Exploring Types And Sources Of Stress In Emergency Nursing

by

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Exploring Types and Sources of Stress in Emergency Nursing

BY

Janet Kellow

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirements of the degree of Master of Nursing

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Abstract

Emergency nurses are confronted with a wide variety of stressors caused by uncertain, chaotic environments, the potential for patient crisis, high patient acuity, the demand for technological excellence, and the unpredictable flow of patients through the department. Government cut backs and downsizing in health care have contributed to a back log of admitted patients waiting in emergency hallways. This has contributed to increased stress among registered nurses in the emergency department. Empirically based research exploring emergency nursing stress is limited. Administrators and emergency nurses need to identify the types and sources of stress in emergency nursing before they can develop appropriate approaches or interventions to address stress in the workplace.

This qualitative study sought to explore the types and sources of stress in emergency nursing. It also examined the sources of satisfaction in emergency nursing, the coping methods used by emergency nurses and the signs and symptoms of stress in emergency nursing. Person-centered interviews were conducted with seven nurses from three different institutions in the city of Winnipeg. Research findings were interpreted in light of the Organizational Stress Framework developed by Matteson and Ivancevich.

The findings of the study were presented in four major sections. The first section examined the sources of satisfaction in emergency nursing. The second section explored the types and sources of stress in emergency nursing and was divided into four major categories: a) Problems in the health care system, b) patient related factors, c)unit management and d) interpersonal relations. The third section explored the coping strategies used by these emergency nurses. The fourth and final section examined the signs and symptoms of stress in emergency nursing.

Uncontrolled patient volume and flow of patients through the department was the major source of stress for these nurses. This was attributed to lack of funding in the health care system. Inadequate staffing and interpersonal relationships among health care staff were also significant sources of stress.

Results of this study provide health professionals with an understanding of the types and sources of stress in emergency nursing. Implications for nursing practice, education and research are discussed and recommendations for addressing stress in emergency nursing are suggested.

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CHAPTER ONE: STATEMENT OF THE PROBLEM

Stress is recognized as an inherent part of nursing practice and a growing body of evidence suggests that it may be increasing in severity (Hawley, 1992). Emergency nurses are confronted with a wide variety of stressors caused by the uncertain, chaotic environment, the potential for patient crises, high patient acuity, the demand for technological excellence, and the unpredictable flow of patients through the department. Government cutbacks and downsizing in health care have contributed to a back log of admitted patients waiting in emergency hallways. This has meant that emergency nurses are responsible for running a "medical ward" as well as an emergency unit. Numerous articles, letters and editorials have been written in the Winnipeg Free Press regarding public concerns with hospital overcrowding and bed shortages (Janzen, November 28th,1998; Janzen, Naime, Mackenzie, and Wild; January 9th,1999; Paul & Santin, January, 14th, 1999).

Emergency nursing provides opportunities for intellectual stimulation and learning and offers variety and excitement (Helps, 1997). Many nurses are attracted to emergency care because the fast pace and level of uncertainty provide a unique combination of challenge and satisfaction (Burns, Kirilloff & Close, 1983). However, challenge can change to distress if adequate support is not provided. Certain incidents such as death of a child, death of a coworker, and caring for severely burned patients can cause acute stress symptoms in emergency nurses (Wright, 1990). Daily hassles and frustrations and prolonged exposure to stressful incidents such as death and mutilation can result in a myriad of emotional and physical manifestations of stress

(Sowney, 1996). Sowney (1996) states that there is a "growing emphasis being placed on the importance of recognizing stress and using appropriate measures to alleviate the problems associated with it "(p. 38). Topics such as post traumatic stress disorder, critical incident debriefing (Back, 1992; Burns & Harm, 1993; Sowney, 1996) and vicarious traumatization (Blair & Ramones, 1996; Crothers, 1995; Hartmann, 1995) have appeared in the recent literature.

There is a substantial amount of research on stress in critical care nursing but a very small, limited body of research exploring stress in emergency nursing. There is reason to believe that emergency nursing is highly stressful (Back, 1992; Brunt, 1984; Caldwell, 1976; Kashoff, 1976; Keller, 1990; Phipps, 1988; Thompson, 1983) but empirically based research exploring these stressors is limited. Most of the articles are anecdotal or subjective in nature, focusing on one person's observations and experiences (Hawley, 1992; Burns, Kirilloff & Close, 1983). Only three major research studies were found that explored emergency nursing stress (Burns, Kirilloff, and Close, 1983; Hawley, 1992; Helps, 1997). Burns, Kirilloff and Close (1983) surveyed 104 emergency nurses working in the city of Pittsburgh and the surrounding area to identify factors attracting nurses to this specialty, sources of stress and satisfaction in emergency nursing, and the coping methods used to manage stress. Inadequate staffing and working with apathetic, inexperienced physicians was identified as the greatest source of stress while patient progress and improvement was cited as the greatest source of satisfaction. Physician uncertainty and need for direction was identified as a an important source of stress. Burns, Kirilloff, and Close (1983) found significantly different responses between nurses with less and more than two years

emergency care experience. They concluded that more than two years of emergency experience is needed before emergency room nurses are confident in their knowledge base and clinical judgment. This highlights that lack of experience is an important source of stress for emergency nurses.

Hawley (1992) conducted a survey of 69 nurses from four urban Canadian hospitals. A general profile of emergency nurses' perceptions of stressors was obtained using a modified version of the Stress Diagnostic Survey developed by Ivancevich and Matteson (1980). The key stressors identified in her research study include inadequate staffing and resources, too many non-nursing tasks, "misuse" of the emergency department by "repeaters" and patients not needing emergency care (an increase in non-emergent patients), and delays in transferring patients to other units. Dealing with patients and families in crisis situations was also stressful for this sample of nurses. Patients and families often arrive in the emergency department following sudden, acute traumatic events. This crisis state can lead to confrontation and tension between the patients or their families and the nurses working in the department.

The third major research project was conducted by Sarah Helps in Kings College Hospital in London (Helps, 1997). She used a variety of measures to investigate how emergency nurses are affected by occupational stress and what measures should be used to reduce it. Problems related to the physical working environment and inadequate staffing levels caused the most stress for this sample of nurses. Saving lives and helping patients get better was reported as the greatest source of satisfaction. Measures such as increased staffing, critical incident debriefing, and providing a "time out" room were suggested to reduce occupational stress.

These studies had various methodological weaknesses such as limited sample sizes (Hawley, 1992; Helps, 1997) and the use of unvalidated questionnaires (Helps,1997). Therefore, further research was required to explore issues such as level of experience, coping strategies, social support, and problems maintaining appropriate staffing levels in the emergency department.

The development of stress theory

The phenomenon of stress has been widely recognized in the popular media and by a variety of scientific disciplines. There is an overwhelming amount of literature on stress and coping. The challenge is in narrowing the focus of study and developing a precise operational definition of stress that would be appropriate for nursing practice. Scientists from multiple disciplines have attempted to study the nature of stress, but these researchers have developed their own terminology and definitions in studying the phenomena. Despite substantial historical precedents, "there remains less than total agreement on the precise nature of stress" (Mitchell & Everly, 1995, p.18). Han (1993) argues that investigators of coping, defense, and stress "are handicapped by a lack of consensus on the meaning of these terms" (p. 258). Reugg (1987) believes that this confusion and ambiguity in defining the phenomenon of stress has hindered communication between the scientific disciplines and has impeded the development of an all inclusive theory needed to unify stress research.

Mason (1975) believes that the term stress should be abandoned while Lazarus (1971) suggests using the term as a general label for a complex interdisciplinary area of study. McGrath (1970) argues against abandonment of the term. He maintains that

what is so called a popular area of research at a specific point in time is not a random matter. He suggests that certain contemporary forces both conceptual and practical in nature, are responsible for the popularity of the phenomenon of stress. Aldwin (1994) argues that "differences among stress researchers arise primarily because of the varying degrees of emphasis put on the individual components (of the stress process) and because of disagreements about the causal ordering of components" (p. 42). The only conclusion that the various scientific disciplines are able to reach is the immense impact that stress can have upon the individual and society. The widespread consequences of stress can affect both the individual and the people and organizations associated with that individual.

Significance of the Problem

Job stress has been linked to physiological and psychological problems such as ulcers, coronary artery disease, frequent colds and illnesses, sleep disturbances, increased use of drugs and alcohol, excessive fatigue and physical exhaustion, and personal, marital, and familial dysfunction (Cobb, 1976; Cronin-Stubbs & Rooks, 1985; House, 1974; Kornhauser, 1965; Lobb & Reid, 1987; Morris & Snyder, 1979; Oehler, Davidson, Starr & Lee, 1991). Stress in the workplace also results in job dissatisfaction (Beehr, 1976; Johnson & Stinson, 1975; Lyons, 1971; Miles, 1975), physical, emotional and mental exhaustion or burnout (McElvoy, 1982; Pines & Aronson, 1988) and increased rates of staff turnover (Gupta & Beehr, 1979; Porter & Steers, 1974).

Nursing, in particular, is a highly stressful profession, both physically and emotionally. In the current climate of nursing shortages, high patient acuity, rapidly

changing technology and hospital financial constraints, job-related stress is an increasingly prominent issue (Thomas, Riegel, Gross, & Andrea, 1992). The literature suggests that the potential for job stress is great among critical care nurses and emergency nurses in particular because of a constantly changing patient population and frequently high patient acuity (Thomas, Riegel, Gross & Andrea, 1992). Stress in critical care nursing has been a subject of considerable concern since the early 1960's as hospital administrators have attempted to deal with burnout and high attrition rates in their nursing staff. Stress has been shown to have a considerable impact on the health care industry. Staff turnover and job satisfaction are persistent problems plaguing the delivery of health care (Reugg, 1987). According to Stanton, Laughlin, and Wheeler (1983) rates of turnover among non-supervisory personnel have ranged from 37-67 percent per year. The economic impact of such a high rate of turnover has alarmed the health care industry (Reugg, 1987).

The continual process of orientation leads to difficulties in providing continuity, in interpreting and individualizing care policies, in organizing care, and responding swiftly to emergencies (Reugg, 1987). The monetary costs of constant staff orientation are considerable. According to Hinshaw and Atwood (1982) the orientation costs for a professional nurse entering an acute care agency averages $2,000 (American), not considering the six months of decreased productivity that occurs with new employees.

The presence of chronic, unresolved stressors in the work environment can result in burnout. Burnout is a syndrome of physical and emotional exhaustion, characterized by the development of a negative self-concept, negative job attitude, and lack of concern for clients (McElroy, 1982; Pines & Aronson, 1988). Cronin-Stubbs &

Rooks (1985) describe burnout as a maladaptive psychophysiological and behavioral response to occupational stressors. Symptoms of burnout are prevalent in the helping professions as workers are exposed to high levels of emotional arousal associated with intense or extended involvement with people (Brownstone, Shatoff, & Ducro, 1983) Highly motivated, enthusiastic, and idealistic individuals are especially susceptible to burnout. As helpers become over extended in response to the demands of their clients they deplete their reserves and become emotionally and physically exhausted (Maslach, 1982). In response to exhaustion, helpers withdraw and become emotionally distant, developing negative, callous and sometimes contemptuous attitudes towards clients and others (Thomas, Riegel, Gross & Andrea, 1992). This negative uncaring view of humanity results in a lowering of the helper's self esteem as they realize that they are no longer responsive to client's needs. They feel inadequate to do their job and this causes a reduced sense of personal accomplishment.

The impact of stress and burnout on the health care industry is significant. High levels of stress cause low morale, frequent errors, decreased productivity and job performance, lack of social support to other staff members, negative work attitudes, and increased absenteeism and job turnover (Bailey, Steffen, & Grout, 1980; Chiriboga & Bailey, 1986; Cronin-Stubbs & Rooks,1985; Keane, Ducette & Adler, 1985; Keller, 1990; Lobb & Reid, 1987).

Research into emergency nursing stress is critical because of the immense impact that stress can have on the nurse's physical and psychological well being, job performance and satisfaction. Current budgetary restraints and downsizing in health care have created more stress for the emergency room nurse. The popular media has

highlighted public concerns with the provision of health care in emergency departments. Furthermore, high levels of job stress can result in higher costs for the health care system in a time when budgetary restraints are a major concern. Consumer satisfaction with the nursing care provided in emergency units can also be improved. Measures can be developed to reduce and minimize stress in the emergency department.

Stress Theory

Classically, theories of stress have been divided into three types: stimulus-orientated theories, response-orientated theories, and interactional (transactional) theories (Lazarus, 1966).

Stimulus-orientated theorists believe that stress results from stimuli within the organism's environment. In this approach "those aspects of the environment that increase demands upon or disorganize the individual impose stress upon him or her" Derogatis & Coons, 1993, p.201). Stimulus-based theorists such as Elliot and Eisdorfer (1982) distinguish between different categories of stimulus stressors and their capacity to induce stress. These categories include: (1) acute time-limited stressors such as awaiting the results of a medical lab test; (2) stressor sequences such as death of the family member; (3) chronic intermittent stressors such as final exams or dental surgery; and (4) chronic stressors such as a chronic debilitating disease or financial strain. Events and occurrences are defined as stressful if they lead to psychological distress, behavioral disruption, or deterioration in performance. Lazarus and colleagues (DeLongis, Coyne, Dakof, Folkman & Lazarus, 1982; Lazarus & Delongis, 1983)

introduced an additional class of stressors known as daily hassles. These are relatively mundane, chronic daily events that have the potential to induce stress. Daily hassles have been shown to parallel major life events in their potential to induce stress and have an even stronger relationship than traditional life event measures in predicting physical health status (Derogatis & Coons, 1993; Kanner, Coyne, Schaefer & Lazarus, 1981).

Response-oriented theorists focus on how individuals or organisms respond to events in their environment. The pattern and amplitude of responses can be used as operational measures of stress. These measures can be physiological (e.g. galvanic skin response, blood pressure), psychological (e.g. negative affect states, degree of symptomatic distress), or neurobiological (e.g. level of corticosteroids) (Derogatis & Coons, 1993). Cannon was the first to use this approach when he investigated the responses of organisms to extreme variations in their physical environment (Derogatis & Coons, 1993). Hans Selye, the major pioneering researcher and theoretician of stress, also adopted a response-oriented definition of stress. He developed the theory of the General Adaptation Syndrome or the biological stress reaction (Selye, 1974). Selye (1976) defined stress as the "non specific response of the body to any demand made upon it" (p.27) and emphasized that "symptoms of stress can be both biophysical and psychological" (p.55). Selye (1978) stated that "stress is the common denominator of all adaptive reactions in the body" (p. 64). Roy (1984), a prominent nursing theorist, used the concept of adaptation in her nursing model. Roy (1984) identified that the ability to adapt to stress is dependent on the degree of environmental change and the person's coping habits. More recent response orientated theorists (Henry & Stephens,

1977; Kagen & Levi, 1974) use a more interactional approach. However, they "continue to define stress in terms of response variables and hold that this response pattern is a precursor to, or instrumental in the development of functional derangement and diseases (Derogatis & Coons, 1993, p. 202). Contemporary response orientated theorists (Blalock, 1989; Daruna & Morgan, 1990) have examined the function of neuropeptides as mediators between psychological and physiological functions in stress states.

Interactional or transactional theorists emphasize the importance of the individual or the organism in the stress equation. They maintain that there is a dynamic relationship between the perceptual, cognitive, and physiological characteristics of the individual and the characteristics of the external environment (Cox & Mackay, 1976; Lazarus, 1976,1981). There is an "ongoing relationship between the person's adaptive mechanisms (i.e. coping) and the stimulus properties of the environment" (Derogatis & Coons, 1993, p. 203).

An individual's private beliefs about a stressful event play an important role in the stress process. Lazarus and colleagues developed a transactional model of stress that emphasized primary and secondary cognitive appraisal of the stressor (Folkman & Lazarus, 1988; Lazarus & Folkman, 1984). Appraisal was defined as "the cognitive process that intervenes between the stimulus and the emotional reaction. It is the evaluation by the individual of the significance of the stimulus" (Lazarus, 1966, p. 52). Coping was defined as the cognitive and behavioral attempts to overcome, accept, or reduce the demands that are perceived by the individual as threatening (Lazarus, 1966; Lazarus & Folkman, 1984). Interactional theorists (Lazarus, 1976, 1971; Moos,

1977; Taylor, 1983) provided a variety of frameworks to understand how individuals cope with stress.

To summarize, there is a complex and sometimes contradictory array of stress theories. However, many of the prominent stress theorists emphasize that intrapsychic cognitive processes (e.g. appraisal, coping) and/or emotional states (e.g. anxiety, depression) are central to the definition of stress (Derogatis & Coons, 1993).

Conceptual Framework

The conceptual framework used in this study was based on the model for organizational stress research developed by Matteson and Ivancevich (1987). In this model, stress is considered to be part of a complex and dynamic system of interaction between the person and his or her work and non-work environment. A visual diagram of the framework is presented in Appendix A.

It is a cyclical model in which a feedback loop links stressors and outcomes. The model emphasizes that stress is an individual perceptual phenomenon. The process of organizing all the complex variety of sensory stimuli that employees receive during the work day, arranging and coordinating these stimuli is called "perception". Their framework emphasizes how stressors, stress, individual differences, outcomes and consequences are linked together by feedback mechanisms. For example, insomnia (a consequence) may further affect a persons blood pressure (an outcome), how the person appraises work situations (stress), and the relationship an employee has with his superior (a stressor) (Matteson & Ivancevich, 1987, p. 25).

Matteson and Ivancevich (1987) designate five levels of organizational variables they believe are of particular relevance in the study of stress phenomenon: intrinsic job factors, organizational structure and control, reward systems, human resource systems, and leadership. They also consider extraorganizational stressors such as family relationships, economic and legal problems that can interact with the organizational problems creating significant amounts of stress.

The next component of their model is cognitive appraisal perception. This refers to the intake of the stressor and the cognitive processing of it by the individual. Factors that can influence a person's cognitive appraisal perception include cultural upbringing and attitudes, self-esteem, experience, education, and personal behavior patterns. The individual's cognitive appraisal perception can be measured by visual observations, self-report techniques, biochemical assessment (measurement of corticosteroids, catecholamines, or cholesterol from blood, urine, or saliva) and performance measures. Performance measures assess the effects of stress on some ability or combination of skills such as proofreading or problem solving.

Once the individual appraises an event as a stressor he or she moves towards outcomes. The three major outcomes (physiological, psychological, and behavioral) can be triggered individually or in various combinations. "Physiological outcomes include changes in blood pressure, heart rate, or catecholamine level; psychological outcomes include reduced morale and apathy about work; and behavioral outcomes included decreased work effort and increased irritability" (Matteson & Ivancevich, 1987, p. 29). The framework illustrates that individual differences directly affect stressors and

moderate the association between stressor and stress, stress and outcomes, and outcomes and consequences.

"The consequences of the entire process are categorized in the framework as health/family or performance" (Matteson & Ivancevich, 1987,p 30). Matteson and Ivancevich (1987) propose that once an individual has been under stress for too long they break down, resulting in such problems as ulcers, insomnia, accidents, and/or a decrease in quantity of output. The consequences are seen to affect the person, their family, and the organization.

Coping is the moderating factor in this framework. It is defined as the cognitive act of analyzing the environmental stressors to master, reduce, manage, or tolerate them. Matteson and Ivancevich (1987) highlight three major coping styles of dealing with stress; to modify the stressful situation through direct action, to reinterpret the stressful situation, and to manage the outcomes. The ultimate goal of coping is to overcome stressors. The three variables involved in every coping attempt are rationality, flexibility, and farsightedness. Rationality is viewed as the accurate, objective assessment of the extent to which a stressor is a threat. Flexibility refers to the individual's contingency plans and the tactics and willingness to consider these plans. Farsightedness involves the individual's ability to anticipate the response of the environment to the actions being undertaken. Coping moderates the stressor-stress and the stress-outcomes relationships. The ideal coping response would be rationale, flexible, and far-sighted so that the proper management of stressors is achieved. Matteson and Ivancevich (1987) highlight the two major coping processes; problem-focused coping, where the individual attempts to manage or alter the condition causing

the stress and emotion-focused coping, where the person attempts to regulate their emotional responses to the condition.

Hawley (1992) used the Organizational Stress Framework to guide her study. She confined her study to intraorganizational stressors. A general profile of emergency nurses' perceptions of stressors was obtained through the modified Stress Diagnostic Survey developed by Ivancevich and Matteson(1980). Hawley (1992) claimed that the reliability and validity of the Stress Diagnostic Survey had been determined in previous testing and were found to be acceptable for diagnostic purposes.

Summary of the Conceptual Framework

The model for organizational stress research developed by Ivancevich and Matteson provided a framework in which to view emergency nursing stressors and provided a structure in which to facilitate analysis and presentation of the study findings. Many components of this model were directly applicable to the emergency department. Some of the intraorganizational stressors were already identified in the literature. Issues such as role conflict (dealing with inexperienced medical staff, doing non-nursing tasks) and work overload (inadequate staffing) were reported by Helps (1997), Burns, Kirilloff and Close (1983), and Hawley (1992). Burns, Kirilloff and Close (1983) identified stress related to unresponsive leadership and administration. Hawley (1992) found that the five most stressful categories calculated from the modified stress diagnostic survey were human resources development, rewards, time pressures, communications, and supervisory style. Therefore, this model was an effective guide in the analysis of emergency nursing stressors.

Problem Statement

Purpose

The purpose of this research study was to identify and describe the sources of stress perceived by emergency nurses. There was reason to believe that emergency nursing is highly stressful (Brunt, 1984; Harris, 1989; Keller, 1990; Phipps, 1988; Thompson, 1983) but "empiric evidence regarding the stressors associated with nursing in this speciality area is limited" (Hawley, 1992, p. 211). Identification of stressors unique to emergency nursing was a preliminary step to understanding these stressors and employing effective measures to deal with them (Hawley, 1992).

Research Questions

The research project addressed the following questions:

1. What do emergency nurses perceive to be sources of stress in their workplace?
2. How do they rate these stressors in terms of frequency or severity?
3. What factors increase stress in the emergency room and what factors buffer the experience of stress?
4. What personal and professional strategies do emergency nurse use to cope with stress?
5. How has stress been addressed within the culture of the emergency department?

Summary of Chapter One

This chapter examined the problem of stress in emergency nursing. Previous scientific research exploring emergency nursing stress was reviewed. The significance of this problem was also addressed. Various theoretical approaches to stress theory were

discussed. The conceptual framework used in this study was described. Finally, specific research questions that were addressed by the research project were presented.

CHAPTER TWO: REVIEW OF RELATED RESEARCH AND LITERATURE

Introduction

This literature review focuses on stress in nursing practice. Linkages are made between stress, burnout, and coping in the nursing profession. The researcher will narrow the field of study by examining literature and research pertaining to stress in critical care nursing. Stressors, coping, and personality traits unique to critical care nurses are attended to in this review. Finally, the literature review focuses on research conducted on stress in emergency nursing. This is compared with research on stress in critical care nursing. The differences and similarities between ICU stressors and potential (not fully researched) stressors in emergency nursing are also reviewed.

Stress in Nursing Practice

Nursing is generally acknowledged to be a highly stressful profession (Albrecht, 1982; Asken, 1982; Cassem, 1972; Gentry, Foster & Froehling, 1972; Jones, 1962; Maloney, 1982; Menzies, 1960; Michaels, 1971). The concept of stress has been of concern to nurses since 1859 (Nightingale, 1949) and has been described in the nursing literature since the 1950's (Stehle, 1981). In the sixties and early seventies there was a growing recognition that people in certain "helping" professions such as teachers, nurses, police officers, and air traffic controllers were exposed to frequent stressors in the work environment. Menzies (1960), in a four year observational study of hospital nursing, observed that nurses are responsible for caring for the physical,

psychological, and emotional needs of each patient. They are expected to be caring, empathetic, and compassionate even when faced with distasteful, unpleasant, or frightening experiences. The literature reveals that constant exposure to suffering, pain, illness and death is an occupational problem of nursing unmatched by few other professions (Albrecht, 1982; Beaton and Degner, 1990; Benoliel, McCorkle, Georgiadou, Denton, & Spritzer ,1990; Gentry, Foster & Froehling, 1972; Maloney, 1982; Menzies, 1960).

Nursing involves a high level of commitment and interpersonal involvement. Vincent and Coleman (1986) describe how nurses are frequently involved in situations involving loss, anxiety, separation, frustration, and death. The literature reports that disturbing relationships with patients is a frequent cause of stress. Patients and their families can be irritable, hostile, aggressive and demanding (Bilodeau, 1976; Maloney, 1982; Menzies, 1960). Gentry, Foster and Froehling (1972) point out that nursing practice involves intimate, constant contact with private functions of the human body, often in diseased form. This can cause discomfort and anxiety for the nurse as well as the patient.

Milazzo (1988) points out that some of the stresses in hospital nursing are shared with other occupations, such as accountability to different levels of authority and irregular work schedules. However, she believes that there are some unique stressors in nursing which exist just by virtue of the profession. These include working with emotionally taxing patients, working with complex technical equipment, heavy physical labor, and interacting with all levels of hospital personnel.

Occupational hazards which are not unique to nursing but contribute to the overall stress of nursing practice include exposure to cytotoxic agents and ionizing radiation, the detrimental effects of shift work, and the constant threat of musculoskeletal injury (Williamson, Turner, Brown, Newman, Sirles, & Selleck,1988). The rotating shift schedule and length of working hours has a strong impact on nurse's level of anxiety and job related stress (Coffey, Skipper, & Jung, 1988; Skipper, Jung, and Coffey, 1990; Colligan, 1980). Rotating shift work and inflexible scheduling have been shown to have a negative impact on nurses' job satisfaction and job performance (Boyarski, 1976; Mills, Arnold & Wood, 1983; Niemeier & Healy, 1984; Godfrey, 1980).

Interpersonal relationship skills and communication skills are essential in the nursing profession. This involves interpersonal relationships with members of the health care team as well as patients and family members. Many studies of stress in nursing practice discuss problems with communication among staff members and the administrative hierarchy. Relationships among coworkers may be indifferent or competitive rather than supportive and collegial (Bilodeau, 1976; Maloney, 1982; Menzies, 1960; Milazzo, 1988; Vincent and Coleman, 1986).

Stress, Appraisal and Coping

Successful coping helps to maintain the physical, psychological and social integrity of individuals (Adams & Lindemann, 1974; Boreycki,1996) and promotes the development of positive outcomes (Adams & Lindemann, 1974; Boreycki, 1996). To

further understand coping one must examine the processes that initiate coping as well as coping itself (Borycki, 1996; Folkman & Lazarus, 1984).

Coping is a protective behavior that occurs in response to stress (Lazarus, 1993). According to Pearlin and Schooler (1978) coping mediates the stress response by changing or removing the conditions that cause the stress or controlling the emotions associated with the stress. Lazarus (1993) states "when encounters are considered harmful or threatening coping processes are set in motion, that, if successful, eliminate or ameliorate the harmful condition along with the emotion that it produced" (p. 34). Even in the most positive experiences coping measures may be required to bring about and sustain a positive condition or to ward off threats to it.

Appraisal

Lazarus (1993) describes appraisal as an evaluation of the significance of an occurrence in terms of one's well being. It is the cognitive process of evaluating a situation for threat and the available options and resources for coping (Boryecki, 1996). Appraisal and coping processes are closely interrelated. Lazarus and Folkman (1984) state that primary appraisal involves people's judgments about what is at stake in a stressful encounter, while secondary appraisal involves their beliefs about the viable options for coping. Secondary appraisal involves an evaluation of what might and can be done based on one's coping resources (Boyle, Grap, Younger, & Thornby, 1991; Folkman & Lazarus, 1980). According to Moos and Schaefer (1993) appraisals are generally measured with one-item indexes that assess individual's immediate reactions (threat, challenge, harm, or benefit) to the situation and the extent to which it can be changed or must be accepted. In other literature appraisal takes three forms: harm-

loss, threat, and challenge (Boryecki, 1996; Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Harm-loss and threat are viewed as negative concepts, associated with future or existing harms, while challenge is seen as a more positive concept, demonstrating the ability to overcome and master stress (Boryecki, 1996; Folkman & Lazarus, 1985; Kobasa, 1985.

The degree of stress experienced is determined by the individual's appraisal of their environment (Lazarus, 1993). The appraisal of contextual or environmental influences help to moderate the individual's perception of stress and their perception of harm-loss, threat or challenge (Boryecki, 1996; Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Moos and Schaefer's (1993) model of stress and the coping process suggests that aspects of the personal system (i.e. demographic and other personal factors), the environmental system (i.e. life stressors and social resources), characteristics of the focal life crisis or transition (transition or severity) , and an individual's appraisal of the situation provide a context for the selection and effectiveness of coping resources.

Coping

The concept of coping has produced an abundance of literature (Cohen, 1987; Folkman & Lazarus,1980; Lazarus & Folkman,1984; Moos, 1992; Moos, Brennan, Fondacaro & Moos, 1990; Schaefer & Moos, 1991). Earlier researchers defined coping as a form of ego or defensive behavior, actions that people use to avoid or remove stresses and return to a state of equilibrium (Boreycki, 1996; Folkman & Lazarus, 1980; Lazarus, 1987; Lazarus & Folkman, 1984; Murray & Zentner, 1975; Perlman, 1975).

Perlman (1975) defined ego mechanisms as affective or cognitive behaviors used to delay gratification. These behaviors produce a state in which an individual feels a sense of mastery (Boreycki, 1996) allowing the individual to adapt to the physical or social environment (Boreycki, 1996; Murray & Zentner, 1975). This conceptualization of coping has been criticized because it is "difficult to judge or assess ego and defense mechanisms" (Boreycki, 1996, p. 43) and it does not address the problem solving aspect of the coping process (Boreycki, 1996; Panzarine, 1985).

Most researchers have used one of two main conceptual approaches to classify coping processes (Moos & Schaefer,1993). The first approach emphasizes the focus of coping: a person's orientation and activity in response to a stressor. In this approach a person can approach a problem and make active efforts to resolve it or try to avoid the problem and focus on managing the emotional ramifications associated with it. The second approach focuses more on the particular approach individuals use to cope with stress.

Folkman and Lazarus (1980) conceptualize coping as a set of personality traits or a set of cognitions and behaviors. These behaviors or cognitive decisions are designed to eliminate or reduce stress (Boreycki, 1996; Fleishman, 1984; Folkman & Lazarus, 1980; Lazarus and Folkman, 1984). Individuals are viewed as using the same cognitions, behaviors, or personality traits throughout their life experiences or during different situations. This has lead to the inclusion of a situational perspective in the study of coping to account for its multidimensional character (Boreycki, 1996; Folkman

& Lazarus, 1980; Lazarus and Folkman, 1984; Panzarine, 1985; Pearlin & Schooler, 1978).

A situation orientated approach to the conceptualization of coping developed from the work of Folkman and Lazarus (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984) and Pearlin and Schooler(1978). In this approach different situations determine the specific coping strategies utilized by the individual. These coping strategies are grouped into specific functional categories such as maintaining or restoring interpersonal relationships, seeking information, feeling better, maintaining self-esteem, and making good decisions (Boreycki, 1996; Folkman and Lazarus, 1980). However, Folkman and Lazarus (1980) argue that the ability to generalize across situations is limited.

Pearlin and Schooler (1978) examined the concept of coping within the context of daily life events. They examined coping strategies used in the key roles of marriage, parenting, household economics and occupation. They found that individual coping behaviors were effective in dealing with interpersonal relationships roles such as marriage and parenting but were least effective in dealing with impersonal problems present in the work situation. When economic and employment factors could not be controlled individuals coped by reassessing their personal goals and placing more value on life outside of their employment. In the interpersonal areas of marriage and parenthood individuals used avoidance and withdrawal coping strategies to deal with these stressors.

Boreycki (1996) and Folkman and Lazarus (1980) identify several limitations to the Pearlin and Schooler (1978) study. They argue that these authors fail to identify

coping responses that are effective in reducing stress. Folkman and Lazarus (1978) state that there is a poor relationship between what individuals report and what they actually do. Therefore, the results of the study are difficult to generalize (Boreycki,1996). Boreycki (1996) concludes that further research is required to ensure that the situation orientated approach of conceptualizing coping truly represents the concept.

The last conceptual model of coping derives from cognitive-phenomenological theory. In this model Folkman and Lazarus describe coping as those behaviors or cognitive processes involved in overcoming, reducing or enduring "external and internal demands and conflicts among them" (Folkman and Lazarus, 1980, p.223). The emphasis is on a reciprocal relationship between the individual and the environment. In this model the individual uses coping strategies or specific thoughts and actions in order to deal with appraised stressors (Boreycki, 1996; Folkman and Lazarus, 1980; Lazarus and Folkman, 1984).

There are two forms of coping strategies noted in the literature: emotion-focused and problem focused strategies. Taylor and Aspinwall (1996) describe problem solving efforts as "attempts to do something active to alleviate stressful circumstances, whereas emotion focused coping involves efforts to regulate the emotional consequences of stressful or potentially stressful events" (p.86). Research suggests that people use both of these approaches to combat most stressful events (Folkman and Lazarus, 1980), although the predominant strategy depends on the type of stressful event. Individuals use problem based coping strategies for work-related and

family-related problems but they use emotion-focused coping strategies for physical health problems (Taylor & Aspinwall, 1996)

Coping strategies and the critical care nurse

The research shows that nurses high in personal accomplishment tend to use a higher number of adaptive or effective coping skills and perceive the work environment as supportive and less stressful (Oehler, Davidson, Starr, and Lee, 1991; Stone, Jebsen, Walk, & Belsham, 1984). Critical care nurses tend to favor coping skills that involve direct action such as confrontation or problem solving (Robinson & Lewis, 1990; Schaefer & Peterson, 1992). As the perceived severity or frequency of the stressor increases, the use of maladaptive coping measures such as withdrawal and denial of feelings, smoking, abuse of alcohol, increased caffeine consumption, and over eating increase (Oehler, 1983;Oskins, 1979; Robinson & Lewis, 1990). Critical care nurses tend to favor confrontational, optimistic, and self-reliant coping strategies (Erenfeld, 1990; Schaefer & Peterson,1992). They find avoidance or evasive, palliative and fatalistic coping strategies to be the least effective method of dealing with stress (Erenfeld, 1990; Schaefer & Peterson,1992). Inexperienced nurses tend to report more stress, a decreased sense of personal accomplishment, and utilize more maladaptative coping strategies such as avoidance or withdrawal (Ehrenfeld, 1990; Stone, Jebsen, Walk & Belsham, 1984).

Stress in General Nursing Practice verses Critical Care Nursing

Researchers have primarily focused on stress in critical care nursing or have compared types of stress and stress levels between different hospital units (Anderson, Chiriboga & Bailey, 1988; Foxall, Zimmerman, Standley, & Bene, 1990; Gray-Toft & Anderson, 1981; Kelly & Cross, 1985; Vincent and Coleman, 1986). The results of these studies are ambiguous and confusing. Although critical care nursing was portrayed as highly stressful, researchers have not demonstrated that one type of hospital unit is more stressful than another (Bibbings, 1987; Gentry & Parkes, 1982; MacNeil & Weisz, 1987; Stehle. Harris (1989) reviewed twenty of these comparative studies conducted between 1972 and 1988. She found that of the twenty studies reviewed, twelve indicated no difference and three indicated only marginal differences between ICU and non-ICU nurses on a variety of criteria. Harris speculates that these results are speculative because of design weaknesses that include inappropriate sampling with invalid and unreliable tools.

Foxall, Zimmerman, Standley and Bene's 1990 comparison study of the frequency and sources of nursing job stress perceived by intensive care, hospice, and medical-surgical nurses revealed no significant differences among the three groups of nurses on the overall frequency of job stress. Job stress was measured through the Nursing Stress Scale developed by Gray-Toft and Anderson (1981). Thirty-five ICU nurses, 30 hospice nurses, and 73 medical surgical nurses completed this questionnaire The three groups did differ on the types and sources of stress that they

experienced. ICU and hospice nurses perceived significantly more stress than medical-surgical nurses related to death and dying; ICU and medical-surgical nurses perceived significantly more stress than hospice nurses related to floating; and medical-surgical nurses perceived significantly more stress than ICU and hospice nurses related to work load/ staffing. Overall, death and dying situations were the most stressful for ICU and hospice nurses while work overload and staffing situations were the most stressful for medical-surgical nurses.

Boumans and Landeweerd (1994) used a descriptive correlational study to compare intensive care unit and non-intensive care unit nurses regarding work situation characteristics (e.g. work pressure), reaction variables(e.g. job satisfaction), and individual and psychosocial characteristics (e.g. need for autonomy) to explore whether it is more stressful to work on an intensive care unit than on a non-intensive care unit. The sample consisted of 561 ICU and non-ICU nurses from 36 nursing units in 16 randomly selected general hospitals in the Netherlands. Subjects completed a survey questionnaire with items derived from the Job Diagnostic Survey, the Leader Behaviour Questionnaire, the Organizational Stress Questionnaire, and the Utrech Coping Questionnaire. The outcome measures were work related variables including work pressure, autonomy, feedback and clarity, job satisfaction, experienced job significance, health complaints, absence frequency, social support, need for autonomy, and coping strategies. The results of the study showed that nurses who work in ICU's had more positive scores than nurses who work in non-intensive care units. Boumans and Landeweerd (1994) conclude that the general assumption that ICU nursing is more stressful than general nursing practice was not supported by their study. They go

further to state that non-intensive care nurses may have a greater need for interventions in the work situation. Therefore, it remains unclear whether ICU nursing is more stressful than general nursing practice.

Stress in Critical Care Nursing

Since the inception of intensive care units in the late 1950's and the early 1960's, stress in critical care nursing has risen to increasing prominence in the literature. The challenge in studying this phenomenon is in focusing or narrowing the area of study and sifting through the abundance of literature on the subject.

Initial articles on stress in critical care units focused on individual anecdotal experiences or personal observations within a single unit. These were based on subjective impressions of nursing personnel and were not generalizeable in nature (Gentry & Parkes, 1982; MacNeil & Weisz, 1987; Spoth & Konewko, 1987; Stehle, 1981). Few authors could agree on a particular definition of the term stress, thus there was a lack of agreement on a fitting stress paradigm. Kelly and Cross (1983) contend that the literature was limited by studies that were largely descriptive and observational and fraught with problems that were primarily methodological in nature. Stehle (1981) reports that researchers focused on identifying, observing, and appraising sources of critical care nursing stress in an attempt to validate the presence of critical care nursing stress and to identify antecedents to actual stress. However, by the late 1970's and early 1980's there was a trend towards research with a stronger empirical basis despite

varied results and degrees of methodological sophistication (Gentry & Parkes, 1982; MacNeil & Weisz, 1987; Spoth and Konewko, 1987; Stehle, 1981).

Studies of Internal Stressors

In the early 1970's several researchers started to address psychological or internal stressors of ICU nurses. Again, the results seem inconclusive at best. Gentry, Foster and Froehling (1972) found that ICU nurses reported more depression, hostility, and anxiety and were more irritable, verbally aggressive and resentful than non-ICU nurses. Hay and Oken (1972) found that ICU nurses coped with stressors in the workplace by denying stress, withdrawing, forcing cheerfulness, and submerging in the ICU system

Maloney and Bertz (1983) found that ICU nurses were more alienated, more externally controlled, had a greater sense of adventurousness and sought significantly more challenge than non-ICU nurses. A later study by Levine, Wilson and Guido (1988) revealed that ICU nurses' personality attributes tended to be aggressive, competitive, persevering, moralistic, resourceful, and mechanical. The nurses who enjoyed the critical care field most were of the androgenous or masculine type and had high levels of self-esteem. Despite this research, no obvious personality factors predominate the literature.

Recent research in critical care nursing stress.

Following the original studies, investigators focused on delineating types of external stressors for ICU nurses. Many antecedent factors began to appear in varying order of importance. Inconsistency in the results can be related to the following factors:

(1) a considerable portion of the investigators were not from the nursing profession, and (2) most of these studies were essentially atheoretical and resulted in conflicting categorizations of both external stressors and nurse's coping responses (Gentry & Parkes, 1982; MacNeil & Weisz, 1987; Spoth and Konewko, 1987; Stehle, 1981).

Sources of stress in critical care nursing

The primary source of stress for critical care nurses is in the realm of interpersonal relationships. The literature reveals that personality conflicts with staff, physicians, administration, and residents are the most frequent source of stress for ICU nurses (Anderson, Chiriboga & Bailey, 1988; Bailey, Steffen & Grout, 1980; Benoliel, McCorkle, Georgiadou, Denton & Spitzer, 1990; Gray-Toft & Anderson, 1981; Spoth and Konewko, 1987).

The second greatest source of stress for ICU nurses involves management of the unit. Included in this category are problems arising from inadequate staffing and apathetic or incompetent staff (Anderson et al, 1988; Bailey et al., 1980; Foxall et al., 1990; Gray-Toft and Anderson, 1981; Quamar, 1984). This phenomenon of work overload results in part from the multiple demands imposed upon nurses by both medical and administrative personnel (Gray-Toft and Anderson, 1981). Shift work and scheduling of shifts is yet another important stressor highlighted in the literature.(Bailey et al., 1980; Boyarski, 1976; Coffey, Skipper & Jung, 1988; Godfrey, 1980; Harris, 1984; Niemeier & Healy, 1984). Frequent interruptions by medical personnel, paper work, taking charge responsibility, and floating out of the unit, are yet other stressors identified under this category (Bailey et al., 1980; Foxall et al., 1990; Vincent & Coleman, 1986).

The category of patient care is the third major source of stress in critical care nursing. Stress related to emergencies or arrests and caring for critical, unstable patients is included in this category. The constant exposure to death and dying is identified as a fundamental source of stress for ICU nurses (Bailey et al., 1980; Eastham, 1990; Foxall et al., 1990; Gray-Toft & Anderson, 1981; Spoth and Konewko, 1987). Unnecessary prolongation of life and disagreement with physicians over patient goals is cited as a major source of stress for nursing staff (Beaton & Degner, 1990; Daniels, 1987; Spoth and Konewko, 1987; White & Tonkin, 1991). The stress of meeting the intense emotional needs of the patient and the family has been highlighted in the literature (Huckabay & Jagla, 1979; Gray-Toft & Anderson, 1981).

The fourth category of ICU stressors lies in the area of inadequate knowledge and skills. Insufficient knowledge, inadequate orientation and lack of experience and skill is a key source of stress for many nurses (Bailey et al., 1980; Harris, 1984; Vincent & Coleman, 1986; White & Tonkin, 1991). Another stressor included in this category is the increasing complexity and sophistication of technological equipment found in critical care units (Bailey et al., 1980; Huckabay & Jagla, 1979; Reugg, 1987).

Problems with the physical work environment encompass the fifth major category of ICU stressors. Factors in this category include insufficient or malfunctioning equipment, lack of adequate work space, lack of supplies, crowding, poor ventilation, inadequate heating or air conditioning and insufficient lighting (Bailey et al., 1980; Spoth & Konewko, 1987; Qamar, 1984).

Stress resulting from the personal or family life of each individual nurse can have a strong impact on the work place (Bailey et al., 1980). The individual personality

characteristics of the nurse and the nurse's own perception of the stress level in the work place have been shown to be more influential in producing symptoms of stress than the actual stressor themselves (Gentry et al., 1972; Gray-Toft & Anderson, 1981; Johnson, 1979; Maloney, 1982; Milazzo, 1988).

The final category of ICU stressors involves the area of administrative rewards. Factors involved in this category include poor pay or benefits, lack of participation or control in administrative decision making, lack of job security, and little opportunity for advancement (Bailey et al., Harris, 1984). The anticipation and lack of control of untoward events, particularly arrests or major trauma cases, are obvious stressors (Harris, 1984). In times of budgetary restraint and health care reform, wages and job security have become an increasing concern.

The major sources of stress in critical care nursing include poor interpersonal relationships (personality conflicts with other staff members), problems with unit management (inadequate staffing or incompetent staff, shift work and shift scheduling) and difficulties with patient care (constant exposure to death and dying, caring for critical, unstable patients, moral and ethical issues of life and death). Secondary sources of stress include inadequate knowledge and skills, problems with the physical work environment, stress arising from the personal or family life of the individual nurse, and lack of administrative awards.

Stress in Emergency Nursing

There has been little published research pertaining to stress in emergency nursing. Three major research studies have been conducted in the U.S.A., Canada,

and Britain. Helps (1997) surveyed 51 emergency nurses in Kings College Hospital in London to determine how emergency nurses are affected by occupational stress and what they think should be done to reduce it. Factors related to the physical working environment such as ambient temperature and lighting were the most frequently reported source of irritation or concern. It should be noted that this hospital was undergoing major reconstruction at this time. Other frequent sources of irritation (in descending order of reported frequency) included; too much to do, budget cuts, physicians, erratic workload, other nurses, people in charge, time and work pressures, and lack of resources. The sources of greatest occupational stress (in descending order of severity) were; lack of staffing, relationships with colleagues, physical/ verbal abuse (from patients), management related concerns, too much to do all at once, bereaved relatives, uncertainty regarding patient care, faulty equipment and crib death/ death of children. The sources of greatest occupational satisfaction (in descending order) included: saving lives/ patients getting better, patients and staff saying thank you, providing a good service, supporting/ helping/ calming people, variability and unpredictability of the work, and good working relationships. Nurses suggested a variety of ways in which occupational stress could be reduced. These included employing more staff, providing a "time out" room and debriefing after traumatic events. However, there were a number of methodological weaknesses in this study which include the use of unvalidated questionnaires and the small sample size. The study was conducted in one hospital which limits the ability to generalize these results.

Burns, Kirilloff and Close (1983) carried out a postal survey of 160 emergency nurses working in the city of Pittsburgh and in the surrounding area. Eighty-five nurses

were employed in the emergency departments of five community hospitals and 75 emergency nurses resided within an approximate 75 mile radius of Pittsburgh. The goal of their study was to determine sources of stress and satisfaction in emergency nursing. Two instruments were used; an Emergency Care questionnaire and a Coping Method questionnaire. Factors attracting nurses to emergency nursing included: intellectual challenge, opportunities for learning, variety and excitement, opportunity for learning to handle emergencies, and proficient use of skills. Those items resulting in internal or personal rewards (intellectual challenge, learning, variety) were ranked higher than those items related to the unit as a whole (team member, nurse-patient ratio) or to other's opinions (recognition and/or respect).

Items in the category of unit management were seen as the greatest cause of stress for emergency nurses. These included such items as inadequate staffing, apathetic, inexperienced medical staff, patients not requiring emergency medical care, apathetic or incompetent staff nurses, shifts and scheduling, interruptions, documentation and paper work, delays in ancillary services: lack of bed availability, unavailability of physicians, and floating out of the unit.

Items in the category of patient care were found to be the second highest cause of stress. These included such factors as critical emergencies, uncontrolled patient volume, serious injury or death of children, inability to meet patients needs and uncooperative, abusive, or demanding patients or families.

The category of interpersonal relations was the third highest cause of stress. This included factors such as unresponsive leadership/ administration, nurse physician interactions, lack of teamwork among emergency staff and other departments or

ambulance services, personality conflicts between staff, physicians, administrators, and residents and communication problems (ie. a lack of opportunity for input into nursing policies).

The item listed as patient improvement, progress and recovery was cited as the greatest source of satisfaction. This item was listed first by 32% of the sample. Another important source of satisfaction for these ED nurses was related to their knowledge and skills. Eleven percent of the sample ranked immediate results, optimum performance and accomplishments as the highest source of satisfaction. This study had fewer methodological weaknesses than the Helps(1997) study. The reliability of the Emergency Care Questionnaire had been determined in prior testing by comparing responses of nurses in three subgroups of the stress management subgroup (local, regional, and national). However, the Coping Method Questionnaire (which was developed by the principle investigator) was only tested by a sample of four emergency nurses to determine face validity. The sample of 160 nurses from several hospitals gives more strength in the generalizeability of these results.

Burns, Kiriloff, and Close (1983) also compared the responses of nurses with less and more than two years emergency care experience. They found significant differences in their responses. They concluded that "more than this amount of experience is needed before ED nurses are able to believe that their knowledge is current, that their judgments are respected, and that they are part of the unit team" (p 336). Inexperience appears to be an added stressor for these nurses.

The third major research project examining stress in emergency nursing was conducted by Mary Patricia Hawley in 1992. The sample consisted of 69 emergency

nurses from emergency departments of four urban Canadian hospitals. Hawley used a self-report questionnaire. A general profile of emergency nurses' perceptions of stressors was obtained through the modified Stress Diagnostic Survey developed by Ivancevich and Matteson (1980). Forty one items describing potentially stressful conditions in the work environment were rated by respondents according to frequency as sources of stress. She also added two open ended questions. In the first question, respondents were asked to express any additional "frequently occurring sources of stress" (Hawley, 1992). In the second open ended question, respondents were asked to describe the three greatest sources of stress in emergency nursing.

The five most stressful categories calculated from the modified stress diagnostic survey were human resources development, rewards, time pressures, communications, and supervisory style. Responses to the open ended questions were subjected to content analysis with an intercoder reliability of 86.9%. Categories representing frequently occurring stressors included staffing practices, role conflict, intergroup conflict, organizational structure, supervisory style, and the physical environment (Hawley, 1992). Categories representing the greatest sources of stress included staffing practices, intergroup conflict, role conflict, supervisory style, organizational structure, and quantitative overload. They found a striking congruence between these two categories.

Items listed within the category of staffing practices included a shortage of nursing staff, particularly during nights and busy periods. Other factors included a shortage of experienced relief staff, training new, inexperienced staff during peak periods, a shortage of medical staff and inexperienced medical staff.

One of the major stressors described under the category of role conflict was misuse of the emergency department. This involved such factors as nonemergency patients, family physician referrals, and "repeaters". Other sources of role conflict were nurses being required to do non-nursing tasks such as monitoring recovering patients, performing EKG's after hours, and tasks that could be done by aids or volunteers.

Intergroup conflict stressors involved communication problems among patients, families, and medical staff. Communication problems with physicians and unavailability of physicians was found to be a major source of stress.

The major source of stress in the category of organizational structure involved delays in transferring patients to other units once they were admitted. Nurses found that delays in the system contributed to a back-log of patients, increased patient care responsibilities, and increased patient complaints.

Stressors noted under the category of supervisory style included a perception that nursing supervisors were ineffective in improving the overall work environment. Factors that contributed to this perception involved a lack of communication, lack of understanding, incompetence, lack of support, and inexperience.

Major stressors noted in the category of physical environment included poor working conditions, lack of dependable equipment and supplies, not enough facilities for the patient load, and poor lay out of the department.

Hawley(1992) draws several conclusions from her results. She believes that attempts should be made to ensure adequate staff coverage during periods of peak demand and that strategies should be made to ensure orientation and consistent use of relief staff. She advocates greater use of ancillary staff around the clock to carry out

non nursing tasks. Hawley (1992) also believes that increasing use of emergency services by non emergency patients is a reflection of consumer needs and that this will continue to be a burden until other facilities arise to meet these needs. She concludes that further training on conflict resolution and the development of support groups in the workplace would be beneficial.

Hawley's study had a sample size of 69 emergency nurses from four different urban Canadian hospitals. Her analysis was based on questionnaires completed by these 69 nurses. Hawley did not perform a power analysis so it is difficult to speak to her sample size with confidence. She developed the Self Report Questionnaire based on the Stress Diagnostic Survey developed by Ivancevich and Matteson. The reliability and validity of the Stress Diagnostic Survey was determined in previous testing by Ivancevich and Matteson and was found to be acceptable for diagnostic purposes. This study also had a strong theoretical framework which was based on the model for organizational stress research developed by Ivancevich and Matteson.

Related Research and Literature examining emergency room stressors

Other related literature investigating emergency room stressors closely parallel the results of Burns, Kiriloff and Close (1983), Hawley (1992), and Helps(1997). Thomas, Riegel, Gross, and Andrea (1992) examined the effect of a staff-developed intervention on burnout among emergency department nurses. They found that the key stressors for their E.R. personnel were frequently high patient acuity, constantly changing patient population, lab delays and errors, physician-nurse relationships and imbalanced staff workloads. Scullion (1992) explored the literature on stressors associated with emergency nursing, focusing on those associated with student nurses.

He found potential stressors encountered or anticipated by student nurses in the emergency department included the death of patients (especially children), dealing with distressed or bereaved relatives, role ambiguity, patients in pain, critically ill or unstable patients, the "highly charged atmosphere", the fear of failure, interpersonal difficulties with the staff, doubts about their own clinical competency, "unpopular" patients, unfamiliar technology, emergencies, patient dissatisfaction with waiting times, close proximity to relatives/ the public, and violence and abusive behavior from the patients and/or the families.

Dealing with suicide attempt patients can also be a significant stressor for emergency nurses (Pallikkathyil & Morgan,1988). The nurses in this study reported concerns with inadequate time and staffing, abusive behaviors by the patients, ineffective disposition and follow-up of these patients, value conflicts between the staff and the patient, and problems in dealing with the dynamics of the attempter's family.

Gill (1989) highlights how the destructive behaviors of child abuse affect children, families, and health care professionals. Caring for abused children in the emergency department can provoke feelings of anger, avoidance, blaming, denial, fear, frustration, hatred, shock, and sympathy in the E.R. personnel (Gill, 1989). Gill also emphasizes the importance of providing appropriate resources and support for nurses working in this area. Gill recommends using professional resources such as psychiatric clinical nurse specialists, social workers, chaplains and appropriate outside agencies.

Mallet and Woolwich (1990) carried out a study to investigate the effect of triage on patients' waiting times in an emergency department in St. Mary's Hospital in London, England. They highlighted how many of the patients attending the emergency

department suffer from minor injuries or non-urgent problems which could have been treated in the community. This has been identified in the literature as a major source of frustration for emergency nurses (Hawley, 1992). Phipps (1998) goes further to describe how emergency staff must continually distinguish between patients who are simply worried, those who have minor illnesses, those who are candidates for sudden deterioration and those who are critically ill. He suggest that this is a major source of stress for emergency personnel.

Stress, Burnout and Coping in Emergency Nursing

Mytych (1981) examined burnout in emergency nursing. The study was "designed to analyze the overall burnout level of an emergency staff nurse group and to investigate relationships of various factors to job satisfaction" (Mytych, 1981,p.265). She administered two questionnaires, the Staff Burnout Scale for Health Professionals and the Job description index to 37 staff nurses at one large Chicago emergency department. Mytych (1981) found that the nurses had a moderate level of burnout. Burnout levels showed a significant negative correlation with certain aspects of job satisfaction such as job performance, promotion, and supervision. There was no correlation between financial compensation and burnout. Mytych (1981) did not find any significant correlation between interpersonal relationships (co-worker relationships) and burnout. There were some empirical weaknesses in this study. Mytych (1981) limited her study to 37 staff nurses in one emergency department and she worked as a staff member in the same emergency department. Therefore, some of these subjects might have given socially acceptable or desirable answers. This was ethically unwise, due to the coercion factor. Further research would have to be conducted in several

emergency units to validate these results. As Mytych (1981) herself suggests, further research needs to examine the effects of age, sex, length of stay on the job, and level of education of the nurse on the development of burnout.

Keller (1990) used a cross sectional, descriptive design to study the management of stress and the prevention of burnout in emergency nurses. The sample consisted of 532 clinical nurses employed in emergency departments in 15 hospitals in the greater Los Angeles area. She used three questionnnaires: the Emergency nurse questionnaire, the Maslach Burnout Inventory, and the Bell Coping Method Survey. The reliability and validity of the Maslach Burnout Inventory has been well established, however, the reliability and validity of the other two questionnaires have not been well defined. Keller (1990) found that nurses experiencing the highest level of personal accomplishment used approach (confrontative) tactics to deal with stressors. They drew on past experience and took definite action. They used a sense of humor to gain perspective over stressful events and engaged in non job-related activities to achieve personal fulfillment. Those nurses who experienced the highest level of burnout used evasive or avoidance techniques to deal with stress. They used food or food substitutes, ignored the situation, slept and cried more than usual, cursed, daydreamed and used recreational drugs.

In summation, nurses who reported high levels of personal accomplishment and job satisfaction used a balance of short term and long term coping methods to deal with stressful incidents. Furthermore, the coping methods most effective in dealing with stress required taking direct action such as drawing on past experience or seeing

humor in the situation and ignoring the situation by becoming involved in non-job related activities.

Critical Incident Stress Debriefing

Critical incident stress debriefing, a formal method used for debriefing staff after critical incidents, was first described in the literature in 1983 (Mitchell, 1983) and has risen to increasing prominence in the literature in the last two decades (Back, 1992; Burns & Harm, 1993; Sowney, 1996). Prolonged exposure to stressful incidents such as sudden, unexpected death or mutilation can cause innumerable emotional and physical symptoms in emergency personnel. Sowney (1996) claims that "quite often emergency nursing staff develop inappropriate coping strategies to deal with stress" (p. 38). Critical incident stress debriefing was proposed to protect and support personnel and to minimize the development of abnormal stress response syndromes (Sowney, 1996). The emphasis is placed on recognizing stress and using appropriate measures to alleviate the problems associated with it. The debriefing process was primarily developed by Mitchell (1983), a psychologist with years of experience as a fire fighter. It involves the use of structured group processes specifically designed to alleviate stress symptoms and prevent cumulative stress and burnout. Key situations that commonly precipitate critical incident stress include the death or injury of a health team member, injury or death of a child or children, and death resulting from human violence (Back, 1992; Burns & Harm, 1993; Mitchell, 1983). Emergency unit managers should be aware of the possibility of acute stress responses when emergency nurses experience the death of a child or a coworker (Back, 1992; Burns & Harm, 1993). Burns

and Harm (1993) claim that further education regarding stress and critical incident stress debriefing may be helpful for emergency room personnel.

Vicarious Traumatization

Exposure to the traumatic experiences of victims can be detrimental to the mental health of people close to the victim, including nurses and therapists involved in the victim's healing process (Blair & Ramones, 1996; Crothers, 1995; Hartman, 1995). The literature suggests that people who work with victims of violence or abuse can experience profound psychological disturbances and may exhibit symptoms similar to the post-traumatic symptoms of their patients. The consequences to professionals can include "development of anxiety, depression, intrusive thoughts, alienation, dissociative episodes, feeling of helplessness, paranoia, hypervigilance, and disrupted personal relationships" (Blair and Ramones, 1996, p. 30). Blair and Ramones (1996) suggest that the concepts of cognitive processing models and investigation into memory dynamics can provide some understanding of vicarious traumatization and may help define preventative measures and treatment options for this condition.

Hartman (1995) suggests that vicarious traumatization can severely impact the nurse-patient relationship. The emotional arousal creates a dynamic of approach and avoidance in the nurse-patient relationship (Hartman, 1995).

Emergency nurses are frequently exposed to victims of violence or abuse and are at risk for developing vicarious traumatization.

The Similarities and differences between ICU and Emergency Units

The critical care environment is much more structured and controlled than the emergency ward. Unit managers in critical care can control the number of beds utilized, the number and type of patients admitted into the unit, and can staff the unit accordingly. This has been reflected in the literature in that concerns with staffing predominate the emergency literature while problems with interpersonal relationships rate highest in the intensive care unit. It is important to note that the flow of patients and patient acuity can not be anticipated or controlled in the emergency unit therefore staffing ratios have to be dynamic and flexible. This underscores the need for skilled, knowledgeable casual and float staff that can work in the emergency room. These staff need to be comfortable in reading cardiac monitors and interpreting 12 lead EKG's as well as the drugs used during resuscitation. It would also be beneficial if they had taken the advanced cardiac life support course. It is also important to note that emergency unit departments can not refuse patients because they are full and have run out of stretchers whereas ICU can refuse patients because they have lack sufficient beds or skilled nursing staff to look after the patients. The goal of emergency is to diagnose and treat patients and discharge them or admit them to a ward within four hours. Unfortunately, with the current restraint in the health care budget patients are often lying in stretchers in emergency for days at a time. This further compounds the difficulties with staffing ratios. Most other wards or nursing units can control the number of patients and the acuity of the patients and staff their units accordingly.

Emergency nursing can be described as organized chaos. Nurses have to constantly change priorities based on the acuity of patients coming through the door.

Emergency nurses have more limited contact with the patient's family or friends. The emergency physician is the one who talks to the family regarding the patient's diagnoses, his/her prognoses and his/her plan of care. The emergency physician is responsible for talking to the family members after an unsuccessful resuscitation. Critical care nurses are constantly dealing with issues of life and death. They are responsible for giving the family updated information on the clients status and their prognosis and possibility of recovery. ICU nurses are frequently dealing with families and friends of the patient who are going through stages of grieving and adjustment. Emergency nurses deal with patients and families in acute or short term crisis (who can be verbally and physically abusive) while critical care nurses deal with distressed families for extended periods of time. Therefore the type of stressors experienced in dealing with the patients and families will differ between the two areas.

Critical care nurses deal with complex technical equipment such as respirators, CVP monitors and arterial lines on a much more frequent basis than emergency nurses. This can be an added stressor for the emergency nurse when he or she is required to use skills or deal with machines he or she has not dealt with for an extended period of time. With budget restraints and delays in transferring patients it is not uncommon to have patients on a respirator for limited periods of time in the emergency unit.

To summarize, the major difference between emergency and critical care nursing stressors lies in the area of staffing ratios, the control over the influx of patients and their acuity, the type and amount of communication between the nurses, the patient, and the family, and familiarity with complex technological equipment.

CHAPTER THREE: RESEARCH DESIGN

Introduction

Although stress in critical care nursing has been well documented in the scientific literature(Anderson, Chiriboga & Bailey, 1988; Benoliel, McCorkle, Georgiadou, Denton & Spitzer, 1990; Foxall, Zimerman, Standley, & Bene, 1990) empirically based research exploring stress in emergency nursing is very limited. Only three major research studies were found that explored emergency nursing stress (Burns, Kiroloff & Close, 1983; Hawley, 1992; Helps, 1997). These studies had various methodological weaknesses such as limited sample sizes (Hawley, 1992, Helps, 1997) and the use of unvalidated questionnaires (Helps, 1997). Further research was necessary to validate the measures used in these studies. Issues such as coping strategies and social support network needed to be explored. Factors such as the nurse's level of experience and the physical environment also needed to be addressed. Therefore, a qualitative research methodology was chosen to explore stress in emergency nursing.

The fundamental goals of qualitative research are to describe, explain, and understand the phenomenon under study (Morse, 1994). Qualitative methodology is indicated when little is known about the topic being studied (Brink & Wood,1989). It provides a richer data base and allows for an in-depth understanding and alternate perspective that numbers alone can not provide (Polit & Hungler, 1983). Qualitative

methods can provide "intricate details of phenomena that are difficult to convey with quantitative methods" (Strauss & Corbin, 1990, p. 19). Qualitative methods are most appropriate when the researcher wants to describe a phenomenon from the insider's perspective, to study a topic from the people's viewpoint or frame of reference (Field & Morse, 1985; Leininger, 1985). It provides an in-depth understanding of a phenomenon both from an individual's perspective and the "collective experience". A qualitative approach was indicated for this study to provide an understanding of the nature of stress in a field of nursing where empirical research is limited.

Research Design: Person-Centered Interviewing

The challenge for contemporary anthropologists is to place the individual within historical and sociocultural contexts of the community (Levy & Hollan, 1999). The researcher attempts to "elicit behaviors that go beyond the role determined surface scripts to determine hidden or latent dimensions of the organization of persons and of the sociocultural matrix and their interactions" (Levy & Hollan, 1999, p. 334). To establish this goal anthropologists have used a method known as person centered interviewing. This research project used person-centered interviewing to gain a deeper understanding of stress in emergency nursing on an individual and collective basis. In person-centered interviews, the interviewee is both an informant and a respondent. The interviewee provides information about the culture, behavior and values of the group, but he or she is also an "object of systematic study and observation in him- or herself" (Levy & Hollan, 1999, p.334). "The balanced combination of informant and respondent

modes of interviewing is characteristic of person-centered interviews" (Levy & Hollan, 1999, p.336).

During these interviews I used a mixture of informant and respondent questions and probes. Some of these questions or probes were open-ended, while others were focused or closed (Levy & Hollan, 1999). The open ended probes were purposely ambiguous to allow the respondent a wide range of responses. During data analysis I examined the specific choices and emphasis in the content of the responses as well as the form of the responses themselves (Levy & Hollan, 1999).

Sample Selection

The population of interest was emergency nurses working in Winnipeg, Manitoba. I originally sought approval to conduct research in two emergency departments in Winnipeg. One was a large downtown trauma center and the other was a small community hospital emergency department. I originally selected two sites so that the sample size would be large enough to obtain adequate information (Morse, 1989). Due to lack of participants I sought approval to conduct research in two other institutions, one of which was a large downtown teaching hospital and the other was a small community hospital. My final sample consisted of seven emergency nurses from three different institutions in the city of Winnipeg. Two of the institutions were large, downtown teaching hospitals and one was a small community hospital.

The sample population was drawn from general duty registered nurses working in the emergency departments of these institutions. This excluded all managerial or

administrative staff and nursing/unit assistants. The selection criteria for nurse participants were:

1. English speaking
2. Over 18 years of age
3. Registered nurses employed within these emergency departments
4. Nurses willing to be interviewed.

To introduce the study to the nurses, I placed a letter of explanation in the communication book in each of the emergency units (see Appendix B). The letter was followed by small group meetings with staff members in each unit to provide explanations and answers to any questions. All general duty nurses working in these emergency departments were provided with an explanation of the study, in writing, and were asked to indicate if they were willing to participate in taped interviews. Consent was established by means of a consent form (see consent- Emergency Nurses Appendix C). A prearranged envelope was left on the unit to collect the signed consent forms. Those nurses who expressed an interest in participating were scheduled for interviews at their convenience. My objective was to interview 15-20 nurses in total.

I found that a great many nurses were unwilling to participate. As previously stated, I had to obtain permission to conduct research in two other institutions in order to obtain more participants. Despite approaching nurses, nurse managers, and clinical resource nurses in four different institutions (over the course of nine months) I was only able to obtain a total of seven interviews from nurses in three of the institutions. I also attempted to contact the head of the Manitoba Emergency Nurses Association but my phone calls were not returned.

None of the seven nurses actually deposited a signed consent form in the prearranged envelope. Six of the seven volunteered to participate and indicated their interest following small informal group meetings in each unit. Participant seven had completed a previous interview with me and consented to the use of the interview for this research project.

The Setting

The location of the interviews was determined by the participant(s). They were given the option of participating in the interviews in the privacy of their own homes or in my home or in a private interview room in the emergency department. Levy and Hollan (1999) emphasize that it is important to interview the respondent in isolation from his or her family, friends, and acquaintances as the presence of others prompts socially desirable responses. The primary goal was to maintain privacy and confidentiality and minimize interruptions as factors such as crowded living conditions or the presence of young children may make interviewing in the home problematic.

One of the interviews was held in the participant's house. Two were conducted in private offices in one of the institutions. Two interviews were conducted in the researcher's house and one interview was carried out in a private office at the University of Manitoba. One of the interviews was based on a previous practicum assignment that took place in the fall of 1998 and in that case the interview took place in the participant's house.

Data Collection

Data collection occurred through person-centered interviewing and observation. Person-centered interviews were conducted with a total of seven nurses (from three institutions) who agreed to participate in the research project (see consent- Emergency Nurses Appendix C). A signed consent was obtained prior to the interviewing process. The interviews lasted for 45 minutes to one hour. They were tape-recorded and transcribed verbatim.

The use of person-centered interviewing provided an individual and communal perspective of stress in emergency nursing The use of three different teaching institutions allowed for comparison of data. An interview guide was developed and used to direct the interviews (See Appendix D). This guide was based on the proposed theoretical framework, person-centered interviewing techniques outlined by Levy and Hollan (1999) and my own clinical experience as an emergency room nurse. The location and timing of the interview was determined by the participant.

Note taking was kept to a minimum during the interview. Brief notes included "important visual aspects of the respondent's behavior, significant events and shifts in the interviewer's internal experience, and guesses about some potentially illuminating and organizing hypothesis" (Levy & Hollan, 1999, p. 353).

Written notes were made as soon as possible after each interview. These notes included my impression of the significant behavior of the respondent, comments on the interaction between myself and the respondent, comments on any visual behaviors that were observed, and comments on my reaction to various parts of the interview (Levy & Hollan, 1999).

Tape recording of the interviews allowed me to capture the content and the form of the interview. Audio tapes were essential for two reasons. They helped to capture "kinds of micropatternings that are essential phenomena for trying to understand the personal organization of respondents and their relations to their public cultures"(Levy & Hollan, 1999, p354). Audio tapes also provided sources of information about the researcher's conscious and unconscious biases and any linguistic or cultural blind spots that might have distorted the interview (Levy & Hollan, 1999).

Analysis

In most qualitative research data collection and analysis occur simultaneously (Morse, 1989). Brink (1989) states that data collection and analysis requires a fluid, flexible and somewhat intuitive interaction between the researcher and the data. Therefore, after each interview, I replayed the taped interviews noting the tone of the responses as well as the content. I also wrote more extensive, in-depth field notes. Audio tapes were transcribed verbatim by a typist (Field & Morse, 1985; Morse, 1991; Spradley, 1979). I used a process of reflection to examine the notes, typed transcriptions, and audio tapes to facilitate ongoing interpretation of the findings. Data collected during the interview were open coded and aggregated into categories and sub-categories. From these categories, themes and sub-themes were generated.

The most extensive interpretation occurred following the data collection phase through the process of thematic content analysis. I became immersed in the data through reading/rereading of transcripts and listening to taped interviews. The first step of analysis involved open coding of the raw data. Through the process of coding raw

data into categories, several themes and sub-themes developed. Initial categories were broad but did not overlap (Burns & Grove, 1993). Codes were initially organized into descriptive, then interpretive, and finally into explanatory ideas as the analysis progressed from concrete literal description to more abstract conceptualization.

I used an open coding system, developing categories from the original transcripts (Burnard, 1991). The categories that developed at this point in the analysis were literal ideas or impressions developed from the content of the transcripts. The next stage of coding involved collapsing the existing categories into broader, more inclusive categories commonly referred to as themes. Finally, transcripts were reexamined and compared to the original categories and sub-categories that were developed to ensure that data were appropriately accounted for within the coding system. My thesis chair helped to audit the data collection and analysis process to ensure proper coding and development of categories.

Ethical Considerations

Ethical considerations were observed during each step of the research process. Polit and Hungler (1995) state that the principles of beneficence, respect for life and justice are not specific to any type of research and need to be universally regarded. Because of the decreased structure of qualitative research there is an even greater responsibility to protect participants (Ramos, 1989).

A research proposal was submitted to the Ethical Review Committee, Faculty of Nursing, University of Manitoba and several recommendations were incorporated in the research design. While waiting for approval from the Ethical Review Committee I

approached the access committees of the two initial institutions to gain access to their emergency units. Three months later, I approached the access committees of two other institutions to gain access to their emergency units.

Informed Consent

The two key elements of informed consent are the right to self-determination and the right to full-disclosure. The concept of self-determination means that prospective participants voluntarily decide if they want to participate; they can terminate their involvement at any point in the research process; they can refuse to give certain information; and, they are free to ask questions at any point in the research process (Polit & Hungler, 1991). Full disclosure means that the researcher has fully described the study, the participant's right to refuse participation, the researcher's responsibilities, and the potential risks and benefits (Polit and Hungler, 1991). Both of these elements were incorporated into the consent form used in this research project.

Prior to commencing the research, I introduced and explained the research project by meeting with the nurses during small informal group meetings and by placing notices on the bulletin board and in the communication book (See Appendix B). Nurses were asked to consider participation in the interview process and indicate their consent/ refusal to consent by signing a consent form (See Appendix C). The nurses were informed that these interviews were to be audio-taped. This information was also included in the consent form. Those consenting to participate were to leave their consent form in a prearranged envelope, to be examined only by me. It should be noted that six of the participants indicated their interest in participating in the research study during small, informal group meetings in their respective emergency departments. They

handed in their initial consent form to me, in person, at that time. I reinforced the content and continuous nature of consent when meeting with all participants. In this way, informed and continuous consent was sought from all the respondents.

Confidentiality

A promise of confidentiality was made to all participants. Each participant was assigned a code identification number to identify tapes and transcripts. Code number information was kept separate from transcripts and tapes and was accessible to myself and my Thesis Chair. All original transcripts have been kept in a secure location. Participants were given pseudonyms. Descriptions of the study findings were altered as necessary to reduce the chance of tracing information to participants. Subsequent analysis and any publication of the research data will refer only to three institutions in Winnipeg, Manitoba. No participants will be identified.

Beneficence

Polit and Hungler (1995) state that the primary principle of beneficence is "above all, do no harm" (p.134). In keeping with the principle of beneficence I estimated the risk /benefit ratio to participants and included these in the consent form.

Methodological Rigor

The first goal of the researcher is to persuade the reader that the research findings are worthy of the reader's attention, to establish that the research is trustworthy (Lincoln and Guba, 1985). Trustworthiness can be accomplished in qualitative research but the criteria for evaluating this must be specific to qualitative

research and not merely borrowed from quantitative research (Leininger, 1985). The trustworthiness of this research was examined using the criteria established by Lincoln and Guba (1985). These four criteria include credibility, transferability, auditability, and confirmability.

Credibility

Credibility is the truth value in qualitative research. It is judged by the degree to which the researcher is able to convey the reality of the participants. The researcher provides such an accurate description that people undergoing the experience immediately recognize it and others can recognize the experience after reading about it in a study (Sandelowski, 1986).

I ensured credibility through ongoing debriefing with my thesis chair and by monitoring my progressive subjectivity throughout the research process. I monitored my immersion in the research project through a continual process of reflection and examination of notes, transcripts, and audiotapes. Lincoln and Guba (1989) warn that it is important to monitor progressive subjectivity because if the researcher continues to prefer their original impressions it is safe to assume that he or she is not paying sufficient attention to the contributions of the participants.

My initial goal was to use collective member checking to validate the content of the transcripts and determine if my observations were congruent with those of the participants. My objective was to share my findings with staff members from each institution during informal research sessions. This was to provide an opportunity for participants to give feedback and respond to the categories and themes derived from

the data. Unfortunately with shift work and summer holidays I was unable to get the nurses all together for informal research sessions.

Transferability

Transferability is the ability to apply the research findings in a broader context, outside the study situation (Sandelowski, 1986). This involves the ability to apply the research findings within the broader context of nursing knowledge and the extent to which consumers of research "find the research findings meaningful and applicable in terms of their own experiences" (Sandelowski, 1986, p. 32). In qualitative research transferability is achieved through the use of thick description (Lincoln and Guba, 1989). The researcher provides as complete a data base as possible to enhance the reader's appreciation and understanding of the research findings (Lincoln and Guba, 1989). In order to facilitate transferability I have provided clear descriptions of the sample, the setting, and the data collection procedure. A substantial data base has been established and is presented in Chapter four. Chapter five includes a comparison of the research findings with the current literature.

Auditability

Auditability is analogous to consistency in quantitative research. Qualitative research does not lend itself to exact replication as it emphasizes the individual as well as the collective experience. However, a type of replication is possible in other emergency units. Further examination of the nature of stress in emergency nursing and the themes derived from this research project could be achieved by the comparison of contextual variables present in other emergency units. This research project could be

conducted in other nursing units to assess its replication. Researchers could examine the collective experience of stress in pediatric intensive care units or palliative care units.

The development of a "decision trail" is an important principle in auditability (Sandelowski, 1986, p 33). This decision trail should be easily followed by another researcher to yield similar results (Sandelowski, 1986). This was achieved by presenting a detailed and clear description of the study from problem identification to data analysis and discussion.

Confirmability

Confirmability is a measurement of neutrality. In qualitative research it is a measurement of the neutrality of the research data and not the researcher (Sandelowski, 1986). Interpretations and analyses should be rooted in the data and the realities of the participants and not those of the researcher (Lincoln and Guba, 1989). To enhance the confirmability of the research project, I used participants own words to substantiate my interpretations of the data. My thesis chair also helped to audit the data collection and analysis process to ensure that the research findings were verified by the data within the transcripts.

Conclusion

In this research project, I explored the concept of stress in emergency nursing using person-centered interviewing and observation techniques. A convenience sample of seven nurses from three institutions were interviewed. These interviews provided a rich and detailed data base. Data was analyzed through the process of thematic

content analysis. Trustworthiness was maintained by ensuring credibility, fittingness, auditability, and confirmability. Research findings have been interpreted in light of the Organizational Stress Framework developed by Matteson and Ivancevich (1987).

CHAPTER FOUR: RESULTS

The purpose of this research study was to identify and describe the types and sources of stress in emergency nursing. The research sought to answer five major questions: 1) What do emergency nurses perceive to be sources of stress in their workplace?, 2) How do they rate these stressors in terms of frequency or severity?, 3) What factors increase stress in the emergency room and what factors buffer the experience of stress?, 4) What personal and professional strategies do emergency nurses use to cope with stress and 5) How has stress been addressed within the culture of the emergency department. Data analysis was guided by the research questions, the interview guide, and the Organizational Stress Framework developed by Matteson and Ivancevich (1987). The categories derived are rooted in the data set as well as the Organizational Stress Framework .

The findings of the study are presented in four sections. The first section examines the sources of satisfaction in emergency nursing. The second section looks at the types and sources of stress in emergency nursing. This section generated four major categories: a) Problems in the health care system, b) Patient related factors, c) Unit Management and d) Interpersonal Relations. The third section examines healthy and unhealthy coping strategies used by the emergency nurses. The fourth section explores the signs and symptoms of stress in emergency nursing. There was some overlap in categories in the first and second section. Therefore, I attempted to make the "best fit" possible. The names of emergency nurses mentioned in this chapter are pseudonyms. The names of the institutions involved are described in broad, general

terms to ensure anonymity.

Figure 1

Data Categories

Sources of satisfaction in emergency nursing

A. Variety and excitement: The adrenalin rush

B. Intellectual challenge

C. Provision of compassionate, quality patient care

D. Influencing patient outcome

E. Mentoring new staff

Sources of stress in emergency nursing

A. Problems in the health care system (in descending level of priority)

Uncontrolled patient volume and flow

Bed cut backs

The Nursing Shortage

Lack of Funding

Inadequate home care services

Disjointed organization of the Winnipeg Ambulance System

B. Patient care (in descending level of priority)

Child abuse/ serious injury and death of children

Critical emergencies/ unstable patients

Inappropriate use/ expectations of patients and families in the E.R.

Anger and verbal abuse from patients and families

Triage

C. Unit Management (in descending level of priority)

Bed utilization: lack of beds for admitted patients

Lack of communication with administration (unresponsive leadership)

Lack of equipment: Improperly stocked equipment

Charge duty

Inadequate continuing education

Lack of incentive, rewards for long term staff

Scheduling - Holidays

D. Interpersonal Relations (in descending level of priority)

Interpersonal relationships with co-workers

Lack of team work among staff

Interpersonal relationships with physicians

Lack of respect and/ or physician expectations

Disagreement with physicians over patient treatment.

Lack of trust in the knowledge and skills of coworkers

Skills, knowledge, and time management of emergency physicians.

Coping Strategies

Adaptive (effective) coping strategies

Maladaptive (ineffective) coping strategies

Signs and symptoms of stress in emergency nursing

Once ethical approval was received from the Faculty of Nursing Ethical Review Committee and the three institutions involved in the research project, semi-structured, person centered interviews were conducted with seven emergency nurses to elicit their perception of stress in emergency nursing. An interview guide was used to direct the interviews (See Appendix D). The interviews lasted for 45 minutes to one hour and were conducted in a variety of sites. One of the interviews was conducted in the participant's house. Two were held in private offices in one of the institutions. Two interviews were conducted in the researcher's house and one interview was carried out in a private office at the University of Manitoba. One of the interviews was based on a previous practicum assignment that took place in the fall of 1998 and in that case the interview took place in the participant's house. No follow up phone calls or repeat interviews were required.

The nurses worked in three different hospitals in the city of Winnipeg. Three of the nurses worked in a small community hospital in the outskirts of the city. One nurse was based in a large urban teaching hospital in the downtown core of the city. The three remaining nurses came from another large urban teaching hospital in downtown Winnipeg. Although data were collected from nurses in three different institutions, the results were similar. That is, there were more commonalities than differences across the sites and interviews. Therefore, the data is presented combining all three sets of interviews. Contrasting information between the three institutions, however, is

highlighted in the analysis. This chapter begins with a demographic profile of the participants and follows with an analysis of the study results.

Demographic Data

Six of the study participants were female and one of the participants was male. One of the study participants elected not to complete a demographic profile so the demographic data is based on six of the participants. Each of the nurses who were married or living common-law claimed equal responsibility for financial support of the household. One nurse had three young children living at home and one nurse had a 23 year old son living at home. None of the participants had elderly relatives living at home. The annual household income ranged from $40,000 to $99,000.

All of the six nurses had completed a nursing diploma. One was currently enrolled in a Post-RN baccalaureate degree program and one had a bachelor of arts degree. One of the nurses had also taken the Manitoba Emergency Nursing course. For further sociodemographic information, please refer to table 1.

Table 1

AGE OF PARTICIPANTS			
	RANGE	MEAN	MEDIAN
All participants	32 - 50	43.66	45.5
MARITAL STATUS			
MARRIED	COMMON LAW	SINGLE	WIDOW
2	1	2	1
STAFF ASSIGNMENT: 5 FULL TIME 1 PART TIME (.7)			
	ROTATING 12 HR	ROTATING 8HR	8HR EVENING
All participants	3	2	1
NUMBER OF YEARS POST GRADUATE EXPERIENCE			
	RANGE	MEAN	MEDIAN
All participants	10 - 32	19.3	17
NUMBER OF YEARS EMERGENCY EXPERIENCE			
	RANGE	MEAN	MEDIAN
All participants	7 - 20	11.5	10

Sources of Satisfaction in Emergency Nursing

Variety, unpredictability, the lack of routine and the knowledge and skill base attracted these participants to emergency nursing. They liked the sense of excitement and what they called "the adrenalin rush". The participants appreciated the need to develop a broad knowledge base and stretch their clinical assessment skills. The most satisfying shifts were when they could offer quality care to patients and their families and have time to attend to patients' and families' psychosocial concerns. They could go

home feeling that everything possible had been accomplished for their patients. The ability to help people, to show compassion, was important for these nurses. One nurse stated that at times during the last five years she has not had a lot of job satisfaction in emergency nursing. She felt that the overwhelming patient volume and flow in the department prevented her from providing quality, compassionate care.

Variety and Excitement: The adrenalin rush

These emergency nurses enjoyed the constant variety of patients and types of conditions that "come in the door". They found the constant turnover of patients stimulating and exciting. They disliked routine and monotony.

> I think the variety . I guess the I love the high adrenalin high stress environment. To me that is not stressful because that is what I love to do. Stressful to me is coming into a job where you know you are going to do the same thing day in and day out and after a while it gets ... for me it would get kind of boring... so to me exciting is to come into work and face new challenges. (P1, 81-87)

> I guess the adrenalin rush that everybody talks about. The different patients,. Everything is new. You never see the same thing day in ...day out. There's always something to learn.. something new to do. (P2, 36-38)

> It's the variety of different types of clientele that you see and the different types of medical services that come down and see consults on patients. (P2, 45-47)

The unique nature of emergency is such that one never knows what may come through the door. Dealing with critical life and death situations was attractive to these emergency nurses. However, paradoxically, the very nature of emergency nursing was deemed stressful.

> I guess the unique nature of emergency nursing is stressful ... and that in fact is what attracts a lot of nurses to emergency nursing... is that you don't know what is coming in. You're always sort of ready for what's coming in the door...but the nature of it in itself is kind of stressful ... you never know. Just when you think things are stable, you get complacent and sort of relaxed and there's a red that

> comes in the door... that gets the stress out, the energy level, the adrenalin flowing again. I guess that is what appeals to a lot of nurses. (P7, 163-172)

These nurses thrived on the sense of excitement and constant anticipation, the element of the unknown. They described the routine and structure of the general wards as "boring".

Intellectual challenge

Several nurses found the need for critical thinking and the broad knowledge base required in emergency nursing as most satisfying. They liked the independence and the ability to enact their own judgments.

> You have to have a certain knowledge base. You have to have a certain amount of critical thinking. You have to be independent. You have to have a certain amount of judgment and you have to be self directed and be sort of a leader. (P1, 42-47)

> It's the satisfaction of knowing that you can look at a patient and diagnose them and chances are usually your clinical skills and your judgment is pretty much on the money. You know what the person has and how you can treat it. (P1, 60-65)

Two of the nurses enjoyed the opportunity to practice and refine their assessment skills and their psychomotor skills

> For myself, I find the patient's presentation and my own... I guess diagnoses... Like what they are telling me and what I think is happening to them. I play my own game about that ... to see how on the mark I am. (P3, 59-65)

> I was really concerned about losing all my nursing skills and my medications and everything that I learned in nursing school. I thought that emergency would be an all encompassing place for to practice my nursing skills and also practice my assessment skills... and that's why I chose emergency. (P3, 41-49)

> It's the level of skills, the critical thinking, the knowledge base(P1, 74-75)

The nature of emergency nursing permitted these nurses to develop a broad

knowledge base and maintain their competency with psychomotor skills. They were able to retain and build upon the knowledge and skills base that they learned in nursing school. They also valued the greater sense of independence, the ability to use their own judgment and to be self-directed.

Provision of compassionate, quality patient care

Having the time to provide quality care to each patient and attend to all their physical, psychological and emotional needs was satisfying for one emergency nurse in particular, although she felt the opportunity to provide quality compassionate care had diminished in the last five years.

> Probably in the last five years I haven't really had a lot of satisfaction at times in emergency nursing, but, prior to that, I think that the most satisfying times are the times where you can look after someone properly with people who are really caring about the patients that they're looking after and the outcome of the patient turns out to be the best for them... and that you feel satisfied that the proper care has been given and that people are attended to in an appropriate way and their outcome, whether it be good or bad, are the best that could be done for them. (P 5, 33-39)

The opportunity to show compassion to people in crisis was important for these nurses.

> Being there, like having the opportunity to be compassionate in people's time of crisis and pain, seeing their bravery, cause I don't know what I would do if I was in some of the situations I have seen. Its quite inspiring that way. (P4, 77-80)

The nurses found it satisfying to spend time demonstrating compassion and caring to patients and their families.

One other nurse talked about why a specific shift was satisfying, stating that she had time to attend to the patient's needs.

> Today, I can only say the patients were ill but they were looked after. I felt like I could look after them appropriately and do everything that I would like to do as a nurse... without going home feeling like I couldn't do a lot of things. I could speak to the patients or their families or talk to the patient or explain what was happening... or even console them if they needed. Today I could do that... Makes a huge difference. (P3,121-132)

These nurses enjoyed talking with patients and families and having the time to attend to their psychological and emotional needs as well as their physical needs. It was important to them to show compassion and caring. Time restrictions and heavy patient loads negatively influenced their ability to provide psychological and emotional support to their patients. The nurses felt much more fulfilled in their role when they could provide psychological and emotional support to their patients.

Influencing patient outcome

Having a positive impact on the patient's outcome was extremely satisfying for these emergency nurses. They valued the opportunity to have a positive impact on patients lives.

> Well... every shift individually is satisfying because to someone out there you've made a difference. They might not all say that you've made a difference but you know deep in your heart that if it wasn't for you that person would have maybe had a very terrible outcome... so I think it's an individual thing that you know you did the best that you could and you know that you are... you 're... it was you who counted and you're the one who made the judgment call and you're the one who sought treatment... you're the one who sort of did this thing on your own and no one would have picked that up if it wasn't for you and you really made an outcome...you made a difference on somebody's life. Whether it is a full recovery or whether it is allowing the patient to say he's about to die...no, he's at peace with that and I think his end stage problem whether it be cancer or whatever... you made a positive influence so that person can die with a bit of dignity and that also is a very positive thing. (P 1, 97-116)

The opportunity to have a positive impact on people's lives is very satisfying for

these emergency nurses. With the constant turn over of patients, emergency nurses usually have patients for only a short period of time and sometimes they can see quite dramatic results and improvements during that time period.

> The other thing is if the patient's in critical care, they are there for the duration... a lot of time they are dying or that sick...we don't see any positive outcomes whereas in Emergency you can solve a problem and send someone on their way. (P4, 99-101)

Mentoring New Staff

One nurse found it fulfilling and satisfying to mentor new staff and encourage their development.

> Some of the satisfaction, more that I derive now, is from helping people that come into the department new and trying to make them believe that it's worthwhile staying there and to work under the conditions that we work in... and to try and encourage them that they will get a lot of satisfaction from caring for these people. (P5, 39-43)

Teaching, encouraging new staff, and promoting emergency nursing (despite the difficult working conditions) provided this nurse with a sense of satisfaction.

Sources of stress in Emergency Nursing

Overwhelming, uncontrolled patient volume and flow was the number one source of stress for these emergency nurses. The major contributing factor was a lack of beds for admitted patients causing a backlog of patients in the emergency department. Running a hallway full of admitted patients was very frustrating for all these nurses. The nurses attributed this phenomenon to a lack of resources and funding in the health care system. Inadequate staffing levels were also a concern for several of these

nurses. The age of patients, their acuity, their diagnoses and the critical nature of their illness all contributed to nurses' stress levels. Collectively, these factors created a tense environment where problems with interpersonal relationships with staff members, emergency physicians, patients, and their families grew.

Problems with the health care system

Uncontrolled patient volume and flow

Uncontrolled, overwhelming patient volume and flow was the most severe and frequent cause of stress identified by these emergency nurses. They attributed this to a continuous flow of emergency patients along with the back log of admitted patients in the emergency department. This concern was consistent among all the institutions.

> I guess the volume of patients that we get often is overwhelming. We have no control over that.... And if they only come in one critically ill at a time, that would be very nice, but they don't, and you get multiple traumas, you get a backlog of patients... I guess the volume sometimes is overwhelming and the stress level I think goes up with the volume of patients that you have to look after. If you have patients that have been treated and are waiting for reassessments... and they keep coming in...or you have patients that are admitted and waiting for a bed on the ward. They have certain prescribed care- medications, they need to... you know... go to the bathroom, they need to have dressings changed, they have specific things that need to be done in a certain period of time. If you've got incoming patients constantly and you don't... they have to be attended to. You have to do your assessments, find out what's wrong, they have to be put up to be seen. They have treatments that are being ordered and you have scheduled treatments that need to be done. That is very stressful I think to the nurses. (P7, 293-213)

The nurses stated that during a satisfying day they had time to talk to their patients and they were able to give them quality, compassionate care. There was a steady, but not overwhelming flow of patients. The nurses were able to articulate that a steady state of patient flow was ideal.

> It was just sort of the right amount of being busy, like a steady flow of people but where you have extra time, like if you have time to talk with patients and their families and not feel rushed. ...where staff have time to bond, talk with each other as well...just where things flow smoothly as well especially noticeable at triage. Like say someone comes there and you have a spot, they can actually , you know, go straight from registration to a spot where you don't have a huge lineup of charts, people at your throat, wanting to get in. (P4, 110-119)

One of the experienced nurses noted how the flow of patients through the emergency department had deteriorated during the past few years.

> The other thing is that I don't think patients are really out of the emergency department as quickly as they did at one time. Emergency nurses... you know the term is um... Emergency patients... our mandate or whatever it was... that patients would be seen, treated and dealt with within a 4 hour period. You either treated them and made them better and they went home, or you treated them, you assessed them and they went to the ward. Or they were discharged and came back or they went to the O.R. or they went to the ICU, and there was sort of a time frame in which their care would be accomplished in 4-6 hours. But patients aren't ... there aren't spots for them to go now. If the wards are full and ICU's full, so they're are staying in emergency longer...so that sort of backs up the flow too. (P7, 340-354)

> There's too many people to be seen in too short a time, like that can be quite a stressor. (P4, 164-165)

With increased patient volume and a backlog of patients in the department, the nurses have had to concentrate on providing basic physical care. Time restrictions do not permit them to provide quality, compassionate care to their patients. They do not have the time to attend to their psychological and emotional concerns. This is very frustrating for a majority of the nurses and decreases their sense of satisfaction and professional fulfillment.

The sense of powerlessness and lack of control over patient volume and flow are also reflected in these interviews. The nurses did not have the power to control how many beds were available for admitted patients or how soon home care services would

be put in place. They could not control the number or acuity of patients arriving in emergency.

Bed cut backs

Bed cutbacks throughout the health care system have resulted in a backlog of admitted patients in the emergency department. Nurses are providing care for patients on stretchers in the hallways for extended periods of time. Two of the nurses revealed their frustration with the double burden of caring for admitted patients lying on stretchers in the hallway, as well as the regular emergency patients.

> There is this other stress over the last few years that has come in when we've had a ward, an extra ward, within the emergency department, meaning all these extra patients in the hallway... You're trying to deal with the routines of taking care of these people in the hallway that need to be taken care of. Plus you're already overloaded with these nine or ten people, but you've got to deal with the people that are coming in now...I think the whole ward becomes rudderless because we should be focusing on our emergent patients and yet these other people still need help and still need assistance, you know. So, its that stress that adds stress and I think that is really what added a lot of stress over the last few years to emergency medicine, whereas before it was like, like I thought we could, we had stress but it was manageable. I think it became unmanageable when the hallway patients started showing up, even though we had extra staff. (P6, 289-329)

> I think in emergency nursing now, if it was just emergency nursing, it wouldn't be so difficult. But emergency nursing now in the community hospital where I work at is ward nursing as well and the two do not mix well together because you have patients who are admitted to hospital who you want to do a lot of things for to attend to their basic personal needs that they have as well but you can't do that in the confines of the emergency department and you don't have the auxiliary staff that can help you enough with that. (P7, 277-282)

Participant #6 noted that prior to "hallway medicine" the level of stress in the department was manageable but with the addition of patients lying on stretchers in the hallway the level of stress in the department became overwhelming.

The nurses recognized that this was beyond the control of each individual hospital administration and was also a source of frustration for many hospital administrators.

> Although, with the changes in health care and bed cut backs and staffing cut backs, patients aren't going to ICU as quickly. If they're already full, they have to wait, so you have to care for an emergency, an ICU patient in the emergency, which then ties up the nurse in an area, slows down the flow. (P7, 334-340)

> I guess them (administration) saying ...you know... with this back log of patients they have spoken to Mr _________ or whoever. And a lot of this is out of their (the administrator's) hands too, like we're.. I mean its something that's all across Canada I think, and you know... in the states... but its becoming a daily problem in all emergencies. (P3, 714-722)

> But they couldn't...I don't think they (the management) could fix the situation any more than we could and I think they saw the frustrations, they saw what we were dealing with...they were...I think they were frustrated as well, but I don't think they had the capacity to fix anything. I think they wanted to help, you know, but they couldn't and if they... you know... if they had, they would always offer us any suggestions of anything that could be helpful. (P 6, 1337-1352)

> They (administration) can't control the system. They have no control over individuals...sick time increases. They can't force people to work when they do not have to. They really have...they can't force people not to come to the department. They can not force the government to give us more money, so they're kind of like ...they're in a lateral limbo. (P1, 330-337)

The nurses recognized that bed cut backs was a problem through out the health care system and was not limited to their institutions. Hospital managers could not control the changes in the health care system but were forced to deal with the repercussions of these changes. Even hospital administrators could not control the political forces influencing the health care system.

The Nursing Shortage

Cutbacks in nursing staff and support staff have also contributed to the workload in the emergency department. With the decrease in healthcare funding that occurred in the 1990's nursing staff positions were severely restricted. Many qualified nurses found jobs in the United States. Now, in the year 2000, emergency managers are finding it difficult to find qualified, experienced emergency nurses. The result is a shortage, particularly in the speciality areas, such as emergency room nursing.

> I think the nursing shortage is a big problem. You have staff that are burnt out and are working the extra shifts... And I think we need to not pressure people into working the extra shifts. (P2, 311-313)

> The shortage of staff, really, like there's a lot of people prior to you coming in and interviewing me today, they're now coming on to a night shift, they're short. So I had to ask someone to stay for nights and she's coming back for days tomorrow and I said well I'll worry about that when I come in. You know, like you're doing it day by day and that's not good. These people are working overtime shifts like crazy and that's... I think the staffing is a big issue too. You can't just like, you can't just hire anybody into emergency. They have to be experienced nurses, there isn't any. I mean there is but they're not coming here. So that is also part of the stress. (P2, 140-151)

> Well, I feel there is probably one hundred reasons why there is stress in the emergency department...those kind of stresses are built into the system...the key issue also is not in general to emergency but in general to the whole health care system. People have not figured out that without the proper resources the health care system won't function and it's totally independent of anything else...people are not getting the picture that if there is no nurses there is no health care and people are not treating nurses in general (and that also causes stress) with the kind of respect that they actually deserve because if there was no nurses there would be no health care. (P1, 266-279)

The lack of qualified, experienced emergency nurses results in burnout as the nursing staff work more and more overtime. Fatigue and disillusionment creep in and the nurse's resilience to stress in the workplace decreases.

The shortage of nursing staff on the medical and surgical wards also compounds the problem of a backlog of patients in the emergency department. Some of the wards are not able to accept admitted patients because of a lack of qualified nursing staff.

Four of the nurses were frustrated with inadequate staffing and lack of qualified experienced emergency nurses in their facilities. Their major concern was inadequate staffing to provide quality, compassionate nursing care especially during times of high patient volume. One of the nurses was also very concerned that the nurses were working so much overtime that they are "burning out".

> I think more frequently in the last four or five years there's been many times where the staffing amounts were inadequate for the level of acuity of the patients that are there and when you try to discuss this in a reasonable manner with some management people, they don't see the stress that they're putting on the staff by having them cope, or try to cope in these situations. All the people in emergency are trying to do is basically to treat people the way they would want their own family members cared for and treated and if they don't have the adequate staff to do that then you're putting a lot of pressure on people to perform in difficult circumstances and in that way you cause them a great deal of stress. (P5, 95-103)

> Sometimes, if we are short a nurse, like it could be one or two, then someone will have an extra heavy load in terms of assignments. That's particularly bad in stretcher bay because people are critical or sometimes you get someone, they may have to go to the O.R. in ten minutes meanwhile you got a (patient with) chest pain and something else, and you know if you have, like we usually have it that a nurse will get three stretcher bay patients or sometimes you could have like an aneurysm come in and then you might have several staff working on one person and then another might be covering their area and that could be stretching thin. (P4, 292-299)

> In the last couple of weeks we were chronically understaffed...You know... I come from a trauma centre so if we don't have adequate nurses to staff the department and something happens that puts the department in danger and people don't understand that and people don't realize it puts more stress on us individually. (P1, 373-379)

As previously noted, the nursing shortage affects the entire health care system but it also affects each institution and each department on an individual basis. When nurses are working a lot of over time, the problem of burnout and fatigue is a major concern and patient care can be compromised.

Lack of Funding

The lack of funding in the health care system results in inadequate staffing levels, less time for orientation and inservices , and greater patient care loads. Staffing and bed shortages create a back log in the system and admitted patients end up waiting in emergency for extended periods of time.

Because of a lack of health care dollars, patients are being discharged earlier without adequate supports and this results in a higher readmission rate. Patients are returning to the emergency department and are readmitted shortly after being discharged. The higher rate of surgical day care patients also results in a higher readmission rate. This compounds the already congested emergency system.

One of the nurses had worked as a float between ICU, the Recovery Room and emergency. Her position had been deleted with staffing cutbacks in the 1990's. She described how her previous position allowed her to relieve the staff in ICU, emergency and PARR (post anaesthesia recovery room) and enabled her to do patient transfers to other departments.

> That's when I started working in critical care, float between ICU and emergency. If there was a 99 that patient was transferred to ICU, then you just follow through and help with that patient until they were settled...or you might start in ICU if they were really busy and somebody had a very critical patient you might take over the rest of her patients until that one was settled. If there was a transfer out, then you would do the transfer, you were the transfer nurse...It didn't pull from

> anybody's staff so that was in the ideal days when they (the health care system) had more money. (P 7, 92-104)

There is a sense of nostalgia in the nurse's comments. A preference for the days prior to cut backs in health care funding.

Inadequate home care services

Two of the nurses stated that problems in implementing home care services and inadequate home care services created problems in the emergency system. Delays in implementing home care services created further backlog in the system. Inadequate home care services resulted in patients returning to the emergency department within hours or days of their discharge.

> There aren't enough home care services in place in the community to get these people home in a reasonable amount of time and yet they're discharging people upstairs one day and they're back in the emergency the next day as a failed discharge. Yet, like there seems to be, they're on the right path, but they don't have the right things in place yet I don't think... and that's really stressful when you know, you send someone home which you think shouldn't go home, they probably should be in hospital, but there's no bed, you send them home with as much home care and other services that you can provide and they're back the next day because these services failed in the community... and then you've got them back in emergency again, waiting...and the family and the dynamics there are very difficult. (P 2, 122-131)

> Implementing home care has been always... you know... a slower process than in the past, like you know they had difficulty in setting up services. Yes, they'll set up services but they won't be in place till tomorrow or the day after tomorrow, so that patient stays one more night or two more nights in emergency. (P7, 448-453).

Patients on the medical and surgical units may also face longer hospital stays as they wait for home care services to be implemented. This also ties up acute medical and surgical beds that could help to relieve some of the congestion in emergency.

Disjointed Organization of the Winnipeg Ambulance system

One of the nurses expressed frustration with the organization of the Winnipeg Ambulance System. She felt that there was not an equal distribution of ambulances among the emergency facilities. She felt the ambulance service did not utilize all the emergency facilities equally.

> Well. I think some of them, the political stressors, about bed utilization, the disjointed organization of the Winnipeg Ambulance Service, you know, we get five or six ambulances in a row, like they see that we're busy yet they still come here... and other facilities... because I meet with the emergency groups... say they were quiet that day, it just seems that everybody bombards you.(P2, 106-110)

Patient acuity, the type of medical condition and the patient's preference for individual institutions all have an impact on where the ambulance takes the patient. The downtown teaching hospitals have more acute trauma patients and more ambulance traffic. This was not a concern with the community hospital nurses.

Patient related factors

The type of patient, the age of the patient and the critical nature of his or her illness all contributed to stress in the emergency department. The nurses noted an increase in non-emergent cases coming to the emergency department. They were frustrated with the misuse of the emergency department by non-urgent patients and the high expectations of patient's and families waiting in the emergency room. Nurses were subject to anger and verbal abuse from patients and families and this was also a serious source of stress. Most of this anger and verbal abuse was directed at the triage nurse as patients waited for hours to be assessed and treated by emergency physicians.

Child abuse/ Serious Injury and Death of children

Serious injury and death of children was a significant source of stress for these emergency nurses. Three of the seven participants had children of their own. It was especially difficult if the nurses had children around the same age as their patients.

> I guess our level of stress goes up or down depending on the kind of patient that you get and if you get an infant or child, the stress level is very high. Everybody wants to do everything they possibly can and want everything to go right. It's very important, it's very stressful, that's what makes you perform at your peak, I think. If it's an adult, the stress level's still there, maybe a little less. If it's an elderly person, again, the stress level's... probably everybody's a little calmer, this person that has lived their life, you're going to do everything you can, use all your skills you have, but not compared to a child. That stress level is not the same. (P 7, 185-197).

One of the nurses described an incident where a child died as a result of child abuse.

> Well, I think one of the ones that I found was, and I think I can probably say that most of the ones involving children are a big concern for all of us. The one that I can recall is a child that was brought in, I think it was in the summer...the Dad came running in through the back carrying this child, saying that the child had stopped breathing... and because of my pediatric background, once I grabbed the child and went in there was things about the child, you know...the staff just jumped right in, but I think that was very, very difficult because I remember so well that every single nurse that was on that day had small kids around this age. They just, they did their job and performed the role and reacted later, which we dealt with. But my gut instinct, with regards to the father's reaction to this, sort of triggered something in me and I guess at the time I thought he was dealing with the possible and eventual death of his child. He was just totally flat, wouldn't, didn't want to be near the child...didn't even want to stay here, which I thought was really, really strange... and to make a long story short, I had grave concerns about this man and something wasn't right and from like I say...from my pediatric background...I was always taught that your gut instinct is usually right. This was a twin, and on x-ray... the baby wasn't even a year old...on x-ray the baby had two fractured legs, had a fractured arm, old fractures and my gut instinct was right. (P2, 178-195)

She further described her reaction and the reaction of the rest of the nursing staff to this situation.

> People, including myself, who find once you deal with the stressful situation, again, its physically exhausting, emotionally exhausting, and you sort of, I find that I sort of re look things differently. I'll look at, you know, the next time I get a kid in, and I may look at them a little differently , you know, not anticipating the worst but you know what I'm saying, like you look at them a little differently and say oh, you know, and every single staff person that had a child in there, they said they went home that night and made sure they hugged and kissed their kids, which is, you know, a normal response. But, you know, it, it didn't affect me physically, like I say long term, short term it did. (P2,227-233)

Nurses found it difficult to put aside their own anger and outrage and concentrate on using their skills to save the child's life. Nurses with young children found it especially difficult to deal with child abuse, death or illness in children. These nurses seemed to be able to rationalize the death of elderly, ill clients whereas it was much more difficult to accept the death or illness of children. It is important to note that none of these institutions were children's emergencies. They dealt primarily with an adult population or stable children with minor injuries or concerns.

<u>Critical emergencies/ Unstable patients</u>

Caring for critically ill, unstable patients was stressful for these participants. Like intensive care nurses, these nurses have to deal with life and death issues on a frequent basis. Despite aggressive emergency measures and advanced cardiac life support, patients die. Nurses have to deal with contentious issues of advanced directives, whether they should initiate CPR on terminal or elderly patients with poor life expectancy, or how aggressively they should treat patients who are dying.

> Any time, anytime a patient goes... you know... sour. You know if you are having difficulty...you know...helping somebody. Then that's stressful. You know...like you know...it's... they give all these wonder drugs sometimes but you're not God, you know. You can ...you know that you can only do so much. But if sometimes , even though you do your best interventions, working with doctors

> and the team... that's you know, it doesn't go the way you'd hoped. (P6, 829-843)

> It's the age, the nature of the illness that they come in with. If it's a trauma or if its a terminally ill patient. Those kinds of things produce different kinds of stress. If it's a young man or woman and if they're having an M.I., you want to make sure that everything goes right. You want to get all the lines in, you want to get all the medications in that you can, so that you maintain their quality of life. (P7, 204-210)

The sheer volume of critically unstable patients can also cause stress for these emergency nurses.

> Well, anytime you have an unstable patient in stretcher bay I find that like...or sometimes you can have two...I guess just the other night I had two unstable patients, one was a patient with a very bad cardiac history who was in with chest pains, we couldn't get, uh, he had such a bad cardiac history, he had an implanted epidural where he could give himself analgesia and we were trying to get his pain under control and he was using his epidural and we weren't having any luck with that... And I had another fellow that was obtunded right beside him, obtunded (unconscious) with CO2 retention. (P6, 656-669)

The nurses described how the age of the client, the nature and acuity of their illness can result in different types of stress.

Inappropriate use/expectations of patients and families in the E.R.

Several of the nurses expressed frustration with the volume of non-emergent patients using the emergency department. There were a number of reasons for this phenomenon. Patients could not get an appointment to see their family physician for extended periods of time. Patients could not get time off work to see their family physician so they came to emergency during the evening or the weekend. Some of the walk in clinics were not open during certain holidays and some of them did not have x-ray facilities. Some of the patients did not have their own family physician. This resulted in greater patient volume and congestion in the emergency department.

> I think the kind of patients that are presenting in emergency... People want to be seen quickly and get on with their busy lives. So they come in with more minor things to emergency, expecting that they'll be dealt with. They don't like to wait, they think that if they come to emergency they'll get their x-ray and go back to work or they'll come in and have their sore throat tended to because they don't have time to go to the family doctor the next day. It takes time from work or they can't fit it into their schedule. They think if they come to emergency they'll be seen right away. They don't understand that you priorize patients and they they're triaged in order of priority, not in order of when you come in. (P 7, 355-369)

> Emergency tends to be the entry point to people of the medical system and I've noticed that over the course of the years people use emergency as their own private clinic... The reasons are multifactorial, you know I can't see my doctor for ten days...to me those issues go on and on but for me I am a little tired of people not making a conscious effort to take care of themselves, using emergency as their own private office and that's accommodating them as opposed to saying you have your own family Doctor, your illness is not life threatening...you go see your own family doctor. We don't do that as a whole department, we don't do that. (P1, 240-252)

The nurses noted that people's expectation of the emergency department are unrealistic. Non-emergent patients want to be assessed and treated quickly and efficiently within a short period of time despite a high volume of acute patients or hallways congested with admitted patients.

> Some patients are completely unrealistic in their expectations of our department. Like I notice that... like I said in triage...where they come flying up, they expect they're gonna get right in, there are many times where I work evenings all the time so it's from 3:30 to 11:30 and a lot of times you get there and there are 15 charts on the desk, people waitin`g to get in... and I know everyone feels that their problem is the most important and it is, and I know I wouldn't feel great either if I had to sit on a laceration or something but we don't purposely keep people out but they'll... well this is an emergency...or some of the cardiac patients , they'll come here, they'll start talking about chest pain and they still haven't opened their Shoppers Drug Mart bag with nitros... Did you take any of this?... No...At this point I want to deck them because its now my problem, I have to try and find a spot. Some of them I have said start taking it right now. I realize a lot of them are scared, a lot of time money is a factor because medications are expensive. But, like I said, that becomes my problem. Or people, now that summer is here, on Sunday night, people will come in, they've had a three day history of chest or abdominal pain and they didn't want to ruin

> their weekend but now (it) becomes so severe so we have to get them in. So the public doesn't realize that just because its emergency like we're, like they and 50 other people have decided to converge on us at the same time. (P3, 236-252)

From the perspective of the participants, there seems to be a lack of understanding or education on appropriate use of the emergency department. Patients were unsure of initial treatment measures such as taking nitroglycerin for chest pain. Emergency information lines such as the health links phone line in Winnipeg are not being used effectively.

The extra volume of non-emergent patients tied up the nurses valuable time and adds to the congestion of patients in the department. Nurses were not able to monitor their acute, critically ill patients as effectively with "high volume" non-emergent patients in the E.R.

Anger and verbal abuse from patients and families

Patients and their families can become frustrated and impatient with the lengthy waiting periods in the emergency department. It is not unusual for non-emergent clients to wait four to six hours to be assessed by an emergency physician. Two of the emergency nurses described how patients and their families took out their frustrations on the nurses, especially the triage nurse.

> And then being verbally abused by patients and their families. It seems like, you know, like they're yelling at us at triage a lot of times and then when they see the doctor it's like "Oh wow", you know, and sometimes we feel that, you know, they can say something to the physician also. (P3, 409-416)

> I know I really get stressed when I'm triaging and I've got a room full of people waiting and I've got no room to put them for whatever reason... Sometimes you can see that these people are in obvious pain, I mean you want to lie them down or do something for them, I mean. There is no option to do that, like do anything

> for them. And then, people, the family members getting or the patients themselves getting mad at us. Why is it taking so long? So we get...you know... people get angry at us. (P6, 488-505)

> If you're triaging especially it's very, very... like that is where you're hit right at the very front door, with the other patients who're needing to be seen and their families, and they're having to wait a long, long time and you're being verbally abused, and that happens almost daily when you're there... about the time frames that they have to wait (P3, 206-212)

Participants found it challenging to deal with patients and their families who exhibited crisis behavior. They noted that patients and their families tend to take out their frustrations on the nurses and not on the medical staff. The physician's position of power and authority discouraged patients from directly venting their anger at them. Physicians have more power to admit patients or prescribe necessary treatments or medications. Therefore patients and their families want to stay on their "good" side.

Triage

Several of the nurses noted that the role of the triage nurse is very stressful. They had to deal with impatient, frustrated non-emergent patients who were waiting for hours at a time to be assessed and treated. They continually had to distinguish between patients who were worried, those who had minor illnesses, those who deteriorated suddenly, and those who are critically ill. The fear of making a deadly mistake was always present. When all the stretchers in the department were full and the hallway was overflowing the triage nurse had to perform a juggling act to ensure that seriously ill patients were properly monitored and assessed.

> A lot of people will criticize triage but when they get there themselves and they, they'll...like that's an area where people's opinions differ and they'll say "oh well so and so didn't have to come in" and I'll think "yeah, they did". Or like I know

sometimes at the front immediately like I say, people can be very upset and agitated and then you start asking questions they calm down and then there's other ones that look, at first, like you look at them and then as you ask more you can see that they're really sick or that they really are holding back and minimizing their own symptoms, so there's that, too. And then, of course, at the back people will tell different stories of what they've told the triage nurse. We've got one doctor who said...(this is the perfectionist one)... who said the triage nurse is a liar. I'd like to take you in the back and show you. And also at the front people can be very vague and that's difficult to play 20 questions. Like if they say I don't feel right or well and I'll say "What does that mean?" And they'll say "I'm just not right" and we'll...I'll say... are you throwing up?, are you in pain?...you know, you go through all this stuff. And then, one of our heads think you should be able to triage anyone in two minutes, well sometimes that's not enough. So each person does things differently and I think there needs to be respect and to look at how others see things. (P 4, 374-393)

When it gets like that, like I said, the pace gets very, very quick sometimes, I know I get really stressed when I'm triaging and I've got a room full of people waiting and I've got no room to put them for whatever reason.(P 6, 487-494)

There seemed to be a lack of consensus over decisions made by the triage nurse and this caused frustration for one nurse in particular.

Unit Management

Bed utilization, inadequate staffing, lack of qualified nursing staff and problems in communicating with administration were all serious sources of stress for these emergency nurses. The lack of beds for admitted patients was the most severe and frequent source of stress in this category.

Other less severe sources of stress included lack of equipment or improperly stocked equipment, the position of charge nurse, inadequate continuing education, lack of rewards for long term staff, and problems with shift scheduling and vacation time.

Bed Utilization: Lack of beds for admitted patients

Along with patient volume and flow, problems with bed utilization were the most frequent and severe source of stress for these emergency nurses. This concern was noted in all three institutions. The nurses described how admitted patients were waiting for beds in their institutions for days at a time. They also noted that beds were closed on the wards to accommodate peak holiday periods such as spring break, Christmas break and summer holidays. The backlog of admitted patients seemed to be more of a concern during these time periods.

> It's more the politics that makes me stressful. The nursing care doesn't make me stressful, the dealing with staff or family doesn't make me stressful, other than the fact that you want to give them good quality care and get it done quickly, you want to get them a bed, you want to get them treated, you want to give them the care that you think they should receive. Its stressful for me today, for example, there's still a patient here since Friday because there's no bed. That's three days, that bothers me, that's stressful because you have to go back in there and say to them, you know, you may not get a bed today either. That's the political stress that I don't like. (P2, 91-98)

> The political part of it, where, this is spring break so they close beds this week, you know, because that is what they do. Like they don't look at the whole picture... and I know this facility tries very, very hard to accommodate patients coming in but I think that they need to sort of coordinate everything, bed utilization, these closures, whether it's spring break closure, summer closures, winter closures. I think it should be done in the fact that, or in the way that they look at what's happening in the system, rather than closing beds and leaving people in the emergency department which isn't conducive to their care. (P2, 106-117)

> Available beds for people... like we have a lot of medical patients, like now with the shortage of nurses, medical beds are available but they can't be used because there's nobody to staff them. So then we get the backlog of medical patients in our department. So then, they're tying up beds and then that means less mobility for us to get people in to be seen.(P4, 272-276)

When asked what she would consider to be some of the major sources of tension or strain in emergency nursing, one nurse responded that it was the lack of beds for admitted patients.

> Mostly these days it's the lack of beds for admitted patients on the ward and the ability to move admitted patients up to the wards. (P3,197-198)

She described how the backlog of admitted patients was worse on Mondays because there were fewer discharges on the wards during the weekend.

> On a very busy, busy day when there...its Mondays are the worst it seems, because during the weekend there's not as many discharges up on the wards so you've got a backlog of admitted patients in the department. (P3, 391-394)

One of the nurses admitted that administration did try to facilitate patients obtaining beds on the wards.

> Most of the time they (administration) do try and facilitate the flow by getting medical beds, or if there's anything else, like supervisors often will change the beds upstairs, like sometimes there might be one male in a room or something, and they'll move that person, make it a female room or something to facilitate sending people upstairs. (P4, 451-454)

Bed utilization was viewed as a problem throughout the Canadian health care system, but it but it also affected each individual institution. Administrative personnel at each institution were left with the responsibility of ensuring optimum bed utilization. One of the nurses questioned whether bed closures during peak holiday periods was an effective method of bed utilization.

Lack of communication with administration

Lack of communication with administration or perceived lack of support from management was a serious source of concern for four of these nurses. This concern was consistent throughout all three institutions. The nurses did not always understand

the direction the hospital administrators were taking or what plans they had for the future. They wanted to know what was going on in other parts of the hospital. They wanted better communication with other departments in the hospital.

> When it doesn't seem like management is explaining what's happening, yet their meetings of the upper echelons or whatever, they probably know what direction they're taking but they're not explaining it to us. We don't know if they are indeed, you know, expressing our concerns to the other wards involved or the other parts of the hospital involved. So the larger communication aren't there. Not always, no. (P3, 264-275)

> I think the most stressful part is that nurses sometimes perceive that management doesn't give a damn and their hands are tied but they need to walk around the department a little more, show their faces as opposed to just sitting in their precious offices...you know maybe take an interest on how the department really functions because management, if they didn't like the middle man, like the unit assistants and the nurses, then their department wouldn't run either.(P1, 410-419)

One of the nurses expressed a concern that the expectations of administrative personnel were sometimes inappropriate or unrealistic, especially in terms of patient workload.

> I think management has a big role too. The managers are sometimes visible in the department but not really doing any hands on or helpful work there. At times they can only offer a lot of suggestions that only increases your workload such as now when an emergency is full, they want people moved to other hospitals that are less full and you're sort of being railroaded to go around and talk to the patients and their families about moving to another hospital. They then put this onto the nurse who is already in charge of looking after these people and that adds extra stress to their workload. I think at times, sometimes, maybe management thinks some people are, I don't know if I want to use the word, like bleeding hearts, but they have to understand more that people just want what's best for the clients or the patients, as if they were caring for their own family members and whatever I would want for my family I expect no less for the patients I'm looking after, whether their families are aware of different things that can be done to ease their process or make their situations a little bit easier. That's what I want for the patients that I care for and that's what I hope management realizes people are trying to do. (P5, 138-150)

> Changes have to be addressed with the nurses that are working there as well and their input needs to be very important. I think management has to be more open to the pressures they are putting on staff by their expectations and if I can find one manager who can come and work a day side by side with me, and do all of those things that they expect me to be able to do then I will take another look at myself and the job I'm in right now. But until I see someone doing that, then the expectations I have for myself are just gonna have to be the best that I have. I don't think that there's too many of them that could come and do what they expect their staff to do. (P5, 286-294)

When the lines of communication improved it made a big difference to the morale of the staff. The nurses felt that management was trying to show support. The rapport between administration and the emergency staff improved and a trusting relationship was established.

> With the numbers that showed up in the hallways we started seeing more management come to the department a little more, like the _____ (Head of hospital administration) was down quite a lot. He, you know, I don't think they could particularly fix the situation, but they were trying to show support. Like, __________ (Team manager for emergency) was down in the department a lot and they were trying to figure out numbers... what's, you know, how many admitted patients do we have? Do we have any beds anywhere? You could see that they were looking at the overall picture that we were dealing with. I know that they had conferences with other hospitals and what not. (P6, 1300-1314)

> Our administrators do come to staff meetings. We know that they are available anytime we need to talk and are... not the program team manager, she is approachable as well, but just the whole, the director, like the nursing director of the emergency program is very approachable so we know if we have problems we can go to them and its a good feeling to know that they will listen and where they can help they do. (P4, 462-467)

The physical presence of administrative personnel in the department seemed to indicate support to these nurses. The nurses were pleased when management took the time to listen to their concerns even if they could not always change the situation. The nurses found it especially important that management communicate to the nurses what was going on in other departments and the future direction and plans for the hospital.

Lack of equipment/ Improperly stocked equipment

Lack of equipment or improperly stocked equipment was a concern in one of the institutions. Two of the nurses had experienced problems in ordering more equipment from the central supply room.

> And what else contributes to stress is a lack of equipment and the lack of equipment where it should be, like when it's not properly supplied or properly stocked when it should be... when there's a 99 going on and you need a test tube and somebody was supposed to check the resuscitation room and to make sure there was a supply of all that and you go and check or you need it now and you haven't got it. (P3, 337-362)

> Also, even equipment, like sometimes we don't have certain equipment or it may not be used for a long time but if you need it right now... and then with our department having being renovated last year, a lot of things have been moved around and some things I don't know whether we ever found it. It will be a year in the beginning of July and they're still working out the kinks... and to get certain things, well you have to phone central supply, and half the time you don't know, sometimes they are not there, you have to page them, sometimes the people don't speak English very well, God forbid that you don't have those catalogue numbers for them, like it can be quite an ordeal if you need something right away...or even like, our higher ups have been limiting the amount of things we have stockpiled. Like they don't want too much, which is fine, but certain things you could, it's best to just be able to say have six introducer sets and then just take one, like sometimes you need that right away. (P4, 276-287)

These nurses had encountered problems with accessing the central supply room. There were delays in receiving important, life saving equipment. The nurses in the department were so busy with patient care that they did not always have time to check and restock their room properly. This was especially frustrating when the nurses were trying to resuscitate a patient or stabilize a critically ill patient. The nurses had become very accustomed to where certain equipment was located in a room and renovation and movement of rooms was difficult for them.

Assuming Charge Duty

Two of the nurses from the community hospital found that it was very stressful to be in charge of the department. They found it challenging to coordinate the care of all the emergent patients in all the various rooms. They did not enjoy the responsibility of deciding where to put people and how to accommodate new patients. They did not like to be in charge of other staff members who were also their friends. They did not enjoy being in charge of staffing the department.

> When you are in charge of the emergency department you are in charge of all these patients and your staffing and everything that goes on with everyone of these patients at the time whether it be from the emergency doctors wanting things or the care that they're receiving from the hospital or the care of the admitted patients that might be in the emergency department. (P5, 210-215)

> Sometimes I feel it's hard to always try and be in control of some of the staff who are your friends too, and your expectations of what you'd like to see in the workplace with nurses, what sometimes happens is you know, maybe people not being as serious as they need to be in certain situations and for myself I just don't like to probably have that role a lot. I'd just rather probably just be doing my job and letting someone else control the management side of it. (P5, 225-231)

> Well, I think I find doing charge duty stressful. Even more so than triaging because when I'm triaging I can go to the charge person and say I need a cardiac monitor. When the triage person just comes to me and says I need a cardiac monitor, I've got to be the one that says okay, well you go, you come up to the hall or, you know, or discuss with nurses in stretcher bay who they think can come to them, to the hallway. So, I think, any day I'm doing charge duty is particularly stressful because I want to accommodate the patients that are coming in and yet still want to effectively treat the people that are already here, you know. (P6, 544-566)

> You feel responsible, you're responsible for all aspects of the ward, then, the people that are coming in and being triaged, the people on the floor, like I mean the patients that are within the ward, and also your staff, you're responsible for it all. So when you are doing charge duty, you have all this, you know you have to be accommodating to the ambulances that are coming in and you know when you get an ambulance call and you've gotta make room for somebody, you know, what shuffling is...saying move this patient here, move that patient there. (P6, 976-990)

The charge nurse has the unique responsibility of ensuring the smooth flow of patients through the department. This can be very frustrating when there is a backlog of patients and new, critically ill or unstable patients are coming through the door. This community hospital did not have clinical resource nurses who take charge of the department whereas one of the other larger, downtown teaching hospitals did have nurses in this position.

Two of the nurses found the stress of being in the charge role was quite different than that of the general duty emergency nurse.

> As charge nurse you've gotta take responsibility for the staffing... kinda help out when you can, but it's difficult sometimes also because you're trying to maintain the flow of Emergency plus make sure that you've got staffing for your next shift and try and look after the triage nurse who might be overwhelmed by early... you know... mid shift or whatever and try and get him or her you know out of there, get them gone for breaks, so you can kind of take over... and just keeping the whole place functioning. (P3, 500-509)

> Yeah, cause then a lot of problems...people will come and they sort of dump on you, and you've got so many things going on at one time and you have to prioritize but also if you're in a position like that people think you're not doing anything. I know sometimes when I've been on the floor sometimes I'll think well the charge nurse might be able to come and help us out a bit and they might. A lot of ours do go and help on the floor which is really good, like that makes a big difference, say letting people go for breaks and things like that but sometimes it's not always possible, or else you still have staffing to worry about...certain things, like handle things well, like in terms of hospital policy, protocol, you really have to...I don't know... sort of watch how things are going and how to deal with things differently than you do if you're just a staff nurse. So yeah, the stressors are different and a lot of people who aren't in those positions don't realize that until they get there. (P.4, 358-373)

There were certain stressors that were unique to the charge nurse role that people could not understand or appreciate until they had undertaken the role. These included responsibility for staffing the unit, monitoring the quality of care provided to

the patients and their families, ensuring that the staff follow hospital protocol, supporting the role of the triage nurse, ensuring the efficient flow of patients through the department and making sure that the staff got away for breaks.

Inadequate continuing education

Two of the nurses expressed a concern with the lack of opportunity for continuing education and in-servicing. The units were so busy, the E.R. nurses were unable to get away for in-services or workshops. Some of the nursing staff were willing and eager to gain new knowledge and gain new skills but there was no opportunity for them to get away from the unit as it was too busy. One nurse felt that the in-servicing that did occur was inadequate.

> You have people working in emergency that are eager to learn, eager to do new things. You can't send them to educational things, you can't do in-services because you don't have the time. (P.2, 169-173).

> It's very hard to keep up with all the new changes when you are not adequately receiving inservices. That's another thing...to do it all on your own and to try and find the time to keep on top of these things makes you feel very mentally fatigued at times. Management has to realize the need for more education for nurses working in the emergency department and it can't be just a, you know, a ten minute quick blurb on something that's very important and it should take... you know...a couple of hours to be done thoroughly. (P. 5, 192-286)

Participant #5 found it difficult to keep up to date with all the new knowledge and policy and procedural changes going on in the department, especially as there was a limited amount of time to do this during working hours. She found it mentally exhausting to do this during her off-duty time. It is important to note that this nurse worked full time in the emergency department.

Both nurses were concerned with the lack of opportunity for continuing

education during working hours. They attributed this to inadequate staffing in the department.

Lack of incentives and rewards for long term staff

One of the nurses expressed a concern with the lack of incentives and rewards for long term staff. She felt that when staffing recruitment and retention was such a major concern, management should focus their attention on retaining long term staff.

> I think they, they maybe could be looking at some benefits or some reward for long term staff people. I mean, they've talked greatly, recently. I was just at something where they have recruited people from another province and that's great, but I did bring up the question, what are you going to do about the people that are here. You need to retain these people that have experience and have worked long and hard for one institution or one area. You need to reward these people to say that they are just as good and I don't know if clinical levels of practice is something they should be looking at or people have worked here for many years have no rewards for someone, as they're equal to someone who has been here for a few years and they get up to the same scale, whether it's pay-wise or vacation-wise and they're sort of at a stand still. So there's no reward for those people. Maybe they should be looking at doing something like that...I guess financial incentive is nice, but some kind of...you know... if you've never used any sick time all year, give you two days pay or something, or two days off with pay or something and it doesn't mean that you get two days off maybe they don't have to replace you that day. Or allow people to go to educational sessions and pay for them to go. Even don't make them go on their off time, like I know people have to be responsible, but if it's something that's going to better their practice and they feel they would benefit from, they would come back and teach others, let them go and pay for them to go. You know, some reward for these people, long term employees.

This nurse felt it was important to reward long term staff and retain experienced staff. She suggested a variety of incentives such as days off with pay or allowing them time off and money to go to educational workshops.

Shift Scheduling-Holidays

Three of the nurses expressed a frustration with shift scheduling, especially during peak holiday hours. Nurses were unable to get time off with their families or partners during peak holiday hours such a summer vacation, Christmas holidays, or Easter break. Arguments over the Christmas hours created tension within one of the units.

> Um, not getting holidays! Looks like that is going to be happening this year! When we should be having time off when we'd like to and we can't, with our families or whatever. (P3, 254-260)
> You know, you are constantly working a double shift and people are frustrated because they can't get their vacation.(P2, 171-173)

The nurses wanted to be able to take time off when their family members had holidays or when their children were out of school. They attributed these problems with shift scheduling to the shortage of nurses in the department.

Interpersonal Relations

Difficulties in interpersonal relationships with co-workers, lack of effective team-work among staff members, and communication problems with the emergency physicians were all significant sources of stress for these emergency nurses. They found it frustrating to deal with incompetent or inexperienced nursing or medical staff. Lack of trust in the skills, knowledge, or time management of the emergency physicians also caused a significant amount of stress.

Interpersonal Relationships with co-workers

Three of the nurses from the two larger institutions reported that communication problems with other staff members caused them a lot of stress. They found that nurses tended to complain about each other behind their backs, rather than approach them directly. One of the nurses, in particular, found that some of the nurses had a very negative attitude about work and they were constantly complaining about the "system".

> Stress, to me, is having to put up with people's attitude. Stress is putting up with things that you really shouldn't have to put up with like people's negativity and people constantly harassing you... to me that's stress... to me that's unprofessional... the work itself is not stress. For me personally, no, I don't find emergency nursing personally stressful. I find the people and I am predominately talking about my co-workers, I find that stressful. Coming into work and listening to someone complain about how they're tired of how the system works, that they have no control over beds, staffing, why do people do what they do, to me that's stressful because they have no control over that and having to listen to that is stressful because they are not getting the big picture. They have no place to influence the establishment, all they can do is influence themselves and the constant monotony of listening to people complain is stressful. (P1, 130-159)

Participant #1 felt that other emergency nurses in her institution were disillusioned and frustrated with problems in the health care system. They felt powerless to influence the health care system and therefore simply complained amongst themselves. They felt they could not influence the establishment or affect any real change.

The term back stabbing, or talking about people (other nurses) behind their backs was used by all three of these nurses.

> There's, I don't know if its something that happens, that's always in nursing, or if you have coffee with somebody and they're talking to somebody and they're talking to somebody right there and then the next time you go for a break with them they are cutting that same individual down and you think, well, and you

point out to them well you just said the other day... blah, blah, blah... and yet they're really negative about them and it doesn't seem to equate. (P3, 678-686)

That's happening more than what used to be. What used to happen is if there were difference in values, like something happened, like someone did something to upset another person, most of the time it was inadvertent. The other person, the offended one would tell other people and not go back to the original person that it happened with and that's counterproductive. Like we all know that sometimes it's less threatening to go to others and complain and get their sympathy than it is to go to the person that it actually happened to and it also prevents clarification of intent. I mean, that is, a lot of times if you did talk to the person you would get a better sense of whether it was done on purpose or not, even despite the words. But even if it's done on purpose, then like I say, purposeful offence, well then you can't do much with that or you might...I know there's different strategies people will use, like some people will confront, like they have no problems with that but other people, like myself, who avoid people who drive me nuts, or they do that purposely, if I don't have to see them or associate with them then I won't and then others will try and manipulate their way back into the person's good books, like its quite interesting to see what people will do with that. (P4, 415-429)

If any establishment is to work they have to have cohesiveness amongst themselves and nurses in particular lack that because they, they would kill each other. You know I have a few theories as to why they do that... are they sound I'm not sure, but from what I've seen nursing is still a predominately female profession and as females in general we're catty individuals, we'd rather talk and we'd rather backstab and we'd rather argue as opposed to coming up and confronting a problem and dealing with it in a professional, calm manner. We'd rather talk amongst ourselves, put each other down, and to me that very...not only is it very childish, its very unprofessional. (P1, 170-183)

Our male nurses that I work with, they come to work, they do their job, they don't complain about the work, they don't complain about why they have to accept this patient and say that's not my responsibility. They come to work, they do their job and they go home and they don't put up with the cattiness and backstabbing. They have no place for that. They say haven't you guys got anything better to do with your time. I think that's a male philosophy because males historically have to go to work and have to bring home the bacon so to speak and women were never like that. I'm not sure if its because, you know, women would run the household and now work is infringing on their lifestyle. Men don't do that, men have to go to work. (P1, 199-213)

Differences in values, beliefs or priorities contributed to communication problems among staff members. The nurses noted that staff members tended to complain and

talk about each other behind their backs rather than approaching them directly. Few nurses were able to confront each other openly. They used mostly evasive or avoidance strategies. One of the nurses attributed this behavior to the fact that nurses are still predominately female. She felt that this was a characteristic behavior pattern of females. She noted that her male co-workers did not act in the same manner. One of the other nurses pointed out that these evasive strategies often prevent clarification of intent and do not improve the lines of communication.

When the nurses did work well together, the lines of communication improved. Positive relationships with other staff members actually helped to relieve stress and provided a sense of satisfaction.

> Working with the people that I work with, a lot of them are, well, each one of us is strong and in, like in our personality or our ways, and very different in the strength but there's a lot of gifted people there, like at all levels of staff there are very gifted people. Just the camaraderie and friendship and everything, opportunity to be with them. (P4, 80-84)

It is interesting to note that when staff members appreciated each other's differences and diversity of strengths and beliefs the lines of communication improved.

Lack of teamwork among staff

One of the nurses in the study reported that lack of effective teamwork among staff members was also a significant source of stress. Emergency nurses have to constantly shift priorities to deal with critically ill or unstable patients that arrive in the department. They have to pick up the slack for each other and fill in for each other. They can not focus solely on their assigned area. They have to trust in each other's knowledge and skills.

> Yes, I guess it's a people thing, I'm not sure. There are some shifts that you work and depending on the people that you work with, it doesn't have to be anybody specific, it just becomes infectious sort of thing, there are jobs that need to be done and they aren't your job or my job. It's like a team, a baseball team or whatever. If one person is busy in an area or with resuscitation or whatever the other person picks up the slack even though it's not their area. So, if you work another day with someone who this is their area and this is all they do and that's your area, I can't say specifically it wouldn't work, but I guess the team work, working together, from the E.R. doctor to the nurses that are on that particular day. (P7, 453-466)

When the emergency nurses worked effectively as a team it was a real source of pride and satisfaction.

> I could go back to a situation where the department was quite chaotic. There were people in the hallway, there were ambulances backed up. The staff really seemed to work together as a team. There was a very serious injury to a patient that came in and the staff sort of pulled together with that and sometime later there was, in the obituary, there was a thank you to the staff which kind of pulled everybody together for that. (P2, 56-61)

> We have a really good staff so that's helpful. Like I really do feel we work as a team. (P6, 1038-1040)

Emergency nurses have to work closely with each other when resuscitating a patient or looking after a critically ill patient. They have to have clearly designated roles as to who will prepare the emergency medications or who will defibrillate during a 99. Effective team work ensures that the care of the patient is managed quickly and competently.

Interpersonal Relationship with physicians

Lack of respect from physicians was a major source of stress for two of the nurses in one of the larger teaching institutions. The nurses were frustrated by the high expectations of some physicians in their institution. One of the nurses referred to one

physician as the "perfectionist". The other nurse felt that the physicians didn't seem to value their assessment skills or trust their judgment. Both of these nurses complained that some of the emergency physicians were verbally abusive to some of the nursing staff. They were sarcastic and critical of the nursing staff, yelling at them over little details.

> Emergency physicians who are being...you're...you're telling them your concerns about the patient and they don't seem to share your concern and you have to answer back to the patient that you know they can't have analgesic or whatever, because the doctor's just kind of decided that they don't need it...or physicians who don't, I wouldn't say it's not trust our assessment skills but they are not listening. Or not, you know, our assessment skills aren't...don't seem important to them sometimes. (P3, 222-236)

> A lot of them, there's some of them that can be quite sarcastic about anything at all and it makes you wonder whether there's something going on with them, not us. Sometimes I find myself caught in the middle of a situation, like somebody else might have given you report, dumped a situation, we've got one particular doctor who is quite a perfectionist, but 99% of the time he's right about whatever things he's complaining about. Like he'll say so and so's lab work is not back, and he'll say well why not, this has been a long time and... na,na,na... so we phone for it or get it by computer and it's just about ready...or different things like say their medication list isn't there and he'll say why didn't you get that, you know that person's going be admitted, they're not going home, so I need that and so on...and some of it is difficult. Or we may not have had the chance to and even though you say that, he'll say oh, that's an excuse. That's reality. Things like that make it more difficult. (P4, 212-223)

> When they (the emergency physicians) become anxious and they start yelling at us about some , you know, like sometimes its quite minute detail...Being commented to or didn't get report...You know something like that. Intimidation by them. Being open to...not like...we should be working together. They shouldn't be, you know, up there and we down below...We're not their servants or their maid servants, we're there to look after the patients together. (P3, 276-304)

The nurses felt a distinct lack of respect and appreciation for the nursing staff and a lack of understanding and respect for their role in the health care system.

Disagreement with physicians over patient treatment was also a significant

source of frustration for one nurse. She felt that sometimes patients were discharged inappropriately without services such as home care, physiotherapy or social services.

> And many of them (emergency physicians) have very, very different ideas of patient care management from facilities they worked in elsewhere and the standards are very different as far as disposition of patients. Some of them, because they've worked in tertiary care hospitals, are quite willing to send people out of hospital who we know are totally unable to cope on their own out there and they don't allow a lot of intervention of services that they think aren't needed, whether they be home care, social services or physio and are not open to these ideas so it's sometimes a constant battle to make them see your point of view...or the client's that you are looking after. (P. 215-222)

The nurse has the responsibility of being patient advocate for her patients and sometimes that clashes with the wishes or opinions of the medical staff.

Lack of trust in the knowledge and skills of coworkers

Three of the nurses reported a lack of trust in the knowledge and skills of coworkers. They found it stressful to work with a lot of inexperienced, junior staff, especially during emergency situations. They also found it stressful to work with incompetent or disorganized nursing staff who weren't able to handle a full patient load.

> Well, even coworkers, even working with coworkers who...whether that be physicians, orderlies, other nurses who...God knows why...they're not doing their job or whatever...it doesn't appear that they're doing their job and you feel like you have to put in for them or do extra to cover them....Having nurses who you're not really sure if you trust their judgment.(P3, 315-325)

> Again, your coworkers, working with other nurses...their competency ...your competency...you have to keep up with what is going on. That can add a stress too if you're working with a new grad who is inexperienced...Your stress level's higher than hers. You're sort of watching, covering for them, making sure everything's being done...Or a nurse that maybe it's an experienced nurse but

> maybe she's not pulling her weight. Those add to your stressors too...You sort of feel like you have to take on part of her job as well as yours. (P7, 250-263)

> When I think we have had...well... two 99s back to back and then there was a chest pain at the same time as that requiring strict observation and TPA. We had a lot of junior staff so they were not that comfortable in the department. I don't mind teaching or showing other people but sometimes it's hard when say you need procedures...where you need someone who knows them well and can do them right away. (P4, 312-316)

The sheer number of inexperienced, junior staff added to the stress level in the department. It was stressful to teach a lot of junior staff especially during emergency situations. Sometimes the nurses did not trust the competency, time management or organizational skills of some of the experienced staff and that added to their stress level.

Skills, knowledge and time management of emergency physicians

The competency and efficiency of the emergency physicians impacted on the stress level of the emergency department. Two of the nurses from the community hospital noted that when the emergency physicians were skilled, knowledgeable, and efficient the flow of the department improved. When the physicians were cautious and hesitant to make decisions it slowed down the flow of the department.

> If you have, for instance, an emergency doctor who is very skilled in his field and you feel very confident with him, or the way he interacts with the rest of the staff...things are more smooth...If you've got an E.R. doctor who perhaps never worked there, doesn't have the experience, he's kind of uptight, makes everybody else uptight. If you're really uptight you really want to do your best. It's stressful to think that you have to reach out even for more than your nursing skills to make sure that everything's being done. It's almost like you're responsible then for helping the doctors, the inexperienced or the doctor that's not aware of the policies or procedures within a certain hospital or the area itself, that type of thing. You have to reach out a little bit further and if you have a

> doctor who's very confident...who's been in the field for a long time and just does things by rote, you just fall in synch...sort of...we always have to be the advocate for the patient and make sure that everything's being done for the patient...that we're doing our best. But that adds to the stress...if you don't feel confident of the person that's in charge of that...Say a 99. (P7, 226-249)

> People who are working, not up to their share of the load that they should be doing... People who are not doing their jobs conscientiously as they should be...and probably a great deal of it in nursing has to do with the physician that they are working with at the time as well and how quickly they're making decisions about patients or seeing patients, or carrying through the care of the patients and in that way, depending on how they're working, it affects the whole flow of the department as well...and a lot of the stress that's placed on nurses from patients or their families really has nothing to do with the nurse's roles but more the physician role...but families and patients tend to take it out on the nurses more than they do on the physician. (P 114-122)

The speed and efficiency of the emergency physician had a significant impact on the flow of patients through the department. If the physicians were inexperienced, slow or cautious it slowed down the flow of the department and patients and families tended to vent their frustrations on the nurses.

Coping Strategies

Adaptive (effective) coping strategies

The nurses used a variety of positive coping strategies that included separating work life from home life (having a clear distinction between the two), taking time by themselves to unwind after a difficult shift, eating well, exercising, having hobbies, activities and interests outside of work, directly confronting people who were involved in a stressful incident, and talking to trusted friends or coworkers about stressors in the workplace.

The strategy that was most consistent among most of the nurses was taking time by themselves after a stressful shift. One nurse stated that the time driving home in her car helped her to unwind and regain perspective. Another nurse explained that when her children were younger she took 20 minutes to half an hour to unwind after her shift before she could deal with her children and other family concerns.

> I find that I withdraw. Like I'm very quiet. If I go home, I'll just usually just wanna be by myself or take the dogs and just go out for a walk...and I don't want to be around people...and that's like other people deal with things in a different way... and then it usually takes me, like I'll be tired, I'll fall asleep... and I probably won't have a restful sleep and the next day its better. (P2, 241-245)

> Yeah, a lot of times, like going for a walk or I find that even when I drive home, is just unwinding to me. A few minutes drive...a two minute drive...it's very relaxing. (P3, 515-527)

> Usually when I get home...I work 12 hour shifts...I never have any plans for after I work. I always go home and take time for myself. When my children were younger especially, before I could deal with any of their day to day concerns about school work or their life, I always had to separate myself from them for about probably half an hour or 20 minutes and just go in the back and have some quiet time on my own and then when I felt that I could deal with other things in my life, I would come out and go on with that. Now that I'm on my own I still use that time for myself. I don't make any plans beyond working those 12 hour shifts.(P5, 241-247)

This coping mechanism was consistent with all the nurses despite their marital status or family situation.

Eating a nutritious diet, getting adequate rest and sleep, and exercising were all effective ways of relieving stress.

> I make sure that I get the rest that I need, especially when I work 12 hour nights. I don't try and get up before my body tells me to get up and I...if that means sleeping, you know, maybe longer than even I would when I worked days, then that's what I do. (P5, 267-270)

> I read books, I exercise, I try to eat healthy, I get great sleep (P1, 343-345)

> Doing things that really are enjoyable for me and really give me life. I have dance class that I go to. I really enjoy that and just that difficult workout...I mean, that has a mental component as well, but its mainly physical and the business of, just the sheer enjoyment of it. Like I mean, nobody is bleeding to death, nobody is having chest pains, so I mean it's uninterrupted. (P4, 402-406).

> Well, over the last few years I wasn't coping very well. I...like I said...I found a big stress release was exercise (P6, 1069-1071)

Having hobbies, interests and activities outside of work were also important ways of relieving stress.

> I started into different crafts at home...I took up silk plants... making things...quartz balls...I really enjoy it and I've also started now this spring starting into my own private little business on my own. (P3, 635-650)

> Other things that are really, like beautiful things, like art. (P4, 406-407)

Several of the nurses found that talking with trusted coworkers, friends, or family helped to relieve stress.

> I find...not keeping it bottled up inside and getting rid of it as soon as I can with regards to even discussing it with someone else who maybe isn't a nurse, someone who maybe is a nurse, and just say, look, this is the situation, this is what occurred, this is how I feel, maybe I could have done this better. Just to sort of vent to make sure what I did or didn't do was correct or if it was incorrect, how could I do it better. So more of the venting once I'm outside of work. (P2, 288-293)

> I talk to people, when I find that I need to talk... I do...I talk to people.(P1, 343-345)

> Talking to staff members about whatever has been going on, just sort of telling someone about it. (P6, 1158-1160)

Two of the experienced emergency nurses noted how they had developed effective coping skills over their years of experience. Participant #2 explained how she had become accustomed to the stresses and strains of working in emergency. Participant #5 had learned to take time off (using banked over time hours) when she

felt overwhelmed.

> It just doesn't take as long as it used to. Like it's almost that your coping mechanisms are a little better. You...it's...you still react but like I would go home and I just wanna be by myself, have something to eat, maybe have a glass of wine and then don't do anything and then go to bed. As you deal with a lot of this, I guess it's just you get accustomed to it or you, you sort of get in the groove of it, I guess. You'll go home, have something to eat and maybe go out with some friends who have nothing to do with medicine, you know, like just talk about or do something else...and it seems to be easier each time that happens. (P2, 245-252)

> I think it comes with experience. Like at first you become very negative about what's happening in the department, and what's going on. I've been in nursing since 1968 so you're sort of more used to the business and the influx of people that come in, the variety of people that come in, and the variety of problems. I deal with stress in the fact that I sort of do the best that I can with what I have and what's happening in the department and sort of deal with it when I leave work. (P2, 271-276)

> Yeah, I think I do (use positive coping strategies)... or I mean...it's taken a long time to develop them...At times... when I am feeling over stressed, I have worked overtime in the past. I bank my overtime and when I feel that things are getting too hard at work then I just start taking those days, as I see fit, and I use them just for myself. (P5, 266, 270-272)

The majority of the nurses found that they did develop better coping strategies to deal with workplace stressors during their years of experience. They learned how to take time for themselves to unwind after a stressful shift, they exercised and watched their diet, they learned how to vent their feelings with trusted friends or coworkers, they developed friendships, interests and hobbies outside of work, and they took time off when they felt overwhelmed.

It is important to note that the seven participants in this study had a minimum of ten years nursing experience and a minimum of seven years in emergency nursing.

Maladaptive/Ineffective coping strategies

Several of the nurses found that bottling up and internalizing their concerns was a very ineffective way of dealing with stress in the workplace. Once they accepted the limitations of the health care system and their own limitations they were able to cope more effectively. Complaining, grumbling, and venting anger with co-workers or family members were also very ineffective ways of dealing with problems in the workplace. Drug or alcohol abuse was noted to contribute to stress in the workplace.

One of the nurses noted that he tended to take too much on his own shoulders. He took his work home with him. He found it difficult to separate work from home life. He found that this was a very ineffective way to deal with work place stressors. Once he accepted that some of the problems were out of his control he was able to change his perspective.

> I guess, like Trudeau, I had a walk in the woods one day and I just told myself, you know, you gotta lighten up, the problems in there are not something that you caused...You have to deal with them but it's not, you know, I think I was taking too much on my shoulders...and early last spring, like I said, just going for this walk, you've gotta lighten up, you just, like this really has really affected you...and once I sort of told myself that none of this was related to me...anything I had done... and you know I shouldn't take all the responsibility of the way things are on my own shoulders, then I started to ease up quite a bit and I wasn't taking it (so seriously), I found the energy to start exercising a bit.(P6, 1081-1104)

After seven years of emergency nursing experience, this nurse learned to accept the limitations of the situation and work within the confines of an imperfect system.

Participant 2, a nurse with 32 years of nursing experience, also found that accepting the limitations of the situation and doing the best with the staff or resources

that are available helped her to deal with stressors in the workplace. She also learned to separate work life from home life.

> I deal with stress in the fact that I sort of do the best that I can with what I have and what's happening in the department. (P2, 275-276)

> I used to go home and take everything that happened at home, take it home with me. I found that that was counterproductive in the fact that I was sick, I couldn't cope with things, it sort of built up, built up, and then the slightest little thing would push me over the edge and that's...I think...I've realized over the last many years, that you can't do that. You need to get it out of your system, because it isn't totally my fault and I need to deal with it in that way, so not holding it in and getting it out to people is...(important). (P2, 297-302)

> With regards to stress management, well I think every nurse should be responsible for their own actions. Be responsible for realizing their limitations. I think the problem is now with the shortages, that people are working and working and missing things that are essential. You've got, instead of five patients you have ten, you give good quality care to ten patients, but maybe you're not giving proper discharge planning, proper teaching to these people...and people have to realize when it gets to that point say "Look I can't do this, I can't do everything for all these people". Either call in other resources like Home Care or Social services, etc. People need to have that, nurses need to know that they can have that outlet and they have to realize that you know, it is stressful and sometimes you forget to do these things and they should realize that they don't have to do it all in an eight hour shift, it can be passed on to the next shift or there are resources in the community that they can refer people to...don't set unrealistic goals that you can't meet. (P2, 355-370)

> I've tried to say well its just another day and tomorrow will be a better day, maybe, and if not, then I am only there during my shifts, I'm not living there...The problems will be ongoing and I can't...I'll do my best when I'm there...and I can't look after the whole department. (P3, 578-585)

Through experience, these nurses learned to accept the limitations of the situation and not take work problems home with them. They were able to change their perspective and accept that they did not have all the power and control over problems in the system. Internalizing and bottling up their concerns was a very ineffective way of dealing with problems in the workplace.

One of the nurses found that complaining and venting anger with co-workers or family members was a poor way of dealing with workplace stressors.

> I guess one thing that I have recognized as being counter-productive is going out with other coworkers and just it's becoming a bitch session. Prior to becoming a nurse I worked in management for a few years...mid-management where I supervised a few staff and I found that that really helped me in my nursing career too. I can separate...like I do not really associate with my coworkers outside of work and I've chosen to do that so that it does not become a bitch session which, anytime I've participated in any activity with my coworkers, that's what it usually becomes. It's counterproductive, it's non productive, it doesn't make any person feel better. Even on my lunch break I started to ...instead to sitting in the lunch room and sitting and listening or becoming involved with all of the backstabbing or whatever... I go to the gift shop and I like the music there. They've got one of those classical music things in there, and music, like a harp or whatever...and I find that most relaxing. (P3, 603-631)

However another one of the participants felt that socializing with coworkers outside of the workplace helped to improve the lines of communication.

> More social events, like last year we had...or two years ago we had something at the Medical head of our department, the doctor, like we had a get-together at his place and it was just...well it started off being social and then we had a facilitator, like that meeting kind of fell apart but just the social aspect was really good, seeing people outside of work doing other things, or even uninterrupted time where you're not having to attend to patients. That helps. (P4, 457-462)

Each personality is unique and each person deals with workplace stressors in a different manner. Perhaps gregarious, outgoing people enjoy socializing and find that a release whereas quiet, serious or introspective personalities need to separate from their co-workers.

Drugs, alcohol abuse, and over eating were clearly identified as ineffective ways of dealing with stress.

> Drugs, alcohol, overeating, being violent, being angry, starting yelling at somebody needlessly, taking it out on family. Those are negative ways to cope with stress. (P1, 361-364)

> I think that it's evident that there are nurses who are using different drugs in their lifestyle that could hamper their ability in their job. Maybe not just drugs, but alcohol as well and I think that nurses always wanna look after everybody and help everybody and they're just dying to take care of people but they're very bad sometimes at taking care of themselves and if people you are working with, you think that they are in trouble, I think it's incumbent on you to talk to them about it and to hopefully make them realize that they need some help before it's too late for them. (P5, 308-314)

It was obvious for these nurses that alcohol and drug abuse actually contributed to stress in the workplace. Participant #5 also discussed the concept of caregiver role strain and the high potential for burnout in nurses who use drugs or alcohol to cope with workplace stressors.

The nurses in the study found that the most ineffective coping strategies were internalizing and repressing their emotions, not separating work life from home life (taking their problems at work home), having unrealistic expectations of the health care system and of themselves, complaining or venting anger with coworkers or family members and using drugs or alcohol.

Signs and symptoms of stress in emergency nursing

These nurses reported significant signs and symptoms of stress both in the workplace and in their own professional experience. Anger, frustration and disillusionment were common themes in these interviews. A group of nurses from the community hospital had actually written to the Manitoba Association of Registered nurses to express their concern over working conditions in their emergency department. Three of the seven nurses had taken stress leave for personal and

professional problems. Several of the nurses noted physical or psychological illness in their coworkers.

Anger, frustration and disillusionment with the health care system was a consistent theme throughout these interviews. One of the nurses reported that many of the nurses in her institution were very angry with the system. Yet another nurse described nurses slamming charts down on the counter or rolling their eyes when they were displeased. Participant #6 described how a few years ago a group of nurses from his community hospital had written a letter to the Manitoba Association of Registered Nurses expressing their concern about working conditions in their emergency department.

> I'd say that 50% of our nurses are over weight. I'd say that 50% of our nurses are very angry, probably more. They're very angry. They come to work in a bad mood. Sometimes they don't show up at all. The general sick time in the whole department has increased when in the last couple of weeks we were chronically short staffed. You know, I come from a trauma centre so if we don't have adequate nurses to staff the department and something happens that puts the department in danger and people don't understand that and people don't realize it puts more stress on us individually and sometimes we don't do the best job that we should do...we do the best that we can but no one seems to care or that's how it seems or some of the things...they'll start yelling or screaming or they'll go home and devour a chocolate cake or they don't come to work the next day. They won't go for critical stress debriefings. They won't do a lot of things and mainly they won't talk about it. They would rather yell about it. (P1, 368-388)

> I even remember when _______ (a staff member) retired, that was a couple of years back and it was bad, really bad in the hallways and we were having trouble coping and the nurses ...a couple of nurses drafted a letter and sent it off to MARN. We all signed it. Yeah and it said...I remember the last line of the letter was please help us. You know, I'm sorry...I'll put my name down. So everyone signed it. (P6, 930-944)
> Just little things like... you know... facial expressions. You know... rolling the eyes, slamming a chart down. (P6, 1252-1258)

The nurses in the study reported significant signs of anger, frustration and

disillusionment with the health care system in their coworkers. One of the nurses reported that nurses in her institution were very angry, they were using sick leave, and they were yelling at each other rather talking things over in a calm, professional manner. They refused to attend critical incident debriefing sessions. In particular, these nurses refused to verbalize their concerns. This finding is significant because internalizing or bottling up emotions was found to be a very ineffective way of coping with stress. However the nurses in the community hospital did express their concerns by writing to MARN. This was found to be a much more effective way of coping with stress in the workplace.

Three of the seven nurses had taken stress leave. One had taken stress leave prior to working in emergency, when she worked in ICU, for family and work related problems. The second nurse had taken stress leave primarily for family related illness but stated that the working conditions in emergency had significantly added to his level of stress. The third nurse went to the employee assistance program in her institution for emotional and psychological problems and saw an occupational health physician at that time.

Several of the nurses reported signs of physical and psychological illness either in themselves or in their coworkers. These symptoms ranged from gastrointestinal disorders, crying and emotional distress to distancing themselves emotionally from family members.

When I'm stressed a lot of times I feel it in my body, like I might feel tight across the solar plexus area. It's not pain and it's not indigestion, cause I know some of our nurses are drinking Maalox...I see them just go to the counter and just help themselves without...you know...like a lot of them are in their 30's, otherwise healthy, or a lot of them get migraines. (P4, 336-340)

Well a lot of, I shouldn't say a lot, some of our staff members have had ulcers and GI consults. It seems to be the vogue thing right now, like in the 70's people had their shrink and in the 80's it was cardiology, I mean cardiology is still there and so is psychiatry but now it seems to be the GI disorders, ulcers, or like crohns disease, like we've had... one of our staff members is now working on Medicine because they ended up with irritable bowel syndrome because of stress too much...and I guess people, its kind of a metaphor in that they can't digest or they can't stomach what's going on and it's hard. (P4, 435-441)

I found it harder to manage the stress when people got to the hallway. That was really my...it just really bothered me and it was very insidious and I didn't realize it was happening but it was affecting me at home...and it was...like it sort of crept in and it started affecting me at home and yeah it did affect me physically as well. But in the past I always had enough energy to go and do some exercise and blow off my steam and you know...it felt pretty good after. But I found out I was just so drained after these shifts. It was so draining, once the people showed up in the hallway. To try and keep up with it, it was absolutely draining I found I didn't even have the physical energy left just to do what I used to do and I think that, then that affected me psychologically. I started getting more uh, agitated easily and you know, like I said, it just affected everything at home too, you know. Like ________(nurse's spouse) said, she could just feel me pulling back over the last couple of years, like I didn't realize this was happening until recently but it really, it affected my home life as well. (P6, 837-921)

I've had nurses tell me they go home, they shut themselves in a room and cry. They shut themselves in the bathroom and cry. I had a nurse...I was working late one night...I had a nurse phone me at 4:00 in the morning...I couldn't sleep. I was concerned about someone one on the ward. I notice it more often in people that work full time. The part-timers...they get away from it for a little while. They sort of rejuvenate and come back. (P6, 1200-1219)

I've seen nurses like have to cry, leave the ward and just cry and let it out and then, you know, basically come back. (P6, 1249-1251)

Participant #6 found that part-time staff were able to "bounce back" and rejuvenate after a stressful shift more effectively than full time staff. This finding is significant in that fatigue was found to decrease resistance to workplace stressors.

Participant #6 explained that he notes these signs and symptoms of stress mainly when the department is overwhelmed with the volume of patients.

> It often is at times... like I said...when we're overwhelmed with the numbers and not having any flow to the department. (P6, 1266-1267)

This finding is significant in that the overwhelming volume of patients and backlog of patients in the department were the major sources of stress for these emergency nurses.

The nurses in the study revealed there were significant signs and symptoms of stress in themselves and their coworkers. These ranged from emotional and psychological distress to physical complaints such as gastrointestinal complaints and migraine headaches.

Summary

This chapter described the findings of this study. These findings were presented in four major sections. The first section examined the sources of satisfaction in emergency nursing. The second section examined the types and sources of stress in emergency nursing. Analysis of the data revealed four themes that describe nurses' perceptions of emergency room stress and types and sources of stress in emergency nursing: problems in the health care system, patient related factors, unit management, and interpersonal relations. The third section examined the coping strategies used by nurses in the study. The fourth section examined the signs and symptoms of stress in emergency nursing. Analysis of the data provided answers to four of the major questions but it did not provide information as to how stress has been addressed within

the culture of the emergency department.

CHAPTER FIVE: DISCUSSION

This research highlighted nurses' perceptions of the types and sources of stress in emergency nursing. The discussion of these findings is presented in two sections. In the first section the research results are discussed in relation to the literature and the Organizational Stress Framework. The second section reviews the implications for nursing practice, education and research. The chapter begins with a review of some of the methodological issues and challenges and concludes with a summary of the research study.

Methodological Issues

Six nurses consented to be interviewed for this research study. The seventh interview came from a practicum assignment for a graduate nursing course completed in the fall of 1998. This nurse consented to the use of the taped interview for the research study, but I was unable to obtain a sociodemographic profile for this participant. Despite approaching nurses, nurse managers and clinical resources nurses in four different institutions (over the course of nine months) I was only able to obtain a total of six interviews from nurses in three of the institutions. I also attempted to contact the head of the Manitoba Emergency Nurses Association, but my phone calls were not returned.

One of the participants stated that the emergency nurses in her institution were angry with the "system" and saw academia as part of the "system". Other nurses stated that they were "too busy". Some nurses may have been afraid of negative

repercussions from administration despite reassurances of confidentiality and anonymity. Certainly, some of the emergency nurses were mothers with young families and other responsibilities, however, the limited sample size leads me to question if I was getting a complete picture of stress in emergency nursing. In these interviews I did not find the extreme anger that this participant described. Perhaps nurses who were angry and disillusioned with the health care system did not choose to participate. Perhaps they did not believe that the results of the study would make any significant difference in their practice. A different methodology such as a cross-sectional descriptive study, using previously established, reliable and valid questionnaires might elicit these nurses' perceptions of the types and sources of stress in emergency nursing. This would provide for more anonymity and would be a "safer" way of expressing negative emotions. The general unwillingness to participate in the research study might indicate that some of the nurses were "burned out" and were frustrated and disillusioned with the health care system.

The fact that three of the nurses in the study had taken stress leave suggests that they realized the impact of stress in the workplace and were aware of many of the types and sources of stress that they encountered in emergency nursing. They had already learned effective coping strategies to deal with work-related stressors.

Nurses in the community hospital were all well known to me from my previous experience working as an emergency nurse in the facility. This both enhanced and detracted from the research. Because the staff knew me, it was easier to recruit nurses, as they were more willing to talk to someone they knew. However, despite assurances of confidentiality, they may have been less forth-coming in describing their

personal experiences with stress or in describing any maladaptive coping methods that they had used in the past.

As previously noted, one of the participants stated that 50% of the nurses in her emergency department were very angry. She attributed these feelings and emotions to other staff members but denied them in herself. Third party information is limiting as it does not come directly from the source however it does arise from a key informant who is a member of the nursing community. It should be noted that people holding negative perceptions are difficult to reach and are often unwilling to participate in research studies. This might explain why only one nurse from this large institution volunteered to participate in the research project

Interviews were conducted with nurses from three different institutions. It was anticipated that the findings would be very similar across all three institutions. The data did reveal that nurses in all three institutions had similar perceptions of the types and sources of stress with a few notable exceptions. Interpersonal relationships with other nurses proved to be a serious source of stress for the nurse from the larger (downtown) trauma center, whereas interpersonal relationships with emergency physicians was a significant source of stress for two nurses from the other larger teaching hospital.

The nurses in the study all had extensive emergency experience. The least experienced participant had worked as a nurse for ten years and had seven years of emergency nursing experience. Therefore, I could not assess if inexperience contributes to a higher incidence of stress. However, two of the most experienced

participants did state that they developed more effective coping strategies throughout their years of experience.

Data analysis revealed that nurses in all three institutions held similar perceptions of the types and sources of stress in emergency nursing. Although the emergency departments varied in size and level of acuity, the ages and level of experience of the nurses in the three institutions were compatible. The sources of stress identified by nurses in this study are similar to those reported from emergency departments in the USA, Canada, and Great Britain (Burns, Kiriloff, and Close, 1983; Hawley, 1992; Helps, 1997).

Research Findings

Sources of satisfaction in emergency nursing

The nurses in this study enjoyed the variability and unpredictability of emergency nursing. They liked the constant sense of anticipation and excitement. They stated that they found the routine of the general wards was "boring". These findings are supported by previous studies done by Burns, Kiriloff, and Close (1983) and Helps (1997). The nurses in these studies also enjoyed the fast pace, the variety and the unpredictable nature of emergency nursing.

The nurses also enjoyed the opportunity to improve and build upon the knowledge base they had learned in nursing school and maintain their competency with psychomotor skills. These findings are similar to those of Burns, Kiriloff, and Close (1983), who found that the emergency nurses in their study were attracted to

emergency nursing because of the opportunity for learning, intellectual challenge, and the use of knowledge and skills.

The provision of compassionate, quality care was an important source of satisfaction for the nurses in this study. They enjoyed the opportunity to provide psychological and emotional support to their patients. Help (1997) also found that the nurses in her study enjoyed providing a "good service". However, the nurses in the study done by Burns, Kiriloff and Close (1983) did not list emotional and physical support of the patient as an important source of satisfaction.

Having a positive impact on patient's lives was a significant source of satisfaction for the nurses in this research study. They wanted to "make a difference" in people's lives regardless of the prognosis or outcome. This finding is supported by the nurses in Help's (1997) study who reported that supporting, helping and calming people was a source of great occupational satisfaction.

The finding that mentoring new staff provided a sense of satisfaction for one emergency nurse was not supported by previous literature.

Sources of stress in emergency nursing

Problems in the health care system

Uncontrolled, overwhelming patient volume and flow was the major source of stress for the nurses in this research study. This finding was not noted in the British or American literature, however, Hawley's (1992) Canadian study did reveal that delays in transferring patients to other units was a source of stress.

Bed cut backs were not an issue for the British or American nurses but the Canadian nurses in Hawley's study did report that "lack of beds" and "waiting for beds to be ready" were factors that contributed to delays in transferring patients to other units once they were admitted. It is interesting to note that Hawley conducted her study in 1992 before cutbacks in health care funding were fully instituted by the Federal Government of Canada.

Staffing cut backs were also a significant source of stress for the nurses in this study. The shortage of qualified nursing staff caused them a great deal of frustration. Hawley (1992) also reported that staffing practices were a serious issue. The nurses in her study believed that because of staff shortages they were unable to give adequate care to patients. Stress related to inadequate staffing was also noted in the two other major studies by Burns, Kiriloff and Close (1983) and Helps (1997). It is unclear if the problems were related to inadequate staffing patterns in the individual institutions of if they resulted from a general nursing shortage.

The frustration with the lack of funding in the Canadian health care system was not found in previous studies, however, no other Canadian research studies have been conducted on this topic since 1992 (prior to the cutbacks in federal transfer payments by the Government of Canada and provincial reform initiatives). A review of the literature did not reveal problems with inadequate home care services or ambulance services.

Patient Related Factors

Stress related to child abuse or serious injury and death of children was clearly identified in the literature. Helps (1997) and Burns, Kiriloff and Close (1983) both found

that crib death and serious injury and death of children were significant sources of stress for their emergency nurses. Back (1992)Gill (1989), and Scullion (1992) also noted that the exposure of emergency department healthcare providers to unusual and emotional situations, particularly those involving children, placed them at risk for critical incident stress.

Caring for critically ill, unstable patients was stressful for the nurses in this research study and this was supported by the literature. Stress related to emergencies or arrests and caring for critical, unstable patients was the third major source of stress in critical care nursing (Bailey et al.,1980; Eastham, 1990, Foxall et al., 1990; Gray-Toft & Anderson, 1981; Spoth & Konewko, 1987). Burns, Kiriloff and Close (1983) and Helps (1997) also reported that critical emergencies, cardiac arrests, and fatalities were significant sources of stress for their emergency nurses.

Stress related to misuse of the emergency department was documented in the literature. Hawley (1992) found that misuse of the emergency department was one of the two major stressors described under the category of role conflict. The nurses in their study attributed this to "non-emergency patients", "family physician referrals," and "repeaters". It is interesting to note that this problem was confined to the Canadian health care system and was not supported by the American (Burns, Kiriloff and Close, 1983) or the British (Helps, 1997) researchers. Therefore this problem could be directly related to the Canadian style of public health care funding.

Previous literature also reported that caring for uncooperative, abusive or demanding patients or families was a significant source of stress (Burns, Kiriloff and Close, 1983; Hawley, 1992; Helps, 1997). Dealing with patients and their families who

exhibit "crisis" behavior was stressful for the nurses in Hawley's (1992) study. Hawley (1992) concluded that confrontation with people in crisis states is inevitable for emergency nurses.

Stress related to the role of the triage nurse was not supported by previous research. Only two percent of the nurses in Burn, Kiriloff and Close's (1983) study reported that "triage" was a significant source of stress.

Unit Management

Hawley (1992) also reported stress related to inadequate bed utilization and lack of beds for admitted patients. The nurses in her study believed that delays in transferring patients contributed to backlog of patients, increased patient care responsibilities and set the stage for emergency nurses' being the target for complaints. It should be noted that this finding was limited to the Canadian health care system and was not documented in the American or British literature.

Problems related to inadequate staffing were consistent throughout the literature (Burns, Kiriloff & Close, 1983; Hawley, 1992; Helps, 1997). Staffing practices were a significant concern for the nurses in all three emergency studies. This was especially problematic during busy periods or during the night shift. Nurses were frustrated with a shortage of experienced relief staff who were familiar with the routines of the unit and who had the requisite skills to work in the department (Hawley, 1992). Inadequate staffing was also a significant concern for critical care nurses (Bailey et al., 1980, Foxall et al, 1990; Gray-Toft & Anderson, 1981: Quamar, 1984).

Stress related to poor communication with administration and perceived lack of support from administration was documented in the literature (Burns, Kiriloff & Close, 1983; Hawley, 1992; Helps, 1997). The nurses in Hawley's (1992) study felt that nursing supervisors were ineffective in improving the work situation. They also noted a lack of support and a lack of understanding from administrative personnel. Burns, Kiriloff and Close (1992) also reported concerns with unresponsive leadership (nursing or hospital administration). The critical care literature also noted that interpersonal relationships with management were a significant source of stress (Anderson, Chiriboga & Bailey, 1988; Bailey, Steffen & Grout, 1980; Benoliel, McCorkle, Georgiadou, Denton & Spitzer, 1990: Gray-Toft & Anderson, 1981; Spoth and Konewko,1987).

The nurses in this research study needed approval, recognition and support from administrative personnel with respect to the working conditions that they were experiencing. The findings suggest that these nurses demonstrated an external locus of control. No research has explored the personality traits of emergency nurses, however, Hawley (1992) did note the importance of positive feedback and positive reinforcement. The nurses in her study reported that all they ever heard was complaints and positive reinforcement would "make their day". Maloney and Bertz (1983) found that ICU nurses were more alienated, more externally controlled, had a greater sense of adventurousness and sought significantly more challenge than non-ICU nurses.

Lack of equipment, difficulty in accessing equipment and improperly stocked equipment were significant sources of stress for the nurses in this study. The nurses in Hawley's (1992) study also reported that lack of dependable equipment and supplies

were the major stressors under the category of physical environment. The critical care (ICU) literature also revealed stress related to insufficient or malfunctioning equipment and lack of supplies (Bailey et al, 1980; Spoth & Konewko, 1987; Qamar, 1984).

Participant # 4 described how her department had undergone reconstruction during the previous year and it was difficult to find certain equipment or supplies. The nurses in Help's (1997) study were undergoing major reconstruction during the time of the research project. These nurses were frustrated with problems in the physical environment such as ambient temperature and lighting but they did not report any problems related to lack of equipment or missing equipment. The wide variation in the physical lay out of emergency departments and in the age of the facilities could lead to discrepancies in these findings.

Two of the nurses in the community hospital found it stressful to be in charge of the department. Stress related to the role of the charge nurse was not documented in the emergency literature or in the critical care literature. The limited number of staff and the lack of clinical resource nurses who take charge consistently might contribute to this problem.

Inadequate continuing education was a significant source of stress for two of the nurses in the study. Hawley (1992) also reported that the lack of human resource development opportunities was perceived as a frequently occurring source of stress for the nurses in her study but inadequate continuing education and staff development was not a concern for the nurses studied by Burns, Kiriloff & Close (1983). It is important to note that concern with inadequate continuing education was confined to the Canadian

emergency departments. Therefore, health care reform and budgetary restraints may have led to these programs losing priority.

Interpersonal Relations

Interpersonal relationships between staff members were a major source of stress for the nurses in this study. This concern was previously identified in the literature. Helps (1997) found that relationships with colleagues were a significant source of stress. The category of interpersonal relations was the third highest cause of stress for the nurses in the study done by Burns, Kiriloff and Close (1983). However, these researchers found that interpersonal relationships were seen as a cause of more stress by nurses in the ICU sample than by those in the emergency department sample. The literature also supports this finding. A review of the critical care nursing literature revealed that personality conflicts with staff, physicians, administration, and residents were the most frequent source of stress for ICU nurses (Anderson, Chiriboga & Bailey, 1988; Bailey, Steffen &Grout, 1980; Benoliel, McCorkle, Georgiadou, Denton & Spitzer, 1990: Gray-Toft & Anderson, 1981; Spoth & Konewko, 1987).

Interpersonal relationships with emergency physicians were also a significant source of stress. In the study conducted by Burns, Kiriloff and Close (1983) stressors relating to interpersonal relationships were most frequently associated with nurse physician interactions. Helps (1997) did not specify if stress related to relationships with colleagues referred to nurses' relationships with each other or with physicians. It is interesting to note that the nurses in Hawley's (1992) study did not report any significant stress related to interpersonal relations with other nurses.

Lack of respect from physicians and disagreement with physicians over patient treatment were significant sources of stress for the nurses in this research study. Problems related to lack of respect from medical staff or disagreement with physicians over patient treatment were not found in the emergency nursing literature, however, communication problems with physicians and unavailability of physicians were major sources of stress for the nurses in Hawley's (1992) study. This concern was also found in the critical care nursing literature. Unnecessary prolongation of life and disagreement with physicians over patient goals was cited as a major source of stress for ICU nursing staff (Beaton & Degner, 1950; Daniels, 1987; Spoth and Konewko, 1987).

Three of the nurses in this research study reported that they found it stressful to work with incompetent or inefficient medical staff. Burns, Kiriloff and Close (1983) and Hawley (1992) did note that working with incompetent, inexperienced or apathetic medical staff was a significant source of stress for their emergency nurses. Help (1997) revealed that doctors were listed as one of the "top ten hassles" by the nurses in her study. Problems related to inadequate or incompetent staff were also noted in the critical care nursing literature (Anderson et al, 1968; Bailey et al., 1980; Foxall et al, 1990; Gray-Toft and Anderson, 1981; Quamar, 1984).

The nurses in this research study reported a lack of trust in the knowledge and skills of co-workers and they found it difficult to work with a lot of inexperienced, junior staff. They found that training new staff during a critical situation was very difficult. Hawley (1992) also noted that training new staff at a time of peak demand was very stressful. Helps (1997) did not specify whether problems related to interpersonal

relationships with colleagues were due to communication difficulties or lack of respect and trust in each others' skills and knowledge base. The nurses in the study done by Burns, Kiriloff and Close (1983) did not find this to be a significant problem.

Coping Strategies

The major effective coping strategy used by the nurses in this research study was to take time for themselves after a stressful or busy shift. This was not documented in the previous literature. They also reported that eating a nutritious diet, getting lots of sleep and exercising were all effective ways of relieving their stress. Hutchison (1987) advocated physical exercise as a method of decreasing job stress. It should be noted that none of the three major research studies on emergency nursing stress had explored ER nurses' coping strategies.

Hobbies, activities and interests outside of work were an important form of the stress relief for these emergency nurses. Keller (1990) did find that those nurses who engaged in non job-related activities appeared to feel more personally fulfilled.

Debriefing with trusted co-workers, friends or family members was an important coping strategy for the nurses in this research study, however, one of the nurses found that complaining and venting anger with co-workers or family members was a poor way of dealing with stress. Keller (1990) found that those participants who reported high levels of organizational stress talked with others about stressful situations to a significant degree. The discrepancy in these findings might be related to the type of communication that was used and how much the participants focused on the stressful situation. Perhaps if they focused solely on the stressful situation they were not able to regain their perspective and separate their home life and their professional life.

Two of the nurses found that they developed effective coping strategies during their years of emergency nursing experience. Burns, Kiriloff and Close also found that length of experience influenced the emergency nurses' perceptions of stress in the E.R. They noted that emergency nurses with less than 2 years of experience were less likely to believe that physicians were available when needed or that they were part of the team. They were less confident of their knowledge and care-giving abilities.

Several of the nurses found that repressing and internalizing their feelings was a very ineffective way of dealing with stress. Keller (1990) noted that evasive or avoidance behaviors resulted in high levels of emotional exhaustion.

Drugs, alcohol and overeating were clearly identified by the participants as ineffective ways of dealing with stress. This finding is supported by the literature. Keller (1990) found that those nurses experiencing the highest levels of emotional exhaustion appear to use avoidance behaviors such as the use of food or food substitutes and using recreational drugs or alcohol. Sowney (1996) described how emergency nurses often sit around drinking coffee and smoking after a stressful event. Cole's study (1992) revealed that, of the nurses researched, 30% resorted to alcohol, 21% to smoking and 43% to drinking numerous cups of tea or coffee.

Two of the nurses had learned to accept the limitations of the situation and work within the confines of an imperfect health care system. This finding was not documented in the previous literature.

Only one of the seven participants found that directly approaching people who contributed to a stressful situation was a great stress reliever. Keller (1990) also found that those nurses who experienced the highest levels of personal accomplishment

chose approach tactics when dealing with stressful situations. Taking definitive action and drawing on previous experience enabled them to feel more personally fulfilled.

Signs and symptoms of stress in emergency nursing

The nurses in the research study reported significant signs and symptoms of stress in the workplace and in their own professional experience. Anger, frustration and disillusionment were dominant themes throughout the interviews. Participant # 1 reported that 50% of the nurses in her institution were angry. Keller (1990) reported that behavioral changes such as quickness to anger, inflexible thinking, negative attitudes, and increased frustration are symptoms of burnout. Therefore, this behavior would lead us to conclude that a significant number of these emergency nurses were showing symptoms of burnout. Three American studies revealed that their emergency nurses were experiencing low to moderate levels of burnout (Keller,1990; Mytych, 1981; Thomas, Riegel, Gross & Andrea (1992). No Canadian studies have attempted to measure burnout in emergency nurses.

The nurses in this study reported that emergency nurses in their institutions tend to use evasive coping strategies rather than a direct confrontational approach. Keller (1990) reported that nurses experiencing the highest level of personal accomplishment used approach (confrontative) tactics to deal with stressors. Critical care nurses tend to favor confrontational, optimistic and self reliant coping strategies (Erenfeld, 1990, Robinson & Lewis,1990; Schaefer & Peterson, 1992). The critical care nursing literature revealed that as the perceived severity or frequency of the stressor increases the use of maladaptive coping measures such as withdrawal and denial of feelings, smoking, abuse of alcohol, increased caffeine consumption and overeating increase

(Oehler, 1983; Oskins, 1979; Robinson & Lewis, 1990). This would lead us to conclude that some of these emergency nurses were under considerable stress and were reverting to the use of maladaptive coping measures.

One of the nurses in the study reported that some nurses in her institution came to work in a "bad mood"; they yelled and screamed or they went home and devoured chocolate cake. These behaviors were identified in the critical care nursing literature as maladaptive coping methods resulting from stress in the workplace (Oehler,1983; Oskins, 1979; Robinson and Lewis, 1990).

Three of the nurses had taken stress leave and others reported physical or psychological illness in themselves or their coworkers. The literature revealed that these are significant signs and symptoms of stress in the workplace (Cobb, 1976; Cronin-Stubbs & Rooks,1985; House,1974; Kornhauser,1965; Lobb & Reid, 1987; Morris & Snyder, 1979; Oehler, Davidson, Starr & Lee, 1991).

Summary

The participants in this research study enjoyed the variety and unpredictability of emergency nursing. They enjoyed the opportunity to expand and build upon their knowledge base and practice and refine their psychomotor skills. It was important to them to provide quality, compassionate care and have a positive impact on patients and their families. These findings were generally well supported by the emergency nursing literature.

Overwhelming, uncontrolled patient volume and flow was the number one source of stress for these emergency nurses. The lack of beds for admitted patients caused a back log of admitted patients in the emergency department. The participants attributed

this to a lack of funding in the Canadian Health Care System. This finding was supported by the Canadian research (Hawley, 1992) but was not supported by the American or British research.

Shortage of nurses was a major concern throughout the health care system. Inadequate staffing and lack of experienced emergency nurses was also a concern at the institutional level. All three major research studies exploring stress in emergency nursing reported problems related to inadequate staffing.

Difficulties in interpersonal relationships with coworkers, lack of effective team work among staff members, lack of trust in the skills and knowledge of coworkers and communication problems with emergency physicians were all significant sources of stress for the nurses in this research study. This finding was also supported by the emergency and critical care nursing literature.

The nurses in this study used a variety of effective and ineffective coping strategies in dealing with workplace stressors. The nurses reported significant signs and symptoms of stress in themselves and their coworkers

Conceptual Framework

The research project was guided by the model for organizational stress research developed by Ivancevich and Matteson (1987). In this model, stress is considered to be part of a complex and dynamic system of interaction between the person and his or her work and non-work environment. A stressor was viewed as any event, situation, or person that an individual may encounter in the environment that requires change or

adaptation. The model provided a framework in which to view emergency stressors and provided a structure to facilitate analysis of the study findings.

The complexity and comprehensive nature of this model made it difficult to collect and analyze the data. The framework included five levels of organizational variables and three different types of extra-organizational variables. The framework also examined cognitive appraisal perception by the individual, coping styles, physiological, psychological and behavioral outcomes of stress, individual differences in response to stressors in the workplace, and consequences of stress. It was difficult to incorporate all these variables in data collection and analysis.

Future researchers might find it helpful to confine the focus of their studies to analysis of each of these areas in isolation. They might examine intra-organizational stressors or look as individual differences in the stress response. Other researchers could analyze the consequences of stress in the workplace or measure the physiological, psychological or behavioral outcomes of stress. This might make data collection and analysis more manageable.

Reflexion and Reflexivity

As a researcher, I have grown and matured throughout the research process. I have learnt much about the complex nature of stress. I also have a better understanding of the types and sources of stress in emergency nursing and the immense impact that stress can have in the workplace.

The nature of this research project involved sensitive material. It required the researcher to be empathetic, mature, and aware of the participants' needs. My previous

experience as an emergency nurse helped me to build credibility with these emergency nurses and enabled them to open up and share their experiences. This had a positive impact on the type and quality of data obtained from the interviews. I value and appreciate the trust these nurses placed on me to maintain confidentiality and anonymity.

I was impressed with the time consuming nature of scientific research and came to realize that researchers need to have good time management and organizational skills. If research is not completed within a timely manner it affects the credibility and validity of the findings.

The nurses in this research study reported significant signs of dysfunction in their emergency departments. It is important to conduct further research in this area as stress has been shown to have a negative impact on the quality of care provided to patients at a time when patients and their families are "in crisis". Further more, emergency is the entry point into the health care system and negative experiences can influence peoples' perceptions of the entire health care system.

Implications and Recommendations

Nursing Practice

Nurses need to exert their considerable influence at the level of the federal and provincial governments to increase the current levels of health care funding. They can do this in a variety of ways. They can work with their unions or professional organizations to affect change in provincial health care funding. They can become involved with political parties that support increases in health care funding or they may

choose to become political candidates themselves. They may simply choose to vote for federal or provincial parties that support health care reform initiatives.

At the administrative level, unit managers need to ensure that there are adequate supports for their nurses such as wellness programs or employee assistance programs. Unit managers need to be more aware of the types and sources of stress in emergency nursing. They need to improve the lines of communication between emergency nurses and other departments in the hospital. They also need to provide a link between administration and emergency personnel. Managers need to show positive recognition and support to their nurses and not simply follow up on negative situations. They need to foster effective coping strategies by offering workshops on stress management and critical incident debriefing. Managers need to ensure that there is a quiet room with soft lighting and comfortable chairs for nurses to relax and unwind after critical incidents. They need to ensure that there is adequate staffing in the emergency department and there is an appropriate balance of experienced and junior nursing staff. Finally, they need to ensure that new E.R. nurses receive a structured orientation with graded responsibilities, formal instruction and close supervision from a clinical preceptor.

At the individual level nurses need to be aware of the signs and symptoms of stress and monitor their own behavior and performance. They should educate themselves on the signs and symptoms of burnout and recognize when they need to take "time out" or when they need to take stress leave or utilize the employee assistance program. They also need to educate themselves about the variety of effective coping strategies that they can utilize to deal with stress in the workplace.

It is vital that emergency nurses attend critical incident stress debriefing seminars following traumatic incidents. It is also important that they attend workshops on communication skills so that they can improve their communication skills with physicians, co-workers, patients and families. Workshops on dealing with people in crisis would also be very beneficial. Nurses also have the responsibility to upgrade their knowledge base and maintain their competency with psychomotor skills. This can be accomplished by a variety of methods such as attending workshops organized by the clinical nurse specialist and reading current textbooks or research material.

Nursing Education

Student nurses need further education on the significant effects of stress in the workplace. Nursing educators should teach students about the signs and symptoms of burn out and how to foster positive coping strategies to deal with stressors in the workplace. This could also help students deal with stress in their academic life. Students need to be made aware that inexperienced, idealistic nurses are most at risk for developing burnout.

Nursing educators need to teach the classical theories of stress, coping and appraisal along with interpersonal communication skills. This should be a structured component of the nursing curricula that could be taught as part of the mental health/psychiatric rotation.

A discussion of problems in the Canadian health care system that contribute to stress in the workplace could be incorporated into a course examining current nursing issues and trends. Clinical teachers could also include this discussion during their post conference time.

Nursing educators should consider doing personality tests on students to determine individual characteristics such as need level, locus of control, type A/B personality, hardiness, self-esteem, and social support. This might help students determine what areas of nursing they might be best suited for or determine who is most at risk for burnout.

Finally, nurse educators should inform students of the variety of resources in the health care system to help them deal with stress. These include such things as wellness programs, fitness programs or employee assistance programs. They should be encouraged to utilize these programs and not to feel inadequate or "weak" for using them.

Nursing Research

This research study had a very limited sample. A province wide cross-sectional, descriptive study using previously established reliable and valid questionnaires, might help to elicit emergency nurses' perceptions of the types and sources of stress in emergency nursing. This would allow for more anonymity and would be a safer way of expressing negative feelings.

Researchers should explore the types and sources of stress in a wide variety of emergencies such as large trauma centers, community hospitals, rural hospitals, or pediatric centers to gain a deeper perspective of stress in emergency nursing and to assess its replication.

Further research is needed to explore individual differences in emergency nurses' response to stress and the coping strategies utilized by E.R. nurses. Research is also needed to measure the level of burnout in a variety of emergency departments

throughout Canada. The influence of extra-organizational variables such as family relations, legal and economic problems should also be explored.

Finally, future researchers should determine the effectiveness of critical incident stress debriefing in relieving stress in the emergency department.

Conclusion

The purpose of chapter five was to discuss the findings of this research project in relation to the previous literature. The advantages and disadvantages of the Organizational Stress Framework, the positive and negative outcomes of the methodology and the implications and recommendations for nursing practice, education and research were also presented.

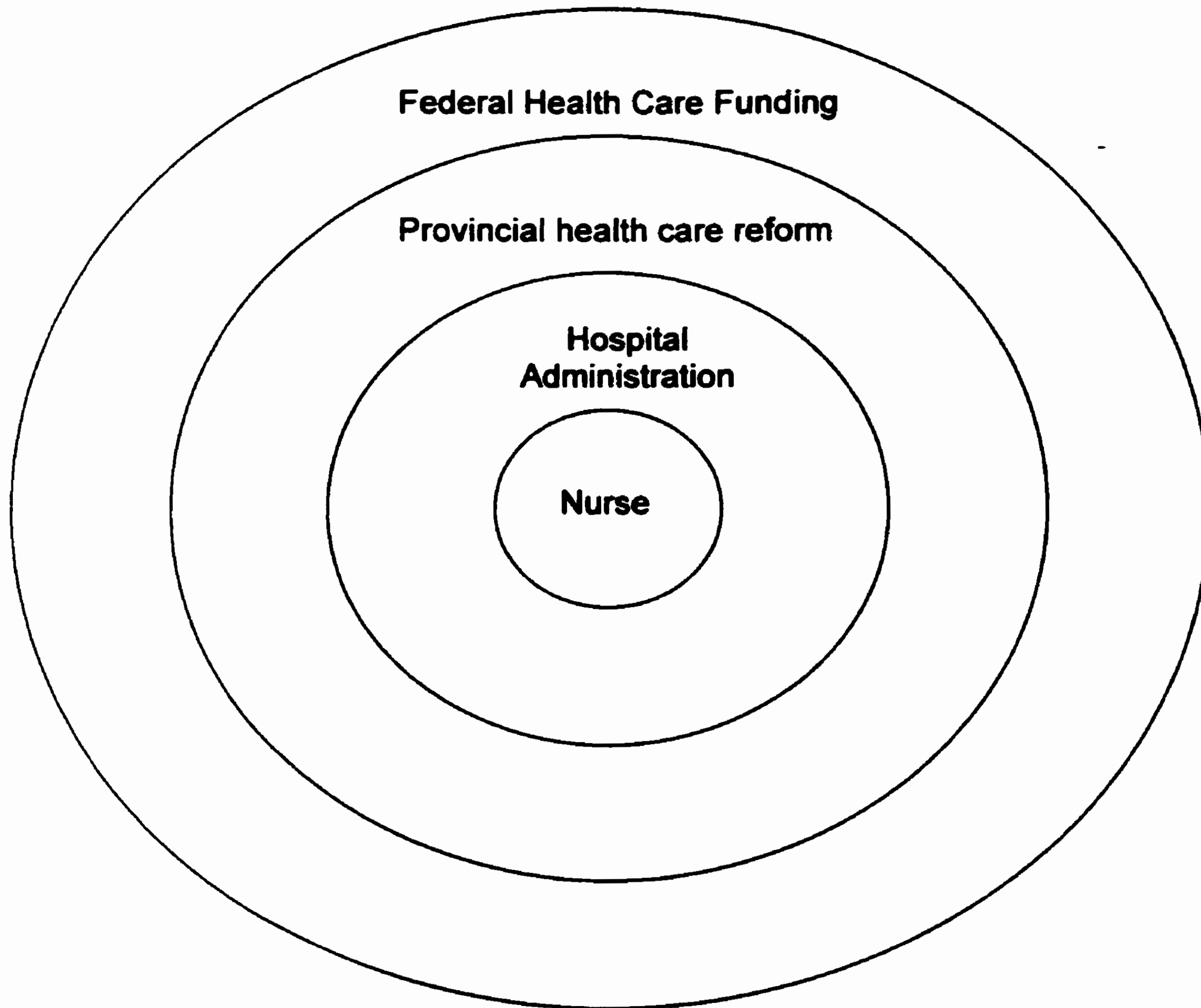
The nurses in this study reported that the number one source of stress in emergency nursing was uncontrolled patient volume and flow. The major contributing factor was a lack of beds for admitted patients causing a backlog of patients in the emergency department. The nurses attributed this phenomenon to a lack of resources and funding in the health care system. Inadequate staffing and shortage of qualified personnel was also a source of concern. The age of the patient, their diagnoses and the critical nature of their illness all contributed to nurses' stress levels. Finally, difficulties in interpersonal relationships with co-workers, physicians, patients and family members were all significant sources of stress for the nurses in this study.

Stress in emergency nursing must be addressed on four different levels. First of all the Federal Government of Canada must increase federal transfer payments to the

provinces to provide further funding for the health care system. Secondly, provincial governments need to reassess health care reform initiatives that were developed in the early 1990's. Funding for emergency departments must be made more of a priority as they are an important entry point into the health care system. Third, at an institutional level, individual managers need to show recognition and support and improve the lines of communication between their staff and other departments. They need to provide adequate support services for their staff such as employee assistance programs or wellness programs. For the fourth and final level, individual nurses need to monitor their own behavior and performance and seek assistance if necessary.

For change to be truly effective, improvements have to be made on all four levels. It is not enough for individual nurses to develop better communication skills or improve their coping strategies. Without further support and improvement in the three other levels these nurses may simply revert to previous patterns of behavior.

Four levels influencing E.R nurses' perceptions of stress



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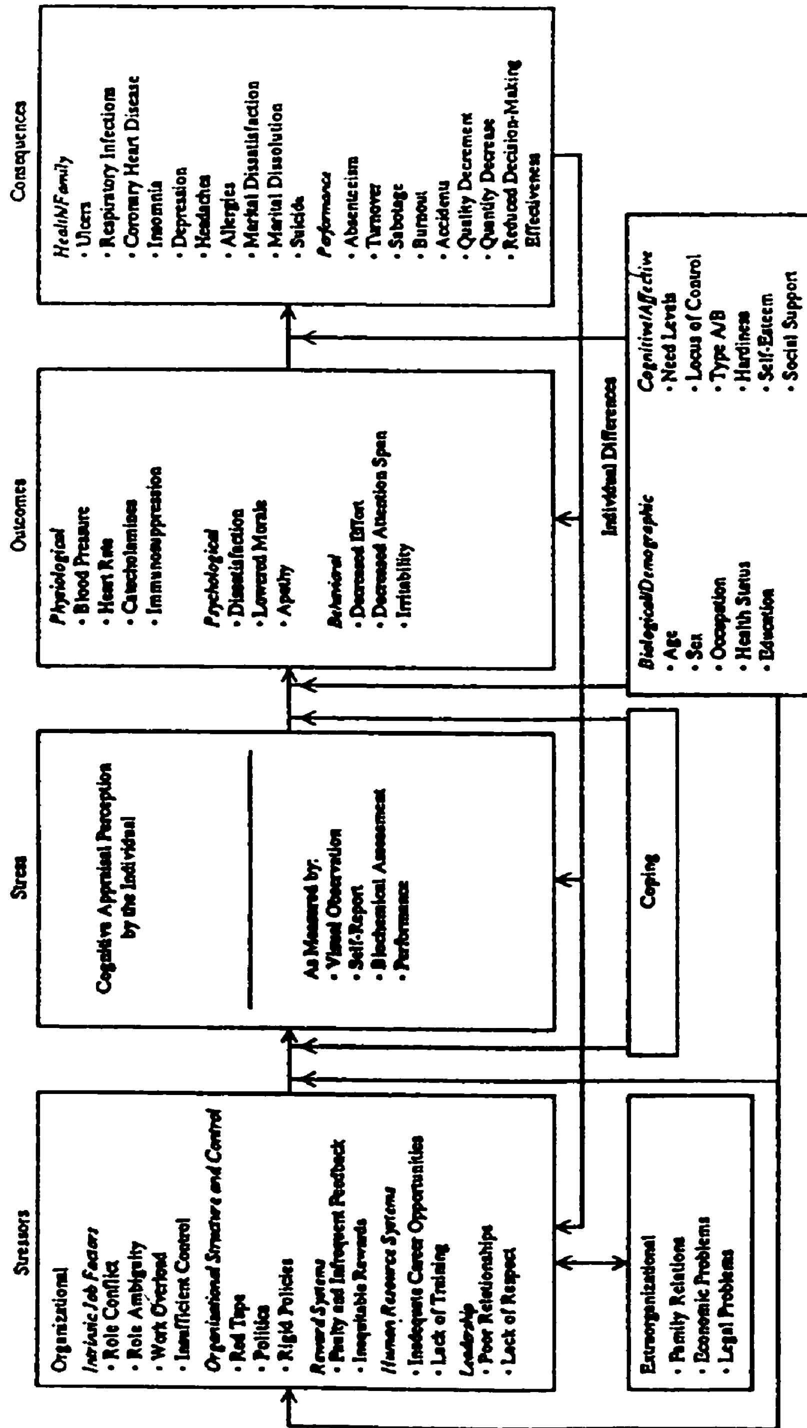
APPENDIX A

Figure 2. Organizational Stress Framework.



APPENDIX B

Explanation of study for Emergency Nurses

My name is Janet Kellow. I am a student in the Master's program in Nursing at the University of Manitoba. As partial fulfillment of this program I am conducting a research study entitled "Exploring Types and Sources of Stress in Emergency Nursing". Scientific research exploring stress in emergency nursing is very limited.

I would like to interview approximately 20 nurses to explore their personal experiences and perceptions of stress in the emergency department. Should you agree to participate, an interview will be arranged at your convenience, at a location of your choice. This interview will be audio-taped. A follow-up phone call may also be required to clarify some information. You will also be asked to complete a short sociodemographic questionnaire at the end of the interview. All nurses agreeing to the interview process will be asked to sign a consent form. The interview will last about one hour. If I require further clarification I will contact you by phone for a 5-10 minute conversation within two weeks following the interview.

There is no obligation on your part to participate in this study. Should you decide to participate in this study you are free to withdraw at any time with no explanation required. Your name will never be used. No information will be shared in any manner that can be traced to your name.

Thank-you for your cooperation and support. There is no known benefit to you should you agree to participate. However, indirect benefit may occur for emergency nurses, as more becomes known about this topic and specific strategies are implemented to reduce stress in the emergency department. Participating nurses will be asked to provide input and feedback when results are compiled, before the study is completed. This will involve a ½ hour group meeting with all participants. This will occur one month following completion of the interview process.

If you have any further questions regarding this research study please feel free to contact me at 204-831-1473. You may wish to contact my Thesis Committee Chairperson, Dr. David Gregory, at 204-474-9201.

By providing your name and phone number, you are indicating an interest in participating in the study. This means that I will contact you to further pursue this interest.

Name______________________________

Phone Number_______________________

APPENDIX C

Consent form for study participants

Emergency nurses

"Exploring Types and Sources of Stress in Emergency Nursing"

I,________________________________, being 18 years of age or older, agree to participate in a study exploring the types and sources of stress in Emergency Nursing. This study is being conducted by Janet Kellow, a student in the Graduate Nursing Program at the University of Manitoba. I have been asked to participate in this research study because of my experience as an emergency nurse. I understand that approval for this study has been obtained from the Ethical Review Committee of the Faculty of Nursing, University of Manitoba.

1. **I UNDERSTAND THAT MY PARTICIPATION WILL CONSIST OF:**

- Reading and signing this consent form
- Being interviewed about my perception of stress in the emergency department for approximately one hour, on off duty hours. If further clarification is necessary I will be contacted by phone for a 5-10 minute conversation within two weeks following the interview. This interview would be tape recorded and later typed word for word, with my permission. The location and timing of the interview will be my choice.
- Completing a short two page sociodemographic questionnaire at the end of the interview.

- Providing feedback when the results are compiled, before the study is completed. This will involve a ½ hour group meeting with all participants. This will occur one month following completion of the interview process.

2. **I UNDERSTAND THAT:**

- Any information obtained through interviews or questionnaires will be kept anonymous at all times.
- My name will not appear on any records, documents, or in any publications.
- Each participant will be assigned a code number, no names will be used.
- No information will be shared in any manner that can be traced to my name.
- The only people that will have access to the interview transcripts will be the members of the thesis committee and a typist.
- These transcripts will be identified by a code number
- The tape recordings, the transcripts, the sociodemographic questionnaires, and the consent forms will be kept locked and separate from each other. After a period of seven years, the tapes will be erased and the transcripts, questionnaires, and consent forms will be destroyed.

3. **I UNDERSTAND THAT:**

- Agreement to take part in this research study is strictly voluntary.
- I am free to withdraw from this study at any time, without question or untoward effect.
- During the interview any question can be refused and/ or the interview terminated, at any time.

- During the interview, I am free to request that no tape-recorder be used, or that the tape-recorder be turned off at any time.

4. **I UNDERSTAND THAT:**

- There are no known direct benefits to me for taking part in this research study.
- The findings of the study may indirectly affect current nursing practice through the implementation of programs designed to reduce stress in emergency nursing.
- There are no known direct risks for participating in this study. If I become upset or troubled during the interview I will be offered the number of the staff health office for further counseling and support.

5. **MY SIGNATURE ON THIS FORM INDICATES THAT:**

- I have read and understand the purpose of the study and my role as participant.
- If I have any questions or concerns I can contact Janet Kellow at 204-831-1473.
- If I have further questions or concerns I can contact her study supervisor (thesis chair), Dr. David Gregory, at 204-474-9201
- I agree to participate

Date:______________________________ Participants Signature____________________

Date:______________________________ Researchers Signature____________________

If I wish to receive a summary of the research findings I will write my name and permanent address below. A copy will then be forwarded to me upon completion of the study.

Name________________________________Address________________________________

APPENDIX D

Interview Guide

1. How long have you been in nursing? In emergency nursing?
2. What made you decide to go into emergency nursing?
3. What do consider to be some of the major sources of satisfaction and enjoyment in emergency nursing?
4. Describe a shift in E.R. which was particularly satisfying and enjoyable? What factors contributed to this situation.
5. What is your personal interpretation of the concept of stress? What does the word stress mean to you?
6. Do you perceive emergency nursing to be stressful. If so, why?
7. What do you consider to be some of the major sources of tension or strain in emergency nursing? How would you rate these in terms of severity and frequency of occurrence?
8. Describe a shift in E.R. which was particularly tense, aggravating, or frustrating? What factors were involved to exacerbate this situation?
9. Has stress in the workplace affected your physical or psychological health or your job performance?
10. Do management stressors differ from those of the general duty R.N. working in the E.R. If so, please explore that in more detail

11. How do you cope with the daily stress and strains of working in emergency nursing? How do you relax and unwind when you get home from a particularly frustrating shift? What coping strategies are productive, counter productive?
12. How could administration/ management help to minimize the tensions and strains in emergency nursing? What do you see as management's role regarding these concerns? What factors are the responsibility of the individual nurse?

Further Probe Questions

13. Can you explain that in more detail?
14. Tell me more about that.

APPENDIX E

Janet Kellow
46 Optimist Way
Winnipeg, Manitoba
R2Y 2J4
(Date)

Nurse Manager
Emergency Unit
____________Hospital
Winnipeg, Manitoba
Postal Code

Dear Nurse Manager:

I am writing to request permission to approach nurses from your emergency department to participate in my thesis research project entitled "Exploring Types and Sources of Stress in Emergency Nursing". My research proposal has been approved by the Ethical Review Committee, Faculty of Nursing, University of Manitoba. A copy of the Ethical Review acceptance is enclosed for your examination.

The purpose of this study is to explore the types and sources of stress in emergency nursing from the perspective of emergency nurses themselves. I would like to interview approximately 10 nurses from your unit to explore their perception of emergency nursing stressors. These audio-taped interviews would last approximately one hour and would be conducted during off-duty hours. The participants would also be required to complete a short sociodemographic questionnaire at the end of the interview.

Participation would be strictly voluntary. Participants will be assured that all information will be kept strictly confidential. Anonymity will be maintained through coding of interview transcripts and questionnaires. The participants will be free to discontinue their participation at any stage of the research project. Informed consent will be sought from the individual nurses prior to the interview process.

If desired, a copy of the study results will be presented to the emergency staff members, following the completion of my thesis.

If you have any further questions you may contact me at 204-831-1473 or my Thesis Committee Chairperson, Dr. David Gregory, Associate Professor in the Faculty of Nursing at the University of Manitoba, at 204-474-9201.

Thank you for your consideration in this matter. I look forward to your response.

Sincerely,

Janet Kellow, R.N. B.N.
Masters of Nursing Student
University of Manitoba

APPENDIX F

SOCIODEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions:

Circle the correct answer

1. sex..Male / Female
2. Marital Status..................Common-law/Married/ Divorced/ Single/ Widowed
3. Are you the head of the household.............Yes/ No
4. Are you the main financial supporter of your household..........Yes/ No
5. Are you presently working another part-time job?...............Yes/ No
6. Are you presently working another full time job?...............Yes/ No
7. What shift do you regularly work? ....Day (8hr)

   Evening (8hr)

   Night (8hr)

   Day (12 hr)

   Night (12hr)

   Rotating 12hour shifts

   Rotating 8hour shifts

Please complete

3. Age ______________________
4. Number and ages of children/ dependent elderly relatives at

   home____________________________________
5. Number of hours regularly worked per pay period.____________________

6. What is your annual household income?

- less than $ 10 000
- $10 000-19 999
- $20 000-29 999
- $30 000-39 999
- $40 000-49 999
- $50 000-59 999
- $60 000-69 999
- $70 000-79 999
- $80 000-89 999
- $90 000-99 999
- $100 000 and over

7. Number of years post graduate nursing experience.____________________

8. Numbers of years experience in any emergency unit.____________________

9. Numbers of years in present employment.______________________________

10. Level of education (diploma/B.N./M.N.)____________________________________

11. Are you presently working toward another degree?_______________________

nursing________ non-nursing_______

Thank You!