begin to gather the knowledge needed. The survey questionnaire is an appropriate tool to obtain the desired data from a national sample.

#### Instrument and Data Collection

The tool was designed by the researcher based on the available literature (Appendix A). In reviewing the literature, a number of authors (Beszterczey, 1977; Oregon Comprehensive Cancer Program, 1980; Vachon, 1979; Vachon, Lyall, Freeman, 1978) suggested specific stressors for those caring for terminally ill patients and their families. These stressors are based on clinical observation. They are divided into four categories: A) interpersonal communications; B) knowledge required; C) environment; and D) patient care. The categories include the following subcategories:

- A. Interpersonal communication problems
  - 1. nurse and physician
  - 2. nurse and administration

3. staff members
  4. nurse and other departments
  5. role conflict
- B. Knowledge base
1. patient and family teaching
  2. increased nursing role in medical decision-making
  3. great amount of individual responsibility to coordinate care
  4. amount of knowledge needed to work in hospice
- C. Environment
1. physical injury to nurse
  2. physical set up (in the home, office and/or institution)
  3. noise level
- D. Patient Care
1. amount of physical work
  2. workload
  3. psychological needs of the patient
  4. physical needs of the patient
  5. caring for patient and family
  6. family involvement in patient care
  7. decisions involving patient and family rights
  8. frequent patient death
  9. death with unresolved issues
  10. investing self in only patients who die
  11. bereavement follow-up
  12. difficulty identifying realistic limitations
  13. on-call schedule

The D. 13. sub-category has been added by this investigator based on personal clinical observations and experience. The questionnaire then contains 25 questions based on the stressors suggested by the literature. The 26th and last question invited the respondent to express anything else about factors that were stressful in hospice nursing. A panel of nurses knowledgeable of the area judged the instrument to have face validity. Demographic data were obtained for each respondent. (Appendix B).

Respondents were asked to read each stress factor. They were asked to choose the frequency with which an item was stressful from the following available responses: always, usually, sometimes, rarely, or never. Instructions preceding the questionnaire included a list of feelings one might have if one was being affected by a stressful situation. The feelings suggested were: nervousness, tenseness, fearfulness, rushed, anxiety, forgetfulness, confusion, tiredness, nausea, excitement, depression, irritability, and inability to concentrate. It was noted the list was not all-inclusive and there were additional possible feelings associated with a stressful situation.

The questionnaires were coded by hospice and numbered from one to the total number sent to each program. In a cover letter, respondents were assured they would not be personally identified nor would results be reported by individual name. Information regarding the purpose and expectations of the study was given. They were further informed return of the questionnaire would be construed as consent to participate in the study. Any subject was free to choose not to participate. A stamped, addressed envelope was provided for return of the questionnaire.

The questions were scored by assigning a numerical value to each of

the answers from always, which was assigned a value of five, to never, which was assigned a value of one. The sum of the score for each question was computed and then divided by the number of respondents answering the question. This produced the mean score for each factor. When the scores for all the factors had been computed, the scores were ranked to determine the most to least frequently stressful factors. For each of the category groups of factor questions a mean score was also computed. The four categories were then rank-ordered by degree of the respondent's perceived frequency of stressfulness.

### Setting

Hospice care is delivered in a variety of organizational structures. The more common and easily identifiable are home-health agency based, community-based, free-standing, and inpatient-based. The inpatient-based facilities include hospices located within hospitals, extended care facilities, and nursing homes. Hospices meeting the following criteria were asked to participate:

1. provision of home care
2. twenty-four hour, seven days per week nursing availability
3. services to the patient and family as the unit of care
4. care by means of an interdisciplinary team approach
5. bereavement follow-up to family members following the death.

### Sample

There are one hundred thirty-eight hospices listed as provider members in the National Hospice Organization Member Locator Directory. By definition, these organizations may either be actually providing care or plan to provide care within two years. The listing does not identify those actually providing care. There are another one hundred thirty hospices

listed as associate members. Since the Locator was over one and one-half years old, it seemed possible that there were some of these organizations who now were currently providing care to hospice patient/families. It is further unknown how many provide an active home care component, and how many are organized in such a way that nurses work both in the inpatient and home care areas. Hospice care is too new and changing too rapidly to know for certain the total number of nurses working in this area. There is no central registry. It is, therefore, not possible to know how large the sample size needs to be in order for it to be representative.

The first step in data collection was to identify those individual hospices that met the criteria outlined in a preceding page. The investigator sent a letter to nursing supervisors of 268 organizations. Each was asked to indicate if the hospice met the requirements set forth. If so, the investigator asked the supervisor to identify the number of nurses in that hospice meeting the stated criteria. The letter also requested nursing supervisors' assistance in distributing the research questionnaire to the identified nurses. (Appendices B and C).

Of the 268 letters sent to nursing supervisors, 160 were returned in the stamped, addressed envelope provided. This was an initial 59.7% return. Of that number, 97 hospices indicated they both met the criteria for the hospice and had staff who met the criteria for nurses. Five hundred ninety-two questionnaires were requested by and sent to nursing supervisors.

The first mailing to the nursing supervisor of individual hospices was completed June 16, 1981. Questionnaires were returned to supervisors as requests were received over the next four weeks. Reminders were

not sent to those hospices that did not respond, due to lack of funds. It was also felt that for some of those who did not respond to the initial letter, it could be assumed that there was no program of hospice care being provided, or there were no nurses who met the criteria. Of the 160 who returned the initial letter, 97 or 60.6% indicated they met all the stated criteria. Those 130 hospices which had not listed themselves in the Locator as provider members could be expected to not meet the criteria.

In the succeeding 6 weeks 305 or 51.5% of the 592 mailed questionnaires were returned. There were 162 who met the criteria, 114 who were RNs who did not meet all of the criteria, and 29 who were LPNs who did not meet the requirement to be an RN. A total of 276 questionnaires or 90.4% of the returned questionnaires were used for purposes of this study.

The sample is divided into two groups:

1. those nurses who fulfill all the stated criteria (Group A)
2. those nurses who did not fulfill one or more of the criteria (Group B).

The criteria established included nurses who:

1. Work in U.S. hospices in a paid capacity a minimum of thirty hours per week.
2. Work at least seventy-five percent of their assigned time in direct patient care as opposed to supervision.
3. Provide direct, hands-on nursing care that includes meeting both the physical and psychosocial needs of the patient/family. (That is, the nurse cannot be a coordinator of the care only, but must actually be involved in doing such procedures as

evaluating pain and other symptom control, dressing changes, catheter changes, problem-solving, and counseling.)

4. Have worked a minimum of six months in hospice.
5. Work with terminally ill patient/families a minimum of 95% of assigned time.

After reviewing the returned questionnaires, it was necessary to change the fifth criterion to lower the minimum assigned time working with terminally ill patient/families from 95% to 76%. It appeared that the question was ambiguous and difficult to understand. Some respondents appeared to believe the question referred to percentage of time working with patient/families in relation to paperwork and office time. The question was attempting to determine percentage of time working with terminally ill patients and families in relation to acute care patients. The rationale for this decision is based on written comments on the returned questionnaire itself and the researcher's own knowledge of the structure of some of the individual programs. For example, it was known that only terminally ill patient/families were admitted to the program, yet respondents answered that they care for terminally ill less than 100% of the time.

#### Group A--Those Who Met Criteria

Table 1 displays by number of months worked in hospice, the 162 who met the study's criteria. There are 159 females and 3 males. A majority of the respondents (131) have worked in hospice nursing between 2 and 29 months. Of these, 49 have been working for less than one year and 110 have been in hospice nursing for less than two years.

All the respondents are paid employees and they all work a minimum

Table 1  
Length of Time Worked in Hospice Nursing  
In Months

<u>Months</u>	<u>Group A</u>		<u>Group B</u>	
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>
0-5	0	0	6	5.3
6-11	49	30.3	26	22.8
12-17	32	19.8	22	19.3
18-23	29	17.9	17	14.9
24-29	21	13.0	18	15.8
30-35	13	8.0	13	11.4
36-41	9	5.5	1	.9
42-47	0	0	2	1.7
48 or more	<u>9</u>	<u>5.5</u>	<u>9</u>	<u>7.9</u>
	162	100.0	114	100.0

of 30 hours per week. There are 46 (28.4%) respondents who indicate they work 76-94% of their time with terminally ill patient/families, while 116 (71.6%) indicate they work 95-100% with these patient/families. Respondents indicate 66 (40.7%) work in the home care area, 58 (35.8%) work in an inpatient unit, and 38 (23.5%) spend time in both areas. It was found that 69 (42.6%) work 76-100% of their time in the inpatient unit, while 63 (38.9%) work 76-100% of their time in the home care area. See Table 2.

When asked what position the respondent currently occupies, the following responses were received: 1) staff nurse - 111 (68.5%); 2) team leader - 16 (9.9%); 3) patient care coordinator - 26 (16%); and 4) other -



Table 2

## Percent of Time Respondents Work With Terminally Ill Patient/Families

## In the Inpatient and Home Care Areas

% of Time	Work With Terminally Ill Patient/Families		Work in Inpatient Area		Work in Home Care					
	Group A	Group B	Group A	Group B	Group A	Group B				
	Number	Percent	Number	Percent	Number	Percent				
0	-	-	51	31.5	65	57.0	50	30.9	16	14
1-25	0	29	25.7	15.4	16	14.0	27	16.7	22	19.3
26-50	0	39	34.5	6.2	10	8.8	8	4.9	10	8.8
51-75	0	27	23.9	4.3	2	1.8	14	8.6	14	12.3
76-94	46	28.4	11	9.7 <sup>a</sup>	69	42.6	21	18.4	63	38.9
95-100	116	71.6	7	6.2	-	-	-	-	-	-
	162	100.0	113	100.0	162	100.0	114	100.0	162	100.0
									114	100.0

<sup>a</sup>time worked is 76-100% for remainder of data

9 (5.6%). The "other" category includes positions such as administrator, director and supervisor.

Table 3  
Area of Work in Hospice Nursing

	<u>Group A</u>		<u>Group B</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Inpatient	58	35.8	21	18.4
Home care	66	40.7	77	67.6
Both	<u>38</u>	<u>23.5</u>	<u>16</u>	<u>14.0</u>
	162	100.0	114	100.0

The age of the respondents was requested in actual years. The years were grouped into 10 year increments. While 64 (39.5%) are between the ages of 26 and 35, 51 (31.5%) are between the ages of 36 and 45. Another 27 nurses (16.6%) are between the ages of 46 and 55. See Table 4. The mean age was 37.06 years, while the median age was 38.65 with a range

Table 4  
Age of Sample in Years

<u>Years</u>	<u>Group A</u>		<u>Group B</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
16-25	13	8.0	4	3.6
26-35	64	39.5	45	40.9
36-45	51	31.5	29	26.4
46-55	27	16.7	28	25.5
56-65	<u>7</u>	<u>4.3</u>	<u>4</u>	<u>3.6</u>
	162	100.0	110	100.0

from 20-64 years. The median age for the total United States working nurses is 36.30 years, making this sample slightly older (Moses, 1980).

The year of graduation from the basic educational program was requested. The years are grouped into 10 year increments, with 70 (43.2%) and 52 (32.1%) graduated between the years of 1970 to 79 and 1960-69 respectively. See Table 6.

A majority of the respondents (89 or 54.9%) graduated from a diploma program. There are 32 (19.8%) who graduated from an associate degree program, while 41 (25.3%) graduated from a baccalaureate degree program. See Table 5. In reviewing the responses to the question of the highest degree attained, it was found that 25 (15.4%) have an associate degree, 64 (39.6%) have a diploma, 59 (36.4%) have a baccalaureate degree, 14 (8.6%) have a Masters. There are no nurses who have obtained a doctorate. See Table 5.

#### Group B - Those Who Did Not Meet Criteria

In this group there are 114 respondents who are all females. Many, 83 (72.6%) of the respondents, have worked in hospice nursing from 6 to 29 months. Of these 32 (28%) have worked less than 12 months and 6 (5.2%) have worked less than 6 months. In addition, 71 (62.2%) respondents have worked less than 24 months, while 9 (7.8%) have worked 48 months or more. See Table 1.

Of the 114 respondents, 110 are paid staff, one is a volunteer, and three are both paid and unpaid. Work weeks consist of 30 hours or more for 79 (69.3%) of the respondents, while 26 (22.8%) work between 20 to 29 hours, and nine (7.9%) work between 10 to 19 hours. Time spent working

Table 5

## Basic Preparation Program and Highest Degree Attained

	Basic Program				Highest Degree Attained			
	Group A		Group B		Group A		Group B	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Associate Degree	32	19.8	17	14.9	25	15.4	13	11.4
Diploma	89	54.9	55	48.3	64	39.6	38	33.3
Baccalaureate Degree	41	25.3	42	36.8	59	36.4	49	43.0
Masters Degree	-	-	-	-	14	8.6	14	12.3
Doctorate	-	-	-	-	0	0	0	0
	162	100.0	114	100.0	162	100.0	114	100.0

Table 6  
Year of Graduation From Basic Program

<u>Year</u>	<u>Group A</u>		<u>Group B</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
1929-29	0	0	1	0.9
1930-39	1	0.6	0	0
1940-49	9	5.6	9	7.9
1950-59	26	16.1	21	18.4
1960-69	52	32.1	28	24.6
1970-79	70	43.2	51	44.7
1980-81	<u>4</u>	<u>2.4</u>	<u>4</u>	<u>3.5</u>
	162	100.0	114	100.0

directly with terminally ill patient/families was generally less than 76%: 29 (25.7%) work 1-25% of assigned time, 39 (34.5%) work 26-50% of assigned time, 27 (23.9%) work 51-75% of assigned time. A total of 18 (15.9%) work 76% to 100% of assigned time with the terminally ill. See Table 2. In their jobs 77 (67.6%) work in the home care area, 21 (18.4%) work in an inpatient unit, and 16 (14%) work in both areas. See Table 3. Table 2 shows that 21 (18.4%) work 76-100% of assigned time in the inpatient area, while 52 (45.6%) work 76-100% of assigned time in home care.

In response to the question regarding current position held, the following answers were received: 1) staff nurse - 69 (60.5%); 2) team leader - 7 (6.1%); 3) patient care coordinator - 23 (20.2%); and 4) other - 15 (13.2%).

The age for this group was also categorized in 10 year increments:

45 (40.9%) between the ages of 26 and 35 years, 39 (26.4%) between the ages of 36 and 45, and 28 (25.5%) between the ages of 46 and 55 years. See Table 4. The mean age was 38.03 years, while the median age was 36.5 years with a range from 22 to 60 years. This group is much closer to the median age of all working nurses in the United States. The mean age of Group A and Group B taken together is 37.47 years, with a 39.42 year median age for the combined groups.

With regard to year of graduation from basic education, the years are grouped in 10 year increments as with Group A and show that 51 (44.7%) and 28 (24.6%) graduated between the years 1970-79 and 1960-69 respectively. There are 4 (3.5%) who graduated between 1980-81 and 1 (9.8%) respondent who graduated between 1920-29. The majority (69.3%) graduated between the years of 1960-79. See Table 6. The basic programs from which the respondents graduated are as follows: 1) associate degree - 17 (14.9%); 2) diploma - 55 (48.3%), and 3) baccalaureate degree - 42 (36.8%). See Table 5. The highest degrees attained at present by these nurses are: 1) associate degree - 13 (11.4%); 2) diploma - 38 (33.3%); 3) baccalaureate degree- 49 (43.0%); 4 ) masters degree - 14 (12.3%), and 5) no doctoral graduates. See Table 5.

#### Limitations of the Study

Nurses may have been feeling more stressed than usual when they completed the questionnaire, which might have caused them to rate all items as more frequently stressful than they might normally. This could be caused by events happening before they came to work, or by events at work such as cutbacks and threats to program viability. Individuals may displace the stress perceived onto an inaccurate, but perhaps safer

or more acceptable factor.

The results of this study are generalizable to nurses working in hospice settings as described under "Setting." The nursing roles vary in hospice care, however the same factors may cause stress in lesser or greater degrees depending on the role. The influence of role would be a question for future research. The percentage of nurses in the various roles is unknown, so it is not possible to know how much of the target population the results can be generalized to. It is doubtful that participating in a study about stress changed these nurses' perceptions of the stress they endure, since stress is a frequent topic of concern within all hospice organizations. The reliance on the nursing supervisor of each hospice to select the appropriate nurses to receive the questionnaire creates an unknown bias in sample selection.

By using a survey questionnaire that is self-administered, it is difficult to control for such things as situational contaminants, transitory personal factors, administration variations, response sampling, and response sets. A wide selection of 72 hospices controlled for situational contaminants and transitory personal factors. Making the directions as clear as possible, making the questions as specific and mutually exclusive as possible, and attempting to increase the return by as much as is possible decreased error and bias. To decrease error in the instrument format, a panel reviewed the tool. The panel determined that questions were written in such a way that they could be readily answered by the respondent and that the questions were written in such a way that the researcher's expectations were not implied.

## CHAPTER III

### Results

Through use of the self-administered questionnaire all the identified factors were verified to be stressful to the sample in some degree. This is true for both Group A and Group B respondents. The scores for the individual stress factors when compared item by item were different between the two groups.

#### Rank-order of Stressors

Of the 25 stress factors included on the questionnaire, the five in both groups that were verified as most often causing stress were the same. They were as follows:

- Death of a patient with unresolved issues.
- Amount of work to do.
- Making decisions between the competing rights of the patient and individual family members.
- Meeting the psychological needs of the patient.
- Communication problems between the nurse and the patient's physician.

The most frequent stressor in both groups was question 21. See Table 7 for order and category of the five items most frequently stressful for the two groups. Table 7 also indicates the factors that received a score of 2.5 or greater, which indicates that more than one-half of the time these factors were considered to be stressors to the respondents.



Table 7

## Ranking of Stressors By Title of Items

Receiving Scores of 2.5 or Greater

Rank	Group A		Group B	
	Title	Score	Title	Score
1	Death of patient with unresolved issue	3.161	Death of patient with unresolved issue	3.157
2	Amount of work to do	2.956	Communication problems between physicians and nurse	3.096
3	Making decisions between patient rights and family rights	2.938	Amount of work to do	2.973
4	Meeting psychological needs of patient	2.876	Meeting psychological needs of patient	2.964
5	Communication problems between physician and nurse	2.864	Making decisions between patient rights and family rights	2.956
6	Difficulty with realistic limitations for nurses involvement	2.827	Frequent occurrence of death	2.912
7	Being on-call	2.822	Difficulty with realistic limitations for nurses involvement	2.850
8	Communication problems between nurse and those in authority	2.814	Responsibility for coordination of care	2.823
9	Frequent occurrence of death	2.753	Providing care to both patient and family	2.761
10	Providing bereavement follow-up	2.679	Providing bereavement follow-up	2.734
11	Responsibility for coordination of care	2.617	Being on-call	2.684
12	Providing care to both patient and family	2.592	Communication problems between nurse and those in authority	2.649
13	Perception that not enough knowledge is possessed	2.561	Involving family in care	2.605
14	Involving family in care	2.500	Perception that not enough knowledge is possessed	2.596
15			Meeting physical needs of patient	2.552
16			Making decisions generally made by physician	2.535

None of the stress factors received a score of one or less than one; therefore, all 25 factors were verified as stressors. The score, rank, and category number of all 25 factors for both groups are shown in Table 8. The general order of the rankings is essentially the same with slightly different specific placement.

#### Rank-order of Categories

The computed score for each of the four categories resulted in the patient care category most often being stressful in both Group A and Group B with scores of 2.67 and 2.73 respectively. In Group A, the remaining rankings and scores were as follows: communication (2.53), knowledge (2.48), environment (2.09). The following rankings and scores resulted for Group B: knowledge (2.57), communication (2.54), and environment (2.14). See Table 9.

#### Analysis of the Data

In reviewing the item scores for Group A and Group B, it was noted that 19 of the 25 scores were higher for Group B. A Wald-Wolfowitz Runs Test was performed to detect any significant differences between the two independent samples. This nonparametric statistic is appropriate for ordinal data and sample sizes of less than 20. Since this sample is slightly more than 20, Table A instead of Table F is used to determine the probability. A formula that corrects for continuity is available and was used. A significant difference was found between the two groups ( $z = .28, p < .01$ ). The Wald-Wolfowitz Runs Test does not identify the area of difference, however. To further determine whether the two samples had the same distribution, a Mann-Whitney U test was used. There

Table 8  
 Rank Order of Questions, Scores,  
 and Categories for Group A and Group B

Rank	Group A			Group B		
	Question	Scores	Category	Question	Score	Category
1	21	3.161	4	21	3.157	4
2	14	2.956	4	1	3.096	1
3	19	2.938	4	14	2.973	4
4	15	2.876	4	15	2.964	4
5	1	2.864	1	19	2.956	4
6	24	2.827	4	20	2.912	4
7	25	2.822	4	24	2.853	4
8	2	2.814	1	8	2.823	2
9	20	2.753	4	17	2.761	4
10	23	2.679	4	23	2.734	4
11	8	2.617	2	25	2.685	4
12	17	2.592	4	2	2.649	1
13	9	2.561	2	18	2.605	4
14	18	2.500	4	9	2.596	2
15	4	2.493	1	16	2.552	4
16	7	2.432	2	7	2.535	2
17	16	2.432	4	4	2.424	1
18	12	2.370	3	12	2.412	3
19	6	2.327	2	3	2.377	1
20	11	2.296	3	11	2.375	3
21	3	2.290	1	6	2.359	2
22	5	2.203	1	22	2.342	4
23	22	2.154	4	5	2.201	1
24	13	2.061	4	13	2.052	4
25	10	1.617	3	10	1.657	3

no significant difference ( $U = .68$ , n.s.). (Siegel, 1956; Downie & Heath, 1974; Phillips, 1978).

The individual scores for each respondent were computed. The mean score for Group A respondents was 63.67 while for Group B respondents the mean score was 64.55. The median score for Group A was 64 and for Group B it was 67 (from 33-90). The distribution of scores was considered normal.

Table 9  
Rank Order and Score by Category  
For Group A and Group B

Rank	Group A			Group B		
	Score	Category Name	Category Number	Score	Category Name	Category Number
1	2.673	Patient Care	4	2.734	Patient Care	4
2	2.532	Communication	1	2.578	Knowledge	3
3	2.484	Knowledge	3	2.549	Communication	1
4	2.094	Environment	2	2.148	Environment	2

Because inpatient and home care nurses function in such very different work settings, the individual scores of the 66 home care nurses and the 58 inpatient nurses of Group A were compared. A Mann-Whitney U test determined that there was no significant difference between these two groups ( $z = 1.39$ , n.s.).

In Group B, the 25 factor scores for one group of home care nurses which comprised 25.4% of this sample were compared with the factor scores of the remaining respondents. It appeared in reviewing the raw data

that the frequency with which these nurses perceived a situation as stressful was greater than the other respondents. A Wald-Wolfowitz Runs test detected a significant difference ( $z = .14$ ,  $p < .01$ ) between the home care nurses and the remainder of the sample. A Mann-Whitney test determined there was no significant difference in the central tendency of the two groups ( $U = .61$ , n.s.).

In summary, the following was found:

1. The five most frequently stressful factors were:
  - Death of a patient with unresolved issues.
  - Amount of work to do.
  - Making decisions between the competing rights of the patient and individual family members.
  - Meeting the psychological needs of the patient.
  - Communication problems between the nurse and the patient's physician.

The first factor was the most frequently stressful for both groups, with the other factors in slightly different order.

2. The Group A categories ranked in the following order:
  - Patient care.
  - Communication.
  - Knowledge.
  - Environment.
3. The Group B categories ranked in the following order:
  - Patient care.
  - Knowledge.
  - Communication.
  - Environment.

4. The item scores for Group B respondents are significantly different from the item scores for Group A, but whether the difference is in skewness or dispersion is unknown.
5. There is no significant difference between the individual stress scores of home care and inpatient nurse respondents in Group A.
6. The item scores for a select group of home care nurses are significantly different from the remaining nurse respondents in Group B, but not in central tendency.

## CHAPTER IV

### Discussion

#### Rank-order of Stressors

The findings of this study provide descriptive data about the stress factors found in hospice nursing. The stressor ranked highest by both groups was the situation in which one or more issues are left unresolved at the time of the patient's death. It would seem reasonable to think that the nurse would assume in this situation a failure to cope with the patient's and family's needs that then resulted in an unsuccessful outcome of care. It is the nurse's perception or judgement of an inability to function adequately in the situation that causes stress. Care of the patient is considered the focus of a nurse's responsibility. There are expectations made by nurses themselves, as well as those for whom they are caring, that would make a perceived failure stressful. Four of the five most frequent stressors were from the patient care category. In both Groups A and B this category was verified as stressful with greater frequency than the other three. This supports this researcher's thought that any perceived inability to cope well in this area would more often be stressful than in the areas of environment, knowledge, or communication.

This finding is consistent with Barstow's (1980) findings that nurses indicated they experienced more stress in situations which threatened or interfered with provision of quality care. Likewise, Huckabay and Jagla (1979) found the patient care category to be the most stressful.

All three studies found that nurses related stress more frequently to patient care than to areas such as knowledge, communication, and environment.

Another possible consideration is the educational background of the sample. A total of 74.7% of Group A and 63.2% of Group B graduated initially from either associate degree or diploma programs which do not offer community health nursing components as part of the basic educational process. In addition, 55% of Group A nurses and 44.7% of Group B nurses have attained their highest degree from associate degree and diploma programs. Since a total of 64.2% of Group A nurses and 81.6% of Group B nurses indicated they work in either the home care area or both home care and inpatient, perhaps a part of their stress could be attributed to a lack of training and experience in community health nursing principles. Thus, as Lazarus thought, stress is the result of cognition of an inability to cope due in part to inadequate previous experience and/or knowledge.

One of the basic concepts in hospice care is that an interdisciplinary team supports and cares for each patient/family. It is expected that this is accomplished through teamwork and the use of good communication skills. The item from the communication category that was in the five most frequent stressors in both Group A and Group B was communication problems between the nurse and the physician. Clinical experience of the investigator suggests that while many physicians have embraced the hospice concept of care, a much larger number as yet find it contrary to their beliefs. When one of these physicians' patients is admitted for hospice care, communication problems can occur. For instance, the patient/family may reach an acceptance of death that is then supported by the hospice care team, but not by the physician. The nurse generally is given the



role of coordinator of the team and is therefore more frequently in communication with the physician. Stress did not occur as frequently in the other communication areas, perhaps because nurses don't assume some responsibilities performed by other disciplines.

#### Rank-order of Categories

In considering the rankings by category, in Group A communication was the next most frequently stressful followed by knowledge and environment. In Group B, the next most stressful category was knowledge, then communication and environment. Two of the differences between the two groups were amount of scheduled work time and time worked with terminally ill patient/families, with Group B working less time in both areas. This researcher thinks there are possible explanations for the difference of category ranking between Groups A and B. For those nurses who work less time, or work less time with terminally ill patient/families, they may perceive that they possess less knowledge about provision of care, so that this is stressful to them because they don't always feel able to cope adequately. For those Group A nurses who found communication problems stressful, it may be a function of the fact that they spend more time working and more time working with terminally ill patient/families than Group B. They are therefore more often in a situation where stress is possible.

Environment ranked the least stressful in both groups. This could be due to two reasons. First, the stressors identified by the literature were not accurate, and the researcher therefore did not include the correct stressors. Secondly, the nurses viewed the environmental items

as somewhat universal. They may have believed they had the coping skills to handle these items due to adequate past experience in a wide variety of circumstances both at work and outside of work.

Individual respondents identified under the comments section several other factors that they found stressful as well as reinforcing those items already in the questionnaire. The large amount of paperwork required was most often mentioned. The feeling of being alone and/or actually being the only person working in this area and the resultant feeling of being alone was also identified by several respondents. Not enough time to do all needed work may well be related to too much paperwork. In addition, the need for more time off away from the job was noted. The need to be more flexible in staffing and to float to other units in response to unexpected changes in staffing needs was identified as stressful. A stressor more directly related to patient care was the difficulty of finding adequate and appropriate resources, particularly to meet financial needs. Several respondents mentioned that individual factors were not stressful of themselves, but that the accumulation of a number over a period of time created stress. Related to this was the fact that the stress carried over into non-work areas of the nurses' lives.

#### Differences Between Groups

The finding of a significant difference between the two groups of Group B could account for the significant difference found between the item scores of Group A and Group B. The difference within Group B could have affected the overall Group B item scores sufficiently since the group which was separated out accounted for more than 25% of the sample.

Other areas of difference between Group A and Group B are as follows:

1. A larger percentage of Group A work as staff nurses, while a larger percentage of Group B work as patient care coordinators, directors, or supervisors.
2. A larger percentage of Group A work 76-100% of scheduled time with terminally ill patient/families than Group B.
3. More Group A respondents work a higher percentage of time in the inpatient unit, while more Group B respondents work a higher percentage of time in home care.
4. The median age of Group A is older than Group B.
5. A larger percentage of Group A graduated initially from associate degree and diploma programs.
6. A smaller percentage of Group A had attained baccalaureate and masters degrees as the highest degree attained.

Due to the statistical tests performed it is known that the difference between Group A and Group B is not in central tendency. The difference could be in skewness or dispersion. This would be an area appropriate for further study.

For the most part, the literature reviewed accurately identified those factors that are stressful to hospice nurses. While the factors had previously been determined through experience and clinical observation, now in addition to Barstow's study, they have been verified by nurses currently working as hospice nurses. It is this researcher's belief that a foundation for subsequent research in the area of stress and hospice nursing has been laid.

## CHAPTER V

### Summary and Recommendations

Hospice care is an emerging health care delivery system especially for terminally ill patients and their families. Care involves complex, intense, emotional, interpersonal relationships. It is thought by many authors (Bishop, 1980; Holsclaw, 1965; Ivancevich & Matteson, 1980; Pines & Maslach, 1978) that these types of working relationships contribute to job-related stress in a variety of helping professions as well as nursing.

Specific factors that produce stress in hospice nursing have been suggested by several authors (Beszterczey, 1977; Oregon Comprehensive Cancer Program, 1980; Vachon, 1979; Vachon, Lyall, & Freeman, 1978). These factors are based on clinical observation and experience. This researcher wished to verify with nurses working in hospice what factors cause them stress and how frequently. The questions addressed in this study are:

1. What factors in hospice nursing cause stress?
2. How frequently do these stressors cause hospice nurses to feel stressed?
3. Which of the verified stressors are considered most stressful?
4. Which of the verified stressors are considered least stressful?
5. Into what order can they be ranked?

Stress was defined by Hans Selye (1956, 1974) as the body's non-specific response to a demand. An attempt is made to maintain a homeostatic

condition. Helson (1964), however, thinks the body is in a continual process which progresses from one level to another. Individual factors (focal, background, and organic stimuli) within the individual mediate the individual's response to stress. Lazarus (1966, 1969), whose stress theory forms the conceptual framework of this research, expanded the individual component. He believes stress is more than a stimulus and a response. He introduced the concept of an intervening variable--cognitive appraisal. Each event is evaluated, interpreted, and judged. Stress occurs when the individual interprets in a given situation, based on past experience, learning, and current information that inadequate resources are possessed to handle the situation. Lazarus thinks stress has three components: 1) the stimulus, 2) the appraisal of the situation, and 3) the response to the stimulus based on the appraisal of the situation. When a nurse perceives an inability to cope in a given situation, stress occurs.

Barstow's (1980) study is the only one found by this researcher that actually verified the stressors experienced by nurses working in hospice. Since there is only a small amount of information available from other authors that is specific to hospice nursing, the literature for stress in nursing as a whole, in ICU, in OR, and in oncology nursing was reviewed for verification by those nurses themselves.

In 1980 Ivancevich and Matteson found in their study the following were stressful to nurses working throughout two metropolitan hospitals: human resource development, politics, working conditions, rewards, communications, responsibility for people, time pressures, role conflict, relationships with other nurses, and relationships with supervisors. Huckabay

and Jagla (1979), building on Vreeland and Ellis' (1969) prior considerations, organized ICU stressors into four categories: 1) patient care, 2) interpersonal communications problems, 3) environmental, 4) knowledge base. The patient care area was found to be the most stressful. This area included work load, meeting the psychological needs of the patient, meeting the needs of the family, and death of a patient. In addition, the ICU nurses in Oskins' (1979) study reported that stress is caused by poor staffing, working with inexperienced nurses, threats of suits, counseling uninformed family, a congested and noisy environment, and a nurse working with a personal crisis. The stressors verified by Bailey and Associates (1980) closely corresponded to Huckabay and Jagla's findings. They were: management of the unit, interpersonal relationships, patient care, knowledge and skill needs, the environment, life events, and administrative rewards.

The stressors in the OR (Olsen, 1977) more often involve technical areas and communication problems than patient care. This seemed appropriate given the work setting. A variety of equipment problems, abusiveness of the physician, and the belief that nursing students didn't need OR experience and that RNs were no longer needed in the OR were specific stressors found in this study.

There were no studies available in the area of oncology nursing. Stressors have been suggested (Oregon Comprehensive Cancer Programs, 1980; Newlin & Wellisch, 1978) which fall within the interpersonal communication and patient care categories. These studies discussed a lack of sharing of ideas, wants, and needs; failure to support each individual in the group; lack of staff support sessions; failure of

administration to respond to staff; identifying with patients; guilt feelings when they believe they have failed a patient; expenditure of a large amount of psychic energy and failure to take time to renew self; denial of own needs; and the high frequency of difficult and complex cases.

Hospice nursing is closely related to oncology nursing because many hospice patients are suffering from cancer. Many of the suggested stressors are similar. Some have been more specifically identified (Beszterczey, 1977; Vachon & Associates, 1978; Vachon, 1979) and are as follows: role conflicts; need for better identification of various roles; assumption by nurses of responsibilities previously assumed by physicians; expectations which are only implied rather than being clearly defined; inadequate social support systems; ambivalent feelings from other professionals; and frequent, on-going highly charged and emotional interactions with patients and families. The preceding fall into Huckabay's interpersonal communication category. Those which would be found in the patient care category are: assume a large amount of responsibility for total patient care; work is repetitive; involved with patients and families only at time of death; sense of meaninglessness to work; difficulty accepting inability to solve a patient's physical and psychosocial problems; disappointment if death is not good, or patient and family are unreconciled to the death; and difficulty determining limitations to involvement with patient and family.

Since Barstow's (1980) is the only study which verified stressors in hospice nursing, the researcher chose to identify them separately. Some of the factors are not included in this research because Barstow's study was published after the questionnaire had been designed. It was

felt that the Barstow study did support some of the factors already identified by this researcher. Inpatient nurses regarded the following factors as stressful: dealing with families, identifying with patients, relationships with administration, and patients returning to the hospital to die. Home care nurses reported stress from inability to control symptoms, difficulty monitoring medications, management of respiratory problems, explain death to children, identifying patient/family coping mechanisms, difficulty with depressed patients, and the death of patients with whom they strongly identified. Both inpatient and home care nurses further reported as stressful a rapid succession of deaths, communication problems with uninformed patients, inability to attain symptom control, and the difficult work schedule (being on-call). No one factor was identified as always stressful by either group of nurses, however. They, in fact, showed a significantly lower anxiety scores compared to established norms.

Twenty-five items were chosen from the literature and a self-administered questionnaire was devised by the researcher. A letter was mailed to 268 hospices found in the National Hospice Organization's Member Locator Directory. It requested the nursing supervisor to indicate if that hospice met the following criteria by providing:

- 1) home care
- 2) twenty-four hour, seven-day per week availability
- 3) services to the patient and family as a unit of care
- 4) care by means of an interdisciplinary team
- 5) bereavement follow-up.

If the hospice criteria were met, the letter asked the nursing supervisor



to identify the number of nurses meeting the criteria for participation as follows:

- 1) work in U.S. hospice in paid capacity a minimum of 30 hours per week
- 2) work at least 75% of the time in direct patient care as opposed to supervision
- 3) provide direct, hands on nursing care that includes meeting both the physical and psycho-social needs of the patient/family
- 4) have worked a minimum of six months
- 5) work a minimum of 95% of scheduled work time (this was subsequently changed to 76%).

Five hundred ninety-two questionnaires were sent and 305 (51.5%) were returned, with 162 meeting the criteria (Group A), 114 not meeting the criteria (Group B), and 29 from LPNs which were excluded from the study.

Respondents indicated on the questionnaire following each item whether it was stressful always, usually, sometimes, rarely, or never. The tool was scored by assigning a numerical value from one to five to each of the answers, with 5 as always and 1 as never stressful. The mean score was computed for each factor and for each of the four categories and then rank-ordered for Group A and Group B.

All factors were considered stressful by the respondents; however none were considered usually or always stressful. The most frequently stressful factor for both groups was death of a patient with unresolved issues. The following items received a score of 2.5 or more by both groups:

Amount of work to do

Making decisions between patient rights and family rights

Meeting psychological needs of the patient  
Communication problems between the physician and nurse  
Difficulty with realistic limitation for nurse's involvement  
Being on-call  
Communication problems between nurse and those in authority  
Frequent occurrence of death  
Providing bereavement follow-up  
Responsibility for coordination of care  
Providing care for both patient and family  
Perception that not enough knowledge is possessed  
Involving family in care

In addition, two more items received a score of 2.5 or more by Group B:

Meeting physical needs of the patient  
Making decisions generally made by the physician.

Patient care, communication, knowledge, and environment ranked in that order for Group A while the order for Group B was patient care, knowledge, communication and environment.

The data were analyzed by use of non-parametric statistics, Wald-Wolfowitz Runs Test and the Mann-Whitney U Test. A significant difference was found between the item scores of Group A and Group B, but not in central tendency. The item scores for a select group of home care nurses in Group B are significantly different from the remaining nurses in Group B, but not in central tendency.

Factors relating to patient care are more frequently stressful to nurses because this is the area in which nurses primarily focus their energies. The perception of an inability to cope in these situations

will produce stress based on Lazarus' theory. This study supports Barstow's finding of low stress levels since the highest score obtained was 3.161 out of a possible five.

The educational background of the respondents may also contribute to their stress. Demographic data showed that the highest degree attained by 55% of Group A and 44.7% of Group B is from a program not offering a community health component while 64.2% of Group A and 81.6% of Group B work in home care. These nurses may not be adequately prepared to function with ease in this area. Communication problems between the nurse and the physician proved stressful probably due to the slower physician acceptance of the hospice concept.

One segment of Group B was separated from the rest. All respondents in this group were from a single hospice home care program. This segment comprised 25.4% of the group. The finding of a significant difference between the two groups in Group B could account for the significant difference between Group A and Group B scores. Further research could determine the area of difference--either skewness or dispersion.

Findings of the present study suggest that the way to decrease stress in the hospice setting is to look at solutions which allow nurses to perform quality patient care. This would include adequate education to prepare them to meet those patient/family care needs which are normally expected. Staff support systems should be developed to assist staff to deal with their feelings and concerns, as well as assisting them to recognize signs of stress and to institute appropriate measures to reduce that stress.

The study did not identify the amount of stress in an objective

manner, but rather asked respondents to indicate the frequency with which stress was experienced. Nor did the study request the respondent to indicate specifically if the factor was stressful or not. Another study might change the questions so that the respondent is first asked to determine if the factor is stressful. The second part would ask the degree or amount of stress experienced. It would further be interesting to compare stress experienced by nurses in hospice and other high stress areas with nurses working in those areas thought to be low stress.

It is difficult to determine how representative the study is, since the population remains unknown at this time. The sample did, however, come from nurses across the country, from 87 different hospices. Other areas of research could include a survey to determine the number of nurses working in hospice care and the number of hospice programs in which that care is being delivered.

Because of the question raised about educational background and its role in stress for home care nurses, stress level could be compared for these nurses by educational background. A significant difference might be identified further supporting Lazarus' framework of stress.

A further step based on additional research could be the development of a tool for self-measurement of stress levels. This could lead to the identification of specific ways to prevent stress in hospice nursing and ways to deal with it when stress occurs.

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APPENDICES

APPENDIX A

(1)      (2)      (3)      (4)      (5)

QUESTIONNAIRE FOR THE IDENTIFICATION  
OF STRESSFUL FACTORS IN HOSPICE NURSING

This questionnaire is being given to you to help verify those factors in hospice nursing that are stressful to you. Stressful situations are ones in which you might feel one or more of the following feelings: nervousness, tiredness, tenseness, irritability, or inability to concentrate. All people feel and react differently. When you are in a stressful situation you may experience different feelings. In answering the questions, you are asked to base your response on your past experience. A five point scale has been provided. Rate each numbered item as to how stressful it is to you by placing an X in the appropriate box.

	<u>STRESSFULNESS</u>					
	ALWAYS	USUALLY	SOME- TIMES	RARELY	NEVER	
1. Communication problems between you and the patient's physician.						(6)
2. Communication problems between you and those in authority in your organization.						(7)
3. Communication problems between you and the other nurses you work with.						(8)
4. Communication problems between you and another department in your organization.						(9)
5. Conflict when one team member performs functions thought to be in the specific domain of another team member						(10)
6. Teaching patients and their family members.						(11)
7. Making decisions which are generally made by the physician, i.e., changes in narcotic dosages.						(12)
8. Assuming the responsibility for coordinating the total care of the patient/family.						(13)

(13)

STRESSFULNESS

	ALWAYS	USUALLY	SOME- TIMES	RARELY	NEVER	
9. Perception that you do not possess adequate knowledge or skills for this specialization.						(14)
10. Physical injury to you while working.						(15)
11. The physical arrangement of the work setting.						(16)
12. The noise level of the work setting.						(17)
13. The amount of strenuous physical work required of you to perform the job.						(18)
14. The amount of work to be accomplished by you to perform the job.						(19)
15. Meeting the psychological needs of the patient.						(20)
16. Meeting the physical needs of the patient.						(21)
17. Providing care to the family members as well as the patient.						(22)
18. Involving family members in the patient's care.						(23)
19. Making decisions between the competing rights of the patients' and individual family members						(24)
20. Frequent occurrence of patient death.						(25)

STRESSFULNESS

SOME-

ALWAYS USUALLY TIMES RARELY NEVER

21. Death of a patient when there are unresolved issues either from the patient or the family.

22. Feeling like you are investing yourself only in patients who die.

23. Providing bereavement follow-up to families.

24. Difficulty deciding realistic limitations to your ability to impact a patient/family situation.

25. Being on-call to patient/families.

26. Is there anything else you would like to say about factors that are stressful in hospice nursing? Please use the space below or a separate sheet of paper.

	ALWAYS	USUALLY	TIMES	RARELY	NEVER	
						(26)
						(27)
						(28)
						(29)
						(30)

Finally, I would like to ask some questions about yourself to help interpret the results.

A. Year of graduation from your basic nursing program. \_\_\_\_\_

B. Basic nursing preparation (circle the number).

- 1 Associate Degree
- 2 Diploma
- 3 Baccalaureate degree

C. What is the highest degree attained (circle the number).

- 1 Associate degree
- 2 Diploma
- 3 Baccalaureate degree
- 4 Masters degree
- 5 Doctoral degree

D. How long have you worked in hospice nursing (circle the number).

- |                |                     |
|----------------|---------------------|
| 1 0-5 months   | 6 30-35 months      |
| 2 6-11 months  | 7 36-41 months      |
| 3 12-17 months | 8 42-47 months      |
| 4 18-23 months | 9 48 or more months |
| 5 24-29 months |                     |

E. What is your current position? \_\_\_\_\_  
\_\_\_\_\_

F. Please indicate if you are a paid employee or a volunteer (circle the number).

- 1 Paid
- 2 Volunteer

G. How many hours per week are you scheduled to work?  
(Circle the number of the closest answer).

- 1 10-19 hours
- 2 20-29 hours
- 3 30-40 hours

H. What percentage of your time do you work with terminally ill patient/families? (Circle the number of the closest answer).

- 1 1-25%
- 2 26-50%
- 3 51-75%
- 4 76-94%
- 5 95-100%

I. In what area of hospice nursing do you work (circle the number).

- 1 In-patient
- 2 Home care
- 3 Both

J. What percentage of time do you spend working in an inpatient area? (circle the number of the closest answer).

- 1 0%
- 2 1-25%
- 3 26-50%
- 4 51-75%
- 5 76-100%

K. What percentage of time do you spend working in a home care area? (circle the number of the closest answer).

- 1 0%
- 2 1-25%
- 3 26-50%
- 4 51-75%
- 5 76-100%

L. What is your age in years? \_\_\_\_\_

M. What is your sex? (circle the number)

- 1 Female
- 2 Male

Your contribution to this effort is greatly appreciated.  
Please put your completed questionnaire in the return envelope and mail today.  
Thank you.



APPENDIX B



OFFICE OF THE  
ASSOCIATE DEAN  
FOR ACADEMIC AFFAIRS  
SCHOOL OF NURSING

Area Code 503 225-7893

Portland, Oregon 97201

UNIVERSITY OF OREGON  
HEALTH SCIENCES CENTER

June 16, 1981

Dear Nursing Director,

Stress is a major problem for nurses in the hospice movement.

I am conducting a survey to verify and rank-order the stress factors present in hospice nursing. By identifying those factors, a better understanding of stressful situations in hospice nursing can be attained. It is hoped that the study will suggest priority areas in which to seek methods to reduce stressors in the clinical area.

On a separate sheet a list of hospice characteristics appears. Please check those which describe your hospice. If you have checked all of the listed characteristics, I am requesting your assistance in allowing your nurses to complete a questionnaire. It should take no longer than 15 minutes. I will send the questionnaires to you for distribution to all nurses in your agency who meet the criteria listed below the hospice characteristics.

The results of this research will be available to the National Hospice Organization Research Committee and to all participating individual nurses. You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope and printing your name and address below it.

Please return your reply to me no later than June 30, 1981, so that I can send the questionnaires to you by July 7, 1981.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (503) 654-4744 (home) or (503) 241-3477 (work). The address is 14868 S. E. River Rd., Milwaukie, Oregon 97222.

Thank you for your assistance.

Sincerely,

Linda Van Buren, R.N.  
Hospice Team Manager  
Visiting Nurse Association  
of Portland

APPENDIX C

(1)	(2)	(3)
-----	-----	-----

Hospice characteristics:

- \_\_\_\_\_ Patient and family is the unit of care.
- \_\_\_\_\_ Care is provided by an interdisciplinary team approach.
- \_\_\_\_\_ Active home care component is available.
- \_\_\_\_\_ Patients are accepted who have a life expectancy no greater than six months.
- \_\_\_\_\_ Care is available 24 hours per day, 7 days per week.
- \_\_\_\_\_ Bereavement follow-up is provided.
- \_\_\_\_\_ Nursing staff provide a combination of hands on physical and counseling care.

Nurse criteria:

1. Have worked a minimum of 6 months in hospice.
2. Work a minimum of 30 hours per week.
3. Work with terminally ill patient/families a minimum of 95% of their time.
4. Work at least 75% of their time in direct patient care as opposed to supervision.

Please indicate the number of questionnaires needed \_\_\_\_\_.

Return in the envelope provided.

\_\_\_\_\_  
Name and Title of respondent

\_\_\_\_\_  
Name of Hospice

APPENDIX D



OFFICE OF THE  
ASSOCIATE DEAN  
FOR ACADEMIC AFFAIRS  
SCHOOL OF NURSING

Area Code 503 225-7893

Portland, Oregon 97201

UNIVERSITY OF OREGON  
HEALTH SCIENCES CENTER

June 23, 1981

Dear Nursing Director:

Thank you for your response to my letter of June 16th to locate hospice nurses to participate in a study. I hope to verify and rank order some of the stressors of hospice nursing. Enclosed are questionnaires for the stated number of nurses on your response, as well as one for your information. A stamped, addressed envelope is attached to each questionnaire for return to me. May I ask you to distribute them to the appropriate nurses.

The criteria are listed again as a reminder for you:

1. Have worked a minimum of six months in hospice.
2. Work a minimum of 30 hours per week.
3. Work with terminally ill patient/families a minimum of 95% of their time.
4. Work at least 75% of their time in direct patient care as opposed to supervision.

If you have any questions, call or write: 654-4744 (home) or 241-3477 (work); or 14868 S. E. River Road, Milwaukie, Oregon 97222.

Again, your assistance is much appreciated.

Sincerely,

Linda Van Buren, R.N.  
Hospice Team Manager  
Visiting Nurse Association  
of Portland

APPENDIX E



OFFICE OF THE  
ASSOCIATE DEAN  
FOR ACADEMIC AFFAIRS  
SCHOOL OF NURSING

Area Code 503 225-7893

Portland, Oregon 97201

UNIVERSITY OF OREGON  
HEALTH SCIENCES CENTER

June 30, 1981

Dear Hospice nurse,

The presence of stress in hospice nursing has been identified by many nurses. It is thought that stress affects the ability of nurses to provide required care to patients and their families. Your assistance is asked to help us better understand those events and situations that can be stressful to you as a nurse working in hospice. It is hoped that this survey will suggest priority areas in which to seek methods to reduce stressors in the clinical area.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so that I can determine the number of returned questionnaires from each hospice. Your name will never be placed on the questionnaire.

The results of this research will be available to the National Hospice Organization Research Committee and those individual hospices whose staffs participate. You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope and printing your name and address below it. Please do not put this information on the questionnaire. Please return the completed questionnaire by July 14, 1981 so that your valuable input can be used. Your completing and returning the questionnaire will be taken as evidence of your willingness to participate and your consent to have the information used for purposes of the study.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (503) 654-4744 (home) and (503) 241-3477 (work). The address is 14868 S. E. River Rd., Milwaukie, Oregon 97222.

Thank you for your assistance.

Sincerely,

Linda Van Buren, R.N.  
Hospice Team Manager  
Visiting Nurse Association  
of Portland



APPENDIX F

Demographic Data for the Sample Which was  
Obtained on the Questionnaire

1. year of graduation from basic program
2. basic nursing preparation
3. highest degree attained
4. length of time worked in hospice nursing
5. name of current position
6. whether paid or volunteer staff
7. percentage of time worked with terminally ill patient/families
8. area of hospice nursing in which worked - inpatient, homecare, or both
9. percentage of time worked in inpatient area
10. percentage of time worked in home care
11. age in years
12. sex

APPENDIX G

## CODE BOOK

Questionnaire for the identification of  
stressful factors in hospice nursing

Col #	Item #	Variables	Code
1-3		hospice #	hospice 3 digit
4-5		respondent I.D. #	2 digit
6	1	1-4 Interpersonal	1 = Never 2 = Rarely 3 = Sometimes 4 = Usually 5 = Always
7	2	Communication	
8	3		
9	4		
10	5	5-9 Knowledge base	
11	6		
12	7		
13	8		
14	9		
15	10	10-14 Environment	
16	11		1 = Never 2 = Rarely 3 = Sometimes 4 = Usually 5 = Always
17	12		
18	13		
19	14		
20	15	15-25 Patient Care	
21	16		
22	17		
23	18		
24	19		
25	20		
26	21		1 = Never
27	22		2 = Rarely
28	23		3 = Sometimes
29	24		4 = Usually
30	25		5 = Always

Col #	Item #	Variables	Code
31-32	A	Graduation Year	2 digit range 05-80
33	B	Basic preparation	1 = Associate degree 2 = Diploma 3 = Baccalaureate degree
34	C	Highest degree	1 = Associate degree 2 = Diploma 3 = Baccalaureate degree 4 = Masters degree 5 = Doctoral degree
35	D	Length of time worked	1 = 0-5 months 2 = 6-11 months 3 = 12-17 months 4 = 18-23 months 5 = 24-29 months 6 = 30-35 months 7 = 36-41 months 8 = 42-47 months 9 = 48+ months
36	E	Current position	1 = staff nurse 2 = team leader and head nurse, supervisor, charge nurse 3 = patient care coordinator 4 = other - clinical specialist, director of patient services, administrator
37	F	Employment status	1 = Paid 2 = Volunteer
38	G	Hours worked	1 = 10-19 hours 2 = 20-29 hours 3 = 30-40 hours
39	H	% of time working directly with terminally ill patients	1 = 1-25% 2 = 26-50% 3 = 51-75% 4 = 76-94% 5 = 95-100%

Col #	Item #	Variables	Code
40	I	Area worked	1 = In-patient 2 = Home care 3 = Both
41	J	% time worked in in-patient	1 = 0% 2 = 1-25% 3 = 26-50% 4 = 51-75% 5 = 76-100%
42	K	% time worked in home care	1 = 0% 2 = 1-25% 3 = 26-50% 4 = 51-75% 5 = 76-100%
43-44	L	Age	2 digit range 20-65
45	M	Sex	1 = female 2 = male

AN ABSTRACT OF THE THESIS OF

LINDA L. VAN BUREN

For the MASTER OF NURSING

Date Receiving this Degree: June 11, 1982

Title: VERIFICATION OF STRESS FACTORS PERCEIVED BY  
HOSPICE NURSES: A DESCRIPTIVE STUDY

Approved: \_\_\_\_\_  
Patricia Archbold Thesis Advisor

A descriptive survey design was used to answer the following questions addressed in this study:

1. What factors in hospice nursing cause stress to those nurses?
2. How stressful are the verified stressors?
3. Which of the verified stressors are the most stressful?
4. Which of the verified stressors are the least stressful?

The convenience sample consisted of two groups of nurses, 162 in Group A and 114 in Group B who work in U.S. hospices. Group A nurses met the following criteria, while Group B nurses failed to meet one or more of the criteria:

1. Work in a U.S. hospice in a paid capacity at least 30 hours per week.
2. Work a minimum of 75% of assigned time in direct patient care as opposed to supervision.
3. Provide direct hand-on nursing care that includes meeting both the physical and psychosocial needs of the patient/family.

4. Work experience in hospice of 6 months or more.
5. Work with terminally ill patient/families at least 75% of the assigned work time.

Data were collected by means of a 25-item self-administered mailed questionnaire over a period of six weeks. Respondents were asked to report the frequency of stress caused by each of the 25 items. Data were analyzed by obtaining the mean average for each item and for each category of items. The results were rank-ordered. Items in the patient care category generally ranked higher than items from the other categories. Non-parametric statistics were used to test for differences. There was a significant difference ( $z = .28, p < .01$ ) between Group A and Group B. There was a significant difference ( $z = .14, p < .01$ ) between selected nurses in Group B and remaining nurses of Group B.

The generalizability of the findings is unknown because the population size is unknown. Knowledge about stress factors derived from this survey can be utilized to set priorities in determining with which stress factors to work in attempting to identify appropriate methods to decrease stress. Factors which relate to patient care caused the most frequent stress and would be an appropriate starting point.