SOURCES OF OCCUPATIONAL STRESS FOR NURSE EXECUTIVES IN RURAL MANITOBA'S COMMUNITY HOSPITALS

BY

SHARON MARY EDMUNDSON

A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of

MASTER OF NURSING

Faculty of Nursing
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ABSTRACT

Today's hospitals are becoming increasingly complex and stressful organizations. Few studies have examined the stressors experienced by nurse executives working in this highly stressful environment. None have considered the stressors experienced by nurse executives working in a rural hospital setting.

An exploratory descriptive design was used to explore and describe the major stressors that have caused nurse executives in rural Manitoba's community hospitals to experience job-related stress. As well, the relative intensity of the identified stressors was determined. Cooper and Marshall's (1978) Sources of Managerial Stress Model served as the conceptual framework for the study.

The Delphi technique, consisting of three successive rounds of mailed questionnaires which incorporated feedback from the previous round, was used for data collection. Data were analysed after each round of questionnaire using both qualitative and quantitative procedures. Fifty-four nurse executives completed all three questionnaires.

Forty-four stressor items were identified. Findings of the study generally supported Cooper and Marshall's (1978)

intra-organizational stressors. Two additional categories of extra-organizational stressors, namely the governing board and physical-related issues, arose. As well, contextual stressors related to the provincial government's health reform initiatives were also evident. The stressors that ranked highest in the degree of perceived stressfulness pertained to health reform, certain factors intrinsic to the rural nurse executive's job and problems with staff and staff relationships.

Strategies to prepare rural nurse executives to individually and collectively address the identified stressors are recommended. Ways that employers, the professional nursing association, and educational institutions can help to lessen nurse executives' perceived stress are also suggested. Design and methodological considerations for future research are addressed.

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This thesis is

lovingly dedicated to

my husband, David

and

daughter, Carmen

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CHAPTER 1

OVERVIEW OF THE STUDY

Introduction

Today's hospitals are becoming increasingly complex and stressful organizations. "The management of interpersonal relations, the importance of services offered, and the ever changing technology in the hospital all contribute to a highly stressful environment" (White & Wisdom, 1985, p.113). Nurse executives are particularly vulnerable in this environment as they manage the largest number of employees and material resources (Scalzi, 1988). Rural hospital nurse executives are no exception. Furthermore, Henry and Moody (1986) found that nursing directors' jobs in small rural hospitals were more complex and demanding than they had anticipated.

Dynamic changes in health care have produced complex situational stressors, such as limited financial resources, changing governmental regulations, and competition for clients and funding, that can adversely affect nurse executives (Cohen, 1989). Nurse executives are likely to experience many situational stressors given the multiplicity of their roles and functions (Cohen, 1990). Key issues challenging Manitoba's rural nurse executives today are

budgetary cutbacks and uncertainty as to the future of their organizations and their roles related to rural health reform.

Work-related stressors can cause physical and psychologic disorders, affect nonwork life, and have potential deleterious consequences for their organization (Cohen, 1990). These outcomes may negatively influence the nurse executive's job performance. As the nurse executive has overall responsibility for the department of nursing, the delivery of patient care may be adversely affected. This possible outcome provides substantial justification for investigating the occupational stressors for nurse executives. The success of efforts to minimize stress depends on the accurate diagnosis of stressors, since different stressors will require different actions (Cooper & Marshall, 1978). This assumes that the stressors are amenable to interventions.

Scalzi (1984, 1988, 1990) and Cohen (1989, 1990) have studied the sources of job-related stress in top-level nurse executives. Having worked as a rural nurse executive for over ten years, the investigator had personally experienced many of the identified stressors. Furthermore, through discussions with other rural nurse executives across the province, the investigator was aware that they too

experienced tress related to their roles as nurse executives. These experiences led the researcher to wonder what caused the stress in their roles as rural nurse executives.

Scalzi's (1984) study on role stress was conducted in a large metropolitan county in the United States. Cohen's (1989) research on occupational stressors was set in California's public health departments. The question arose: Were the occupational stressors for nurse executives in rural Manitoba's community hospitals similar to those stressors identified in the above studies? Previous interactions with both urban and rural nurse executives suggested that the rural nurse executives had certain stressors unique to the rural setting. For example, the nurse executive was often the only non-unionized nurse in the facility and was solely responsible for labour management in the department. In addition, rural nurse executives frequently assumed a variety of additional roles such as pharmacist, material manager and inservice coordinator. As nothing had been documented in the literature regarding the perceived sources of occupational stress for rural nurse executives, it was a valid focus for a research study. A clearer understanding of the rural nurse executives' stressors was seen as key to stress prevention and reduction for this vulnerable group.

Statement of the Problem

The objective of this study was to explore and describe major stressors that have caused nurse executives in rural Manitoba's community hospitals to experience job-related stress and to determine the relative intensity of the identified stressors.

Research Questions

The research questions that guided this study were:

1. What are the perceived sources of occupational stress for top-level nurse executives in rural Manitoba's community hospitals?

2. Which stressors do rural nurse executives perceive as most stressful?

Significance of the Study

Investigation of the major sources of occupational stress can provide valuable information and direction for rural nurse executives. Once the sources are identified, nurse executives can individually and collectively address these issues. Individually, each nurse executive can anticipate stressors and develop personal strategies and skills to manage his/her workplace stressors. In addition, nurse executives can share or jointly develop strategies for

dealing with these major stressors. Regulating bodies, such as Manitoba Health and the Manitoba Association of Registered Nurses, can use this information when providing policy direction for rural hospitals and rural nurse administrators. This information will also be useful to employers when developing organizational structures and nurse executives' job descriptions. Nurse educators can incorporate this information into planning educational programs that will better prepare nurse executives to deal with anticipated stressors.

Conceptual Framework

Cooper and Marshall's (1978) Sources of Managerial Stress model served as the conceptual framework for this study. This model posits that managers have sources of stress both within and outside the organizational boundary (Figure 1). The fulcrum of the model is the individual manager. Factors such as the manager's personality, motivation, tolerance for ambiguity, adaptability and behavioural patterns (Type A or Type B) contribute to differences in the manager's ability to cope with stressors (Cooper & Marshall, 1978). The methodology chosen for this study did not address the characteristics of the individual manager that predisposed them to stress but focused on identifying and prioritizing intra- and extra-organizational stressors.

Intra-organizational Source of Stress

Cooper and Marshall (1978) described five categories of stressors within the organizational boundary: 1) factors intrinsic to the job, 2) role in the organization, 3) relationships at work, 4) career development and, 5) organizational structure and climate (Figure 1). An overview of the sources of managerial stress in each category follows.

Intrinsic job factors that cause stress involve having too much or too little work, time pressures and deadlines, poor physical working conditions, having too many decisions, having to cope with changes, and the consequences of making mistakes. Excessive travel, long and/or inconvenient hours, and having to work too fast are examples of stressful working conditions. Workload is seen as being either quantitative (too much work) or qualitative (work is too difficult). Both types are linked with symptoms of stress.

Potential stressors associated with a manager's role in an organization include role ambiguity, role conflict, having responsibility for people, having too little responsibility, lack of managerial support, having to deal with increasing standards of performance, and coping with rapid technological change. Role ambiguity exists when

managers have inadequate information about their work roles, whereas role conflict occurs when managers are torn by conflicting job demands. Differences between organizational structures will determine the extent of these stressors in the workplace.

Poor relationships with superiors, colleagues and subordinates are suggested as sources of stress at work. Difficulty in delegating responsibility, the manager's skill in participatory management, collegial rivalry, and a lack of social support in difficult situations are also potential stressors for managers.

Lack of job security, few job opportunities, and over or under promotion are potential stressors in the career development category. Frustration with having reached one's career ceiling and the resultant fear of redundancy, obsolescence or early retirement also cause career development stress. Status incongruency, the inconsistency between a person's achieved and ascribed status ranks, or the incongruency between an individual's social status and that of his/her family, can also be stressful for managers as it generates role conflict from incompatible expectations of a social position.

The organizational structure and climate can be stressful when it involves limited participation in decision

making, no sense of belonging, lack of effective consultation, poor communications, restrictions on behaviour, and office politics. These factors may threaten the manager's freedom, autonomy and identity.

Extra-organizational Source of Stress

Extra-organizational sources of stress arise from the interfaces between the manager's worklife and life outside the organization. Family problems, life crises, financial difficulties, company versus family demands, and company versus personal beliefs or interests are possible external stressors for managers. The dual career marriages common today may also add stress to the manager's life as there is no longer the traditional segregation of work roles for men and home roles for women. The resultant sharing of roles may require excessive energy inputs and may prevent any of the roles from being fulfilled successfully.

Cooper and Marshall (1978) posited that knowing the possible sources of managerial stress would assist in the development of suggestions for minimizing its negative consequences. They, therefore, compiled the research findings from the management and organizational stress literature into a framework that would facilitate the clear identification of managerial stressors. This framework is

thus appropriately suited for the proposed study of occupational stressors experienced by rural nurse executives.

SOURCES OF MANAGERIAL STRESS

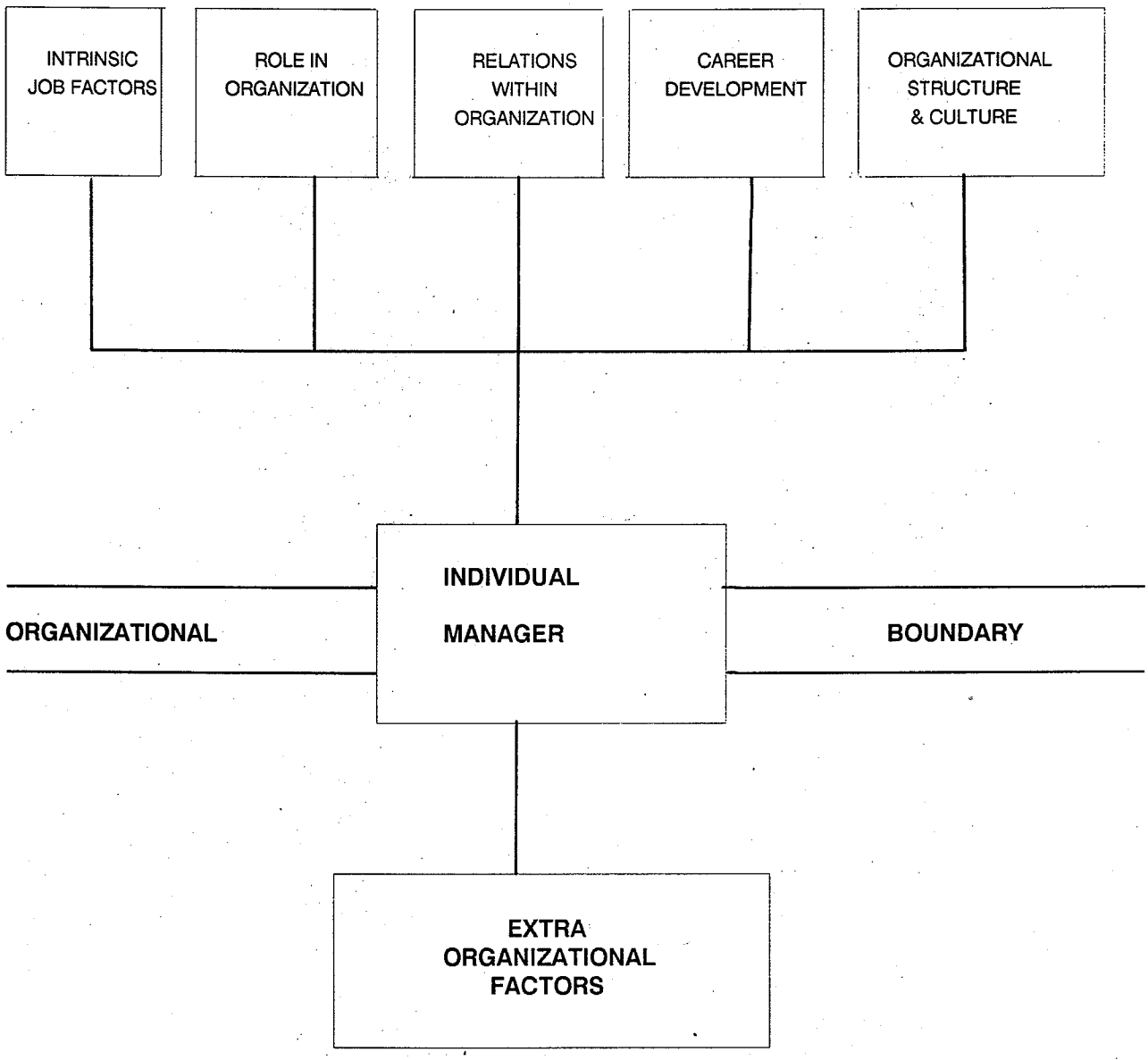

FIGURE 1: **Adaptation from the Sources of Managerial Stress Model. From Cooper, C. L. & Marshall J. (1978). Stress at Work (Figure 3.1) New York: Wiley.**

Definition of Terms

For this study the following terms are defined below:

1. Rural Hospitals - (acute care) community hospitals located outside the cities of Winnipeg and Brandon; excluding federal and provincial nursing stations.
2. Nurse Executive - the one registered nurse from each hospital with overall administrative responsibility for the department of nursing and who reports to the chief executive officer.
3. Occupational Stressors - events or conditions in the working environment that promote perceptions of increased work-related stress.
4. Stressfulness - "the degree to which events or conditions involve uncomfortable feelings or sensations such as fear, anxiety, worry, concern, frustration or anger" (Mullen, 1985, p. 370).

Some of the literature pertaining to occupational stress has its basis in role theory. Terms unique to role theory appear in the literature review and therefore require definition to enhance the reader's understanding of the review.

5. Role - "the expected and actual behaviours associated with a position" (Hardy & Hardy, 1988, p. 165).

6. Role Set - "designates the various role relationships inherent in occupying a particular position" (Scalzi, 1990, p. 85).
7. Role Set Diversity - requirement of a person to maintain working relationships with others in wide variety of complimentary roles (Snoek, 1966).
8. Role Stress - "a social structural condition in which role obligations are vague, irritating, difficult, conflicting, or impossible to meet" (Hardy & Hardy, 1988, p. 165).
9. Role Strain - "felt difficulty in job performance" (Arndt & Laeger, 1970a, p. 253).
10. Role Conflict - role expectations are contradictory or mutually exclusive (Hardy & Hardy, 1988).
11. Role Ambiguity - role expectations are vague or lack clarity (Hardy & Hardy, 1988).
12. Role Overload - role expectations are excessive relative to time available (Hardy & Hardy, 1988).
13. Role Diffusion - the inability to keep separate the activities and behaviours of an individual's various roles (Long & Weinert, 1989).
14. Boundary Position - one in which some members of the individual's role set are located in another department within the same organization or in another organization entirely (Kahn, Quinn, Rosenthal, Snoek & Wolfe, 1964).

Organization of the Thesis

This introductory chapter has presented the statement of the problem, the research question, the significance of the study, and the conceptual framework and a definition of terms used in the study. The second chapter provides a review of literature relevant to the study. Chapter 3 outlines the methodology used in conducting the study. Chapter 4 focuses on the results and analysis of the study. The final chapter discusses the findings, the implications for practice and the recommendations for future research.

CHAPTER 2

REVIEW OF THE LITERATURE

Very little research reviewed proved relevant to the topic under study. Much of the available literature is anecdotal in nature and originated in urban areas of the United States. The literature review critically examined the following topics: (1) Rural health factors relevant to rural nursing administration; (2) Rural nursing issues that predispose the nurse executive to occupational stress; (3) Rural nursing administration; (4) Stress related to work and families; (5) Executive stress; (6) Work stress among health care administrators; (7) Occupational stress among nurse executives.

Rural Health Factors

A number of rural health factors and issues relevant to rural nursing administration are evident in the literature. Forty percent of Manitoba's population lives outside the cities of Winnipeg and Brandon (Manitoba Health Services Commission, 1992). This rural population is served by 71 community hospitals, excluding the northern and provincial nursing stations (Manitoba Health Services Commission, 1991). Fifty (70%) of the 71 hospitals have 30 or fewer beds. The majority of these hospitals are clustered in the

extreme southern part of Manitoba often within a 30 minute drive of each other (Appendix A). Most rural hospitals continue to offer traditional medical-surgical, pediatric and obstetrical services for their communities (Canadian Hospital Association, 1993).

Rural people and rural communities have unique values and beliefs about health and health needs. A descriptive study, that used both qualitative (ethnographic interviews) and quantitative (survey) methods to collect data over a six year period in rural Montana, identified concepts important to understanding rural health needs and rural nursing practice (Long & Weinert, 1989; Weinert & Long, 1987). Health was defined as "the ability to work or to be productive in one's role" (Weinert & Long, 1987, p. 452). Health was of secondary importance to work; a work ethic that may affect the use of social and health services. Health care must therefore be geared to rural work practices. Self-reliance and independence were also key concepts for rural people. As well, they preferred the informal support of friends and families and resisted help from persons seen as outsiders to their support system and newcomers to the community. Consequently, formal health care services need to be blended with the community's informal helping system. Health care providers living in

rural communities were found to experience lack of anonymity and greater role diffusion. Establishing networks for information exchange and peer support would help nurses deal with the stresses of rural practice.

Bushy (1990) attributed rural dwellers' reluctance to seek other's assistance to their work ethic, pride in self-reliance, fear of receiving insensitive treatment, and fear that confidentiality may be broken. Functional illiteracy may also deter them from seeking health care. Rural communities were described as being slower to change traditional cultural values, preferring less organized bureaucracy, having limited employment opportunities and fewer special interest groups. Intergenerational businesses are common in rural communities and the family's income is often dependent on the financial success of the area's major industry. The recent farm crisis in America was cited as contributing to the increase in unemployment, accidents, domestic violence, child abuse and neglect in the rural population.

Fenton, Rounds and Iha (1988) refer to rural dwellers as economically and socially intertwined. As a result, gaining support and acceptance for health programs and changing health behaviours is greatly influenced by peer pressure. Health care must be accessible and integrated into daily routines of rural people's lives.

Socioeconomic and health concerns specific to rural areas in the United States included an urban bias in resource allocation, a higher proportion of elderly, a declining utilization of services and the high incidence of work- related injuries, hospitalization and deaths among farmers (Wakefield, 1990). Coupled with the disparity in funding, rural hospitals faced increased financial burdens related to an increase in medical tests and procedures, as well as, escalating costs for capital equipment and employees' salaries and benefits (Jamieson, 1981). Manitoba's rural hospitals share many of these problems. The allocation of financial resources is one part rural to three parts urban despite the 40:60 ratio in population (Horne, 1989). Horne justified this disparity in funding by saying that rural dwellers use urban health care facilities. Manitoba data confirmed that many rural Manitobans admitted to Winnipeg hospitals do not require complex care; however, alternative services are often not available in their community (Manitoba Health, 1992).

As in the United States, rural Manitoba has a higher proportion of elderly. Winnipeg has 12.5 percent of its population over 65 years whereas 14.1 percent of Manitoba's rural population is in this age category (Manitoba Health Services Commission, 1990). Rural hospitals will likely

encounter greater demands for services as the elderly tend to be heavy consumers of health care services.

Low, declining and fluctuating utilization is an issue for many rural hospitals in the United States (Fuszard, Slocum & Wiggers, 1990; Kovner, 1989). Many small rural Manitoba hospitals have an occupancy rate of 50 percent or less (Horne, 1989; S. Derk, Past Executive Director, Manitoba Association of Registered Nurses, personal interview, October, 1991). Twenty-five of Manitoba's rural hospitals reported less than 30 births per year (Canadian Hospital Association, 1993). Reilly and Legge (1980) asserted that a declining utilization coupled with escalating costs causes small rural hospitals to be less efficient and provide a lower quality of care.

Downs (1980) identified the following problems as having an impact upon Canada's rural hospitals during the 1980's: increased legislation and regulation which demand higher standards of facilities and their employees, increased costs of employees' salaries and benefits, difficulties in recruiting specialists and providing technical and support services, increased financial burden due to a greater use of medical tests and procedures, increased pressure to accept underqualified people in order to remain open, and increased need for gerontological services.

Eighty-one percent of Manitoba's doctors practice in either Winnipeg or Brandon (Horne, 1989). In the period 1980 - 1992, the number of physicians in Winnipeg increased 22 percent and the population increased 10 percent. During this same period, the number of physicians in rural areas increased 12 percent while the population increased only 0.8 percent (Manitoba Health, 1992). A comparison of the physician per 1000 population ratio between Winnipeg and Manitoba's rural health regions makes this disparity blatantly obvious. In Winnipeg there are approximately 2.5 physicians for each 1000 people whereas the Parkland, Central, Interlake and Eastman regions each have less than one physician for each 1000 people (Manitoba Health, 1992).

Rural hospitals experience difficulties in recruiting and retaining physicians and specialists (Fuszard et al., 1980; Jamieson, 1981; Wakefield, 1990). Jamieson (1981) attributes these problems to the dearth of technical and personnel support in rural hospitals, professional isolation and an overwhelming amount of responsibility. Many rural Manitoba communities have encountered problems with frequent physician turnover. Rural nurses and nurse administrators indicated that, as a result of this "doctor-of-the-month" syndrome, the scope of services in their hospital varied

with, the current physician's interests and expertise (personal interviews[1], October, 1991).

Manitoba's rural health care providers and recipients complain about the lack of coordination in the health care system, including overlapping services, service gaps and an inability to access services (Rural Health Services Task Force, 1990). While rural Manitobans were acutely aware of such problems, they felt that they were powerless to change the system. The Rural Health Services Task Force (1990) recommended the amalgamation of Manitoba Health Services Commission and the Community Health Services of Manitoba Health in order to consolidate program delivery. In addition, the task force recommended the establishment of regional councils to manage health care and budget allocations within each region. In May 1992, Manitoba Health issued its health reform plan. As part of this plan a Rural Health Advisory Council was established. This council was:

> challenged to implement, by fiscal year 1993/94, a realignment of up to 200 rural hospital beds that could

---

[1] In preparation for leading a seminar on rural nursing, the investigator interviewed rural staff nurses, rural nurse administrators, the Interlake/East Regional Nurse Administrators Interest Group and S. Derk, past Executive Director, Manitoba Association of Registered Nurses, regarding their perceptions of rural nursing issues. This seminar was done as partial fulfilment for the course Foundations, Issues and Trends in Nursing (49:703). Information gleaned from these interviews is incorporated into this literature review.

be more effectively used by such examples as:

- placement of mental health patients in accordance with the principles of mental health reform;
- redirected services from urban centres;
- replacement of some acute care beds with long term care facilities;
- home care services and supports;
- community health centres;
- reviewing the progress of Westman Integrated Strategy for Health (W.I.S.H.) to determine regional applicability where appropriate. (Manitoba Health, 1992, p. 36).

Both American and Canadian literature suggest regionalization, shared health services and increased community services as solutions to providing cost-effective, accessible and comprehensive health care for the rural population (Downs, 1980; Jamieson, 1981; Kovner, 1989; Lahaie, 1990). Defining the rural hospital as the community's health centre with diversified services, such as ambulatory clinics, day care programs and hospice care, is key to its survival (Lahaie, 1990; Reilly & Legge, 1980; Robinson, 1987). Reilly and Legge (1980) suggest that small rural hospitals focus on services, such as home health and follow-up care, that cannot be provided at more distant

urban centres. Some communities have resisted regional planning fearing that changes will result in a lower level of healthcare service and a loss of jobs in the community (Downs, 1980).

In summary, many rural health factors contribute to a potentially stressful working environment for nurse executives in rural communities. Rural people are known to consider work more important than health, to be independent and to favour informal support systems (Long & Weinert, 1989) over what they perceive as poorly coordinated health services (Rural Health Services Task Force, 1991). In addition, rural hospitals are troubled by decreased occupancy rates, an urban bias in provincial health care dollars (Horne, 1989), escalating costs in delivering services, physician recruitment and retention problems (Downs, 1980), as well as, the uncertainties associated with Manitoba Health's (1992) plan for health reform.

Rural Nursing Issues

Rural hospitals in the United States have an aging nursing population and difficulty recruiting and retaining new graduates (Fuszard et al., 1990). S. Derk, Past Executive Director, Manitoba Association of Registered Nurses, (personal interview, October, 1991) referred to the "greying nurse" in rural Manitoba as 54 percent of all registered nurses are over 40 years old. She expressed concern that there may be an acute nursing shortage in the next five to ten years as many rural nurses could retire at the same time. A study of health care worker vacancies in Manitoba (Manitoba Health Organizations, 1990) also predicted a rural nursing shortage related to a national shortage and the nurses' unwillingness to relocate to rural areas. Problems occur in recruiting into part time and casual positions as nurses will not often relocate for less than full time hours. Rural staff nurses (personal interviews, October, 1991) indicated that they work in the community because they were either raised there and/or they married a local resident.

Rural nurses need a broad knowledge base, are professionally isolated, and work with a lack of physical and human resources (Anderson & Kimber, 1991). Rural nurses must function as generalists; specialization being

inappropriate as they must care for a wide variety of patients (Fuszard et al., 1990). On evenings, nights and weekends the rural nurse may be the only staff on duty; an overwhelming responsibility for which many feel ill-prepared (Manitoba Health Organizations, 1990; Rural Health Services Task Force, 1991). Experienced urban nurses who had moved to rural hospitals spoke about the huge adjustment required before they became comfortable with the responsibility and the generalist role in a rural hospital (personal interviews, October, 1991). They missed the support of other disciplines as well as the advanced technological equipment available in city hospitals. The generalist role is particularly problematic for new graduates as they have limited clinical experience. Furthermore, Manitoba Health's policy that a registered nurse must be on duty at all times limits the recruitment of nonregistered graduates to hospitals that only have one nurse on shift (E. Heinrichs, Past Consultant, Manitoba Health, personal communication, November, 1991).

Long and Weinert (1989) found that role diffusion was experienced more by rural nurses than urban nurses. The nurse's roles in the community, such as parent, spouse, and church attender, were related to the nurse's effectiveness as a health professional. Nurses also experienced

professional role diffusion as they were expected to function in a variety of clinical areas: medical, surgical, pediatrics, obstetrics and emergency. In addition, they were often required to perform tasks of other health care workers such as the pharmacist or dietician.

Rural nurses are described as "welcoming" the chance to perform ancillary duties when their hospital's bed utilization was low as a way of retaining full time employment (Fuszard et al., 1990). Rural nurses in Manitoba indicated that clerical, housekeeping, and other support was often absent, increasing their workload with non-nursing functions (personal interviews, October, 1991). As hospitals are the only 24 hour service in most small towns, nurses also served as the dispatcher for the fire department and ambulance service when the switchboard staff left after the day shift. As well, some rural nurses have taken emergency medical attendant training and provide ambulance coverage when the need arises. Rural staff nurses also confirmed that they assumed the duties of other professionals, recognizing that there was insufficient funding to hire additional staff.

The Interlake/East Nurse Administrators (group interview, October, 1991), affirmed that rural nurses' access to continuing education is impeded due to distance,

cost and insufficient personnel (Anderson & Kimber, 1991). Timeliness of continuing education programs was also problematic as many seminars occurred when the nurses' families were seeding or harvesting. Moreover, the limited education budgets of rural hospitals restricted nurses' initial orientation to this setting.

Most rural communities do not have in-hospital physician coverage around the clock (Fuszard et al., 1990). Local physicians take call from home. As a result, rural nurses have a great deal of autonomy in decision making, are consulted and trusted by physicians and are highly respected in their communities (Fuszard et al., 1990).

Wiens (1990) suggested that the absence of physicians on duty contributes to rural nurses' frustrations when "their lack of autonomy prevents immediate response to patient needs" (p. 15). Expanded clinical ladders and shared governance were proposed as models to expand rural nurses' autonomy. Clinical ladders permit expanded practice for expert clinical nurses. Establishing protocols that authorize expert nurses to administer certain medications without a physician's order or to make decisions about diet and activity changes legitimizes and encourages autonomous practice. In a modified shared governance model staff nurses' autonomy is increased by their participation on

committees that govern nursing practice, establish standards for nursing practice, define and assess quality nursing care and address the continuing education needs of nurses. In addition, representation on the nursing department's executive committee provides clinical nurse input into management decision making and an avenue for their concerns to be heard.

In summary, rural nursing issues create potentially stressful demands on nurse executives in rural community hospitals. Faced with an aging nursing population in their communities (Fuszard et al., 1990; S. Derk, personnel interview, October, 1991), anticipated recruitment and retention difficulties (Manitoba Health Organizations Incorporated, 1990), and limited opportunities for continuing education for their staff (Anderson & Kimber, 1991) rural nurse executives will be challenged to ensure a complement of nurses that can function as generalists (Fuszard et al., 1990) in an environment of increased responsibility (Manitoba Health Organizations Incorporated, 1990) and with limited physical and human resources (Anderson & Kimber, 1991).

Rural Nursing Administration

The literature on rural nursing administration is sparse. Moreover, few research studies related to rural

nursing administration have been published. An overview of the available literature follows.

The administrative behaviours of ten rural nursing directors and the contextual elements affecting their jobs were explored in a qualitative study by Henry and Moody (1986). These directors were expected to be "jacks-of-all-trades", to be proficient in clinical practice, well informed in several specialities, and to perform well as managers. They also needed excellent public relations skills and to ensure the delivery of highly personalized care. The nursing directors experienced high levels of stress related to long hours of work and feeling inadequately prepared to deal with the political and financial aspects of their job. The rural nursing directors' job challenges included setting goals and policies when future technology, population, government regulations and economic status were uncertain; balancing the allocation of resources (especially human resources) and motivating and controlling subordinates.

Henry and Moody's (1986) effective rural nursing directors knew their communities and local politics well and were skillful in influencing others to achieve their goals. They gathered information from a variety of sources, both in-hospital and from the community, and performed a wide

range of agenda-setting activities amid many interruptions. The most effective nursing directors had built large diverse networks and spent most of their time accomplishing tasks through communicating with others. Decisions were often made based on first hand observations and face-to-face contacts. They had a strong sense of the hospital's history and the needs of both hospital and community. The authors identified the small sample size, the unique characteristics of the rural population studied, and the broadly stated research questions as being limitations to their study.

McMillan (1983) surveyed 26 hospital nursing directors in rural Montana about management. Their job situation priorities, ranked from most to least important, were: the opportunity to experience a sense of accomplishment, opportunity to use one's skills, pleasant coworkers, recognition in the job, job stability, salary and promotions. These directors were often the only nursing administrative persons for their facilities. They were consulted by the hospital administrator and they, in turn, consulted with their staff on nursing matters. Most had total control of patient care standards, nursing policies and personnel hiring/firing but very few had total control over their nursing budget. The author suggested that this lack of control limits their organizational power and

discretion and their effectiveness in human resource management.

Besides managing the nursing department, rural nurse administrators are frequently involved in direct patient care, are responsible for support services, and serve on many hospital and community committees (Johnson & Barba, 1992). They are often second in command at the hospital, providing institution-wide leadership in the hospital administrator's absence. Rural nurse administrators are challenged to remain current with professional issues, examine the impact of these issues on care delivery, attract nursing students for clinical experiences, create an environment where nurses feel empowered, ensure immediate access to clinical nurse specialists and other patient care resources in larger institutions, via communication technology, and influence decisions regarding the quality and quantity of health care services available to small rural communities. Rural nurse administrators need to be educated in the unique characteristics of rural communities, networking and negotiating skills, as well as, financial and resource management for small hospitals. Establishing support systems with educational institutions and peers was suggested as an alternative to formal educational programs.

Chapman (1968) reported that nursing directors in smaller hospitals were responsible for pharmacy, purchasing,

admission, central service, housekeeping and materiels management. Their major problems related to staffing, nurse-doctor relationships, inter- and intra-departmental harmony and counselling personnel. All directors planned staff coverage whereas only 12 percent submitted budgets. High importance is placed on day-to-day operations and structured activities in small hospitals (Erickson, 1980).

The diversity of roles common to rural nurse executives was described by the Interlake/East Regional Nurse Administrators (group interview, October, 1991). In addition to managing the nursing department, the nurse executives often functioned as infection control officer, quality assurance coordinator, staff nurse, purchasing agent, pharmacist and/or acting hospital administrator. As well, rural nursing directors were often on 24 hour call to assist at the hospital as required.

Manitoba's rural nurse administrators are not well prepared academically for the responsibilities of their jobs. Twenty-four percent have only their basic nursing diploma and 59 percent have only a post basic certificate (Manitoba Association of Registered Nurses, 1991). The Canadian Hospital Association's Introduction to Nursing Management and the University of Manitoba's Nursing Administration in the Health Care System are the two

certificate programs most commonly completed; neither of which have a broad enough scope of information to prepare nursing directors for administering an entire department (S. Derk, Past Executive Director, Manitoba Association of Registered Nurses, personal interview, October, 1991). The education profile of Manitoba's rural nursing directors is shown in Table 1 (Manitoba Association of Registered Nurses, 1991).

Table 1

Education Profile of Directors of Nursing in Rural Acute Care Hospitals

Doctorate	0%
Masters	3.7%
Baccalaureate	13.0%
Post Basic Diploma	59.3%
Diploma in Nursing	24.1%

Based on her interactions with rural nurse executives when they consulted her about difficult situations, such as physician power relationships, labour relations issues, or reporting professional misconduct, S. Derk felt that they were ill-prepared to handle these situations. Interlake/East Regional nurse executives agreed that they were ill-prepared for their responsibilities and needed more education; however, distance, cost and lack of available

time were cited as prohibitive factors (group interview, October, 1991).

Professional isolation is also an issue for rural nurse administrators. The Interlake/East Regional nurse executives affirmed that in their rural hospitals they were the only nurse managers and the only non-unionized nurses (group interview, October, 1991). Many regional nurse administrators' interest groups have been established for networking, information sharing and collegial support.

The Canadian College of Health Service Executives is a national association available to health care executives for professional networking and leadership development (Canadian College of Health Service Executives, 1991). College members can establish contacts both provincially, at chapter meetings, and nationally, at conferences. Ongoing educational and career development programs are offered by the College. In addition, the College's Certified Health Executive program is becoming a recognized national standard of professionalism in health service management. Only seven of Manitoba's rural nurse executives are members of the Canadian College of Health Service Executives (CCHSE); two of them being Certified Health Executives (CHE) (Canadian College of Health Service Executives, 1992). Membership and certification are more common among rural hospital chief

executive officers. The differences between the chief executive officers and directors of nursing membership is shown in Table 2.

Table 2

Canadian College of Health Service Executives Membership of Chief Executive Officers & Directors of Nursing in Rural Manitoba's Acute Care Hospitals

	# Hospitals	CEO		DON	
		CCHSE Member	CHE	CCHSE Member	CHE
Rural	62	29	10	7	2
Urban	8	5	3	4	2

(Winnipeg & Brandon)

In summary, there are characteristics unique to rural nursing administration that predispose nurse executives working in rural settings to job-related stress. Rural nurse executives are expected to be expert clinicians and competent mangers (Henry & Moody, 1986) for nursing as well as a variety of other departments (Chapman, 1968; Interlake/East Regional Nurse Administrators, group interview, October, 1991; Johnson & Barba, 1992) despite being ill prepared for these responsible positions (Henry & Moody, 1986; S. Derk, Past Executive Director, Manitoba Association of Registered Nurses, personal interview, October, 1991). Moreover, they often lack the support of

other nursing administrative persons (McMillan, 1983). Distance, lack of time and cost have limited rural nurse executives' involvement in ongoing education (Interlake/East Regional Nurse Administrators, group interview, October, 1991) and professional development activities (Canadian College of Health Services Executives, 1992).

Stress Related to Work and Family Roles

A potential source of stress for nurse executives is the conflict between work and family roles. Based on a review of the literature, Greenhaus and Beutell (1985) defined work-family conflict as a type of role conflict in which the role pressures from the work and family domains are incompatible in some respect. Work-family conflict exists when the time devoted to one role, or the strain from participation in one role, or the specific behaviours required by one role make it difficult to fulfill the requirements of another role. The three forms of work-family conflict are time-based, strain-based and behaviour-based conflicts. Time-based conflict arises when work schedules, work orientation, marriage, children or spousal employment patterns interfere with participation in either the work role or the family role. Strain, conflict, or absence of family support, and conflict within the work domain may contribute to strain-based conflict.

Incompatible behaviour expectations between home (warmth, openness) and work (aggressiveness, independence) result in the behaviour-based conflict (Greenhaus and Beutell, 1985).

In a two part study, Kopelman, Greenhaus and Connolly (1983) examined the construct validity of scales developed to measure work conflict, family conflict and the inter-role conflict between work and family roles. In addition, they studied the relationships between the focal constructs and the constructs, job satisfaction, family satisfaction and life satisfaction using correlational and path analysis. The strongest relationships occurred between work conflict and job satisfaction, family conflict and family satisfaction, and between both job and family satisfactions and life satisfaction. Moderate linkages were found between both work and role conflicts and inter-role conflict. The authors identified the small sample size (N=91), use of a convenience sample, and the failure to obtain longitudinal data as methodological weaknesses of their study.

Most nurse executives are women, whereas most other health care executives are men. When working in a traditional male domain, women add the "masculine" role to their identity. As a result, they experience sex-role conflict, which contributes to "home versus office" role conflict often experienced by career women (Chusmir & Durand, 1987).

Barnett and Baruch (1983) studied women's involvement in multiple roles in relation to role conflict, role overload, and anxiety. Significant relationships were found between the role of parent and role conflict, role overload, and role anxiety. In addition, the quality of experience within a women's roles of paid worker, wife and mother was a major independent predictor of role overload, role conflict and anxiety. Work family conflict has not been investigated as a source of nurse executives' role stress.

In summary, when nurse executives' diverse roles at work clash with their roles at home, they will be subjected to the stress of role conflicts. Moreover, female nurse executives may experience the stress associated with the multiple roles of a career woman.

Executive Stress

Role conflict has been purported to be a stressor that contributes to administrator burnout (Harvey & Raider, 1984). When the administrator's values conflict with the demands of the administrative role or when the administrator's service goals differ with the priorities of funding agencies, the potential for stress exists. Relationships with funding bodies, boards and other agencies, accountability to consumers, and acting as the

liaison between employees' needs and demands of the external environment are stressors unique to the administrative role (Harvey & Raider, 1984).

Burke and Belcourt (1974) studied the occupational stress and coping responses of 137 managers employed by Canada's Federal Government. Participants rated 14 individual stress items on a four-point scale. These managers were concerned about having the required information to do their job, feeling uneasy about lack of career development and too heavy a workload. They were rarely bothered by too much responsibility, feeling unqualified for their jobs, feeling pressured to improve performance or ignorance about what their next job would be. Role ambiguity and role overload were identified through a factor analysis of the 14 stress items. Managers scoring high in role ambiguity were younger, better educated females who received less income and had shorter lengths of service in their present jobs and the government. The high role overload group had more females, lesser incomes, less formal education, longer service in the system and intermediate length of time in their present jobs.

The relationship between potential sources of stress and manifestations of ill-health was the focus of a study of 196 senior managers in England (Cooper & Melhuish, 1980). A

four stage research process was used. First, each manager underwent a medical examination. Second, a clinical interview and questionnaires (health measures) were used to obtain information about the manager's worklife and personal circumstances. Third, the health measures and potential stressors were reduced, by factor analysis, to a few groups. Lastly, multiple regression analysis was used to determine the relationship between physical and mental health measures (raised blood pressure, poor physical fitness and mental ill-health). The manager at risk of hypertension was outgoing, tough-minded, self-sufficient, forthright, venturesome and aggressive. This manager also experienced conflict between personal and company values, poor relationships with subordinates and colleagues and little social support from home or work. The Type A, assertive, expedient manager whose values conflict with the company was prone to poor physical fitness. Furthermore, the manager who worked in a poor organizational climate and experienced demands from other people and the company was vulnerable to poor physical fitness. The tense, apprehensive, suspicious, serious but intelligent manager who experienced job insecurity was at risk of mental ill-health.

In summary, executives experience many job-related stressors including role conflicts (Cooper & Melhuish, 1980;

Harvey & Raider, 1984), role ambiguity and role overload (Burke & Belcourt, 1974). Difficult relationships with funding agencies, boards (Burke & Belcourt, 1974), subordinates and colleagues coupled with a poor organizational climate and lack of social supports also cause executive stress (Cooper & Melhuish, 1980). Having accountability to consumers and serving as the liaison between the organization and its external environment is also stressful (Harvey & Raider, 1984). Nurses functioning in executive roles are subjected to these same stressors.

Work Stress Among Health Care Administrators

"Health services administration is one of the most difficult and complex of management challenges" (Quick, Dalton, Nelson & Quick, 1985, p. 103). The unique and stressful challenges of hospital administration include direct interaction with diverse public and professional groups (physicians, nurses, the public and government), an incongruent social status with physicians, lack of collegial support, and a heavy workload. The increased emphasis on cost-effective services, alternative service delivery systems and consumerism are also stressful. Restrictions in decision-making freedom, making decisions regarding staffing, equipment and policies that have life-and-death impact without the technical information and the failure to

make transitions in roles from job to home are further stress-inducing demands.

In a national survey, Numerof, Hendin and Cramer (1984) explored occupational stressors, coping strategies and demographic characteristics in relation to stress symptoms in health administrators. Initial data on stressors were collected via telephone interviews, content analysed and developed into a questionnaire. The questionnaire was mailed to chief executive officers, associate administrators, directors of nursing, presidents of medical staff and other department heads (N=143). Mean stress scores for each stressor listed in the questionnaire were calculated and rank-ordered to determine the relative intensity of associated stress. The total stress score was validated by correlation with a global measure of stress. Directors of nursing reported the highest total stress score of all positions, whereas their stress symptom scores were at the lower end of the ranges. All groups demonstrated emotional symptoms, followed by interpersonal and internalized minor somatic symptoms as their most frequent stress outcomes. Nursing directors reported depressive symptoms as the third most frequent outcome, whereas external behaviour symptoms were reported by the other groups. The authors attribute this difference to the fact

that most nursing directors are women, who tend to report a greater incidence of depressive symptoms than men.

The three top stressors for the executive group as a whole were having too many time demands, meeting one's own expectations for excellence, and having to wait for others to get things done (Numerof et al., 1984). Directors of nursing rated having too many time demands, getting others to carry out their job responsibilities, and seeing organizational problems but not having the resources to correct them as their three most stressful situations. Response-set bias occurring during questionnaire completion and the lack of longitudinal data were identified as the study's limitations.

General hospital administrators were studied to determine their work stressors and to examine the relationships between their perceived stressors and demographic variables, extra-organizational stressors and physical and mental symptoms (White & Wisdom, 1985; Wisdom, 1984). Cooper and Marshall's (1978) model was the study's conceptual framework. The methodology included a mailed questionnaire (N=71) to explore the stress factors, followed by interviews (N=10) to add qualitative insights to the survey findings. Six main stress factors were identified. The impact of time or lack of time related to decision

making, being caught between conflicting groups such as the board of directors, community groups and medical staff were priority stressors. As well, involvement in boundary spanning activities when middle managers failed to resolve operational issues or when interacting with government agencies was stressful. The final priority stressor related to the rate of change, as well as, the volume of technical information managed by the administrator.

Stress related to role ambiguity, role conflict and organizational politics lessened with increased age and administrators' experience in the field and in their positions, but increased with exposure to extra-organizational stress (Wisdom, 1984). Significant predictors of physical illness were dissatisfaction with the difficulty of work to be performed, concern over the gravity of decisions to be made, and perceptions of inadequate influence. Mental illness was associated with dissatisfaction with the quantity of work required.

Mullen's (1985) survey asked nursing home administrators to identify and then rank stressors according to the degree of negative emotion elicited by the stressor's description. The nominal group and delphi techniques were used to generate the prioritized stressors. Study findings reported that boundary spanning activities with state

legislators and regulatory agencies, the press and other media, patients' families and the general public were most stressful. Stressors related to employee relations such as people not doing their jobs, recruiting and retaining qualified staff, lack of care, concern and commitment by staff, lack of cooperative relationships among staff, and having to counsel and/or fire employees were next most important. The highest stressors tended to be outside the administrators' control (inconsistencies among inspector's interpretation of rules and regulations, inspectors' negative attitudes and the attitudes and conduct of legislators).

Lappa (1989) summarized the results of an American Hospital Publishing, Inc., survey on chief executive officer stress. "An overwhelming 98.7 percent of 380 hospital executives consider their positions stressful" (p. 50). Chief executive officers ranked stress factors on a scale of one to five, with five being most stressful. Their causes of stress, in descending order, were financial problems, difficulties with recruitment and retention of staff, heavy workload and poor medical staff relations. Pressures from the Board and public/community ranked lower in terms of the amount of stress they produced.

Role conflict, role ambiguity and job dissatisfaction were studied in hospital executives in Texas (Burke, 1989).

The study population included all members of the American College of Health Care Executives in Houston and San Antonio. Respondents (N=119) completed a mailed questionnaire that included the Rizzo, House and Lirtzman (1970) scale to measure role conflict and role ambiguity, the Porter and Lawler (1968) job satisfaction instrument and organizational demographics. Hospital executives reported lower role conflict and role ambiguity scores Rizzo and colleagues' (1970) than industrial managers. Executives higher in the organization reported lower levels of role conflict, although the differences were not significant. Role ambiguity and job satisfaction varied according to the level in the organization with chief executive officers reporting significantly less role ambiguity and significantly more job satisfaction than their subordinates.

In summary, as Manitoba's rural nurse executives take on broader executive functions or assume the role of chief executive officer they will likely experience many of the unique and stressful demands of hospital administration. Heavy workload (Lappa, 1989; Quick et al., 1985), time demands (Numerof et al., 1984; Wisdom, 1984) and boundary spanning activities within and outside the organization (Mullen, 1985; Quick et al., 1985; Wisdom, 1984) are stressors common to health care executives. Other sources

of stress include managing conflicts (Wisdom, 1984) and difficult employee and medical staff relations (Lappa, 1989; Mullen, 1985) in the absence of colleagial support (Quick et al., 1985). Health care executives also have concerns about the volume of technical information managed, as well as, having the appropriate technical information for decision making (Quick et al., 1985; Wisdom, 1984). Financial problems and recruitment and retention difficulties are also known stressors for this group (Lappa, 1989).

Occupational Stress Among Nurse Executives

Professional-managerial conflict is a source of role conflict for nurse administrators (Nyberg, 1989; Styles, 1988). Professionals experience conflicting role expectations when the idealized perception of their role, as held by members of their profession, differs from the role expectation that emerges in the work setting (Carey, Craighead & Netzel, 1988). Directors of nursing were found to experience conflicting role expectations as the expectation of humanistic caring, nurturing and sympathetic qualities to which nurses are socialized differed from the multiple dimensions of their positions that emerged in the hospitals (Carey et al., 1988). The authors referred to conflicting role expectations as role dissonance, a facet of role conflict experienced by nurses in administrative positions.

As a top-level administrator, the nurse executive is "expected to perform an array of activities with an unusually diverse professional group" (Kulbok, 1982, p. 199). Arndt and Laeger (1970a) designed a study to determine whether directors of nursing have a diversified role set and, if so, to explore the relationship between their role set diversity and role strain. Role strain was defined as "felt difficulty in job performance" (p.253). Their study was based on the work of Snoek (1966) who described a diversified role set as one that involves maintaining working relationships with a wide variety of complimentary roles. Snoek asserted that the more diversified the role set, the greater the possibility of role conflict as each role occupant develops expectations attuned to their own goals and values. Role set diversity was more common in supervisory than nonsupervisory jobs (Snoek, 1966). Arndt and Laeger (1970a) administered questionnaires during personal interviews to a random sample of 47 directors of nursing from California hospitals. Three instruments were used: a tool to determine the percentage of time the directors of nursing interact with members of their work role set, a list of members within each role set and the Job Related Stress Tension Index (Kahn et al., 1964). Directors of nursing were found to have a highly diversified role set with the largest number of role senders

being outside their department. The number of role senders increased with organizational size. Kulbok (1982) described nurse executives' role set as including subordinates, the chief executive officer, the governing board, other department heads, physicians, patients, families, other nurse executives, and professional organizations. Arndt and Laeger's (1970a) study design did not permit establishing a causal relationship between role set diversity and role strain.

Arndt and Laeger (1970b) also explored directors' of nursing sources and consequences of stress. Conflicts within the structure of the work role, conflicts between the work role and other roles of importance (work-family), conflicts between role demands and personal needs, values and abilities, role overload, and role ambiguity were significant sources of stress. The study demonstrated that nurse executives occupied boundary positions, linking two departments. They also experienced many conflicting role pressures as they were bombarded with differing role expectations from all others in their role set.

A qualitative study designed to determine the factors leading to job satisfaction and dissatisfaction among 26 acute care nursing directors identified major stressors as lack of achievement, aspects of the work itself, hospital

policies, conflict with immediate supervisors, and interpersonal relations (Kovner & Oliver, 1977). Herzberg's motivation-hygiene theory (Herzberg, Mausner & Snyderman, 1959) was used as the conceptual framework. Half the sample was asked to describe a work situation in which they felt exceptionally good and half were asked to describe a work situation in which they felt exceptionally bad. Hygiene factors, which lead to job dissatisfaction, included interpersonal relations, supervision-technical factors ("the competence or fairness of the directors' superiors or the directors' willingness to delegate responsibility", p. 62), hospital policy and job security. Motivators, those factors which lead to job satisfaction, were mentioned in both positive and negative stories. Herzberg's theory was therefore not supported by the findings.

In a descriptive study, Johnson (1986) explored the relationship between work values and the level of role strain in a sample of 113 top-level nurse administrators in Washington and Oregon. Work values were defined as the meaning individuals attach to their work. Role strain was the subjective state of distress experienced by the role occupant when exposed to role stress. Role stress was defined as societal, structural conditions in which role obligations are difficult, conflicting or impossible to

meet. Instruments included a demographic questionnaire, the Survey of Work Values tool and the Job Demands and Work Health instrument. Quantitative workload and responsibility for others were significant sources of role strain and subsequent stress for nurse administrators.

Scalzi (1984, 1988, 1990) studied role stress in top-level nurse executives. A descriptive correlational design was used to identify the levels of role conflict, role ambiguity, job satisfaction and depressive symptoms, the major sources of job-related stress, and the relationships among these variables. This study's methodology consisted of mailed questionnaires (N=75) followed by semi-structured interviews with some respondents (N=30). Rizzo, House & Lirtzman's (1970) role conflict and role ambiguity scales and the Centre for Epidemiologic Studies Depression Scale (Radloff, 1977) were used. Three predominant job stressors were identified: overload stressor related to too many expectations; quality concern stressor related to poor quality of nursing staff, medical staff and patient care; lack of support stressor related to their supervisors and subordinates and to difficult interdepartmental relationships. Role conflict and role ambiguity were both negatively related to job satisfaction. Similar correlations were reported in other managerial groups (Burke

& Scalzi, 1988; Rizzo et al., 1970). Scalzi (1990) reported relationships between increased role conflict and increased role ambiguity, increased quality concern stress, and decreased job satisfaction. Higher levels of depressive symptoms were associated with higher levels of role conflict, role ambiguity and quality of concern stressor and lower levels of job satisfaction.

Scalzi's results for nurse executives were compared with Burke's results for 119 hospital executives (Burke & Scalzi, 1988). Nurse executives reported higher role conflict and role ambiguity scores than the hospital executives, although the differences were not substantial. Both groups reported significantly less role ambiguity than did the corporate and managerial staff (N=199) in Rizzo, House and Lirtzman's (1970) original study. Their role conflict scores were also lower, but not significantly lower, than Rizzo and colleagues' scores. Scalzi (1990) attributed the nurse executives' lower role conflict scores to the fact that the Rizzo, House and Lirtzman scale was not sensitive to role overload, a stressor reported by all nurse executives during their interviews. Schuler, Aldag and Brief (1977) studied role conflict and role ambiguity among staff nurses (N=374) in general hospitals. Schuler and associates staff nurses' role conflict scores were less than

Scalzi's nurse executives however, their role ambiguity scores were similar.

Cohen (1989, 1990) used a descriptive correlational design to explore the occupational stressors, coping strategies and sources and types of social support of nurse executives, compare the sample's level of psychologic symptomatology with norms and examine the effects of stressors, social support and optimism in predicting psychologic well-being. The sample included public health nursing directors from California. Data were collected through a mailed questionnaire (N=43) and follow-up interviews (N=21). The revised hassles and uplifts scale (DeLongis, Folkman & Lazarus, 1988) and open-ended interview questions with probes on lack of funding, program changes, understaffing, workload and quality of care concerns were used to gather data regarding work stressors. The brief symptom inventory was used to assess psychologic symptoms. Occupational stressors identified during the interviews were, in rank order, lack of funding, severe work overload, understaffing due to recruitment problems and position freezes, role conflict and role ambiguity, inadequate working space and conditions, political issues, program changes, quality of care and staff competency concerns, lack of power, ethical concerns, relationships with superiors,

increased regulation, communication difficulties and legal concerns regarding scope of practice. Nurse executives experienced some psychologic distress, although not at dysfunctional levels, as well as physical symptoms, such as sleep disturbances, gastro-intestinal symptoms, overeating, muscle tightness in the neck and headaches.

While data from the interviews portrayed moderately stressed nurse executives, total hassles failed to reach statistical significance in a regression analysis. The authors suggested that, "because most of the directors were moderately stressed, there was not enough variance to yield a good prediction" (p.210) or the hassles scale did not address the nature and scope of stress experienced by the nurse executives (Cohen, 1990).

The Health Professions Stress Index (Wolfgang, 1988) was used to measure the stress of 48 long-term care directors of nursing in New York (Kann, 1991). These directors of nursing were found to have moderate to high levels of stress. Their high stress areas related to the perception of having no peer support nor authority to make decisions, operating with inadequate members of staff while being limited in recruitment efforts by budget constraints, quantitative workload, new federal regulations and associated documentation, sensory overload, and managing

conflicts. As the older, more experienced directors of nursing reported less stress, Kann (1991) suggested that, with maturity and experience, directors either learn to manage their stress or their stress lessens as their management skills develop.

Summary

Rural communities and rural hospitals have characteristics unique to their setting. Rural nurse executives are responsible for providing nursing services to a population that places work before health, is self-reliant and independent, and prefers informal support systems (Long & Weinert, 1989; Weinert & Long, 1987). Other unusual circumstances that rural nurse executives encounter are an urban bias in resource allocation (Horne, 1989), a declining utilization of hospital services (Horne, 1989), difficulty recruiting physicians and nurses (Fuszard et al., 1990) and a state of transition in rural health services (Manitoba Health, 1992). Furthermore, rural nurses' generalist roles, increased scope of responsibilities due to the lack of physicians, other professionals and support staff, professional isolation and limited opportunities for continuing education are issues common to rural nurses (Anderson & Kimber, 1991). These issues are likely to complicate recruitment and retention problems for rural hospitals in the future.

Rural nurse executives function both as managers and direct care providers (Henry & Moody, 1986), assume responsibility for support services and serve as the hospital's liaison on many committees (Johnson & Barba, 1992). They face a multitude of job challenges (Chapman, 1968; Henry & Moody, 1986; Johnson & Barba, 1992) while being ill-prepared for their responsibilities and feeling professionally isolated from other nurse executives (Interlake/East Regional Nursing Directors, group interview, October, 1991). Nurse executives have diversified role sets and occupy boundary positions in complex stressful organizations (Arndt & Laeger, 1970a; Arndt & Laeger, 1970b). All factors combined create many challenges for rural nurse executives - challenges that set the stage for them to experience occupational stress.

Occupational stress has been acknowledged at the executive level but little research has been reported. Research related to stressors for health care executives is also limited. These studies varied in methodologies and stressor outcomes. Three recent American studies have investigated the major factors contributing to nurse executives' occupational stress. Certain stressors were commonly identified: work overload (Cohen, 1990; Kann, 1991; Scalzi, 1984), concerns about the quality of care

delivered (Kann, 1991; Scalzi, 1984), inadequate staffing (Cohen, 1990; Kann, 1991), role conflict and role ambiguity (Cohen, 1990; Scalzi, 1984) and increased government regulations (Cohen, 1990; Kann, 1991).

These studies, although enlightening, did not consider the unique aspects of rural health care settings. Furthermore, occupational stress for nurse executives in Canada has not been researched. An investigation of the sources of occupational stress of nurse executives in rural Manitoba's hospitals is timely, relevant and badly needed.

CHAPTER 3

RESEARCH METHODOLOGY

Design of the Study

Before addressing the issue of design, it is first necessary to consider the appropriateness of the research question. Wilson (1989) states "one mark of a good research study is that the research question is written at the appropriate level" (p. 234). "What are the perceived sources of occupational stress for top-level nurse executives in rural Manitoba community hospitals?" is classified as a level I question as it begins with "what.." (Wilson, 1989). Level I questions are used when little is known about the topic under study. As minimal information has been documented in the literature about nurse executives' occupational stress, a level I or "what" question is appropriate for this topic. Wilson (1989) asserts that level I inquiries allow for description of a subject and provide a foundation for higher level studies.

A descriptive design was appropriately chosen for this study, as it is a level I inquiry in which the goal is to describe a phenomenon about which little is known (Wilson, 1989). Descriptive studies serve to describe a single broad variable previously investigated in one population but not

in another (Brink & Wood, 1989). As the sources of occupational stress for top-level nurse executives has not been investigated in Manitoba's rural nurse executives, a descriptive design is therefore appropriate for this study.

Study Sample

This study's subjects were the top-level nurse executives working in (acute care) community hospitals in rural Manitoba. Nurse executives working in personal care homes, mental health centres and nursing stations were excluded from the study because, based on personal experience, the investigator was aware that nurse executives from these settings deal with many unique issues that predisposed them to different occupational stressors.

A top-level nurse executive is the department head for nursing; the one registered nurse from each hospital with overall administrative responsibility for the department of nursing. This person works in a non-unionized position and reports directly to the chief executive officer. Titles for these positions includes Assistant Executive Director or Director of Nursing. This position did not include the Assistant Director of Nursing, Nursing Supervisors, Nursing Coordinators or Head Nurses.

The ideal sample for a descriptive design is either the total population or a probability sample from the target

population (Brink and Wood, 1989). The target population "refers to the total group of subjects about whom the investigator is interested and to whom the results could reasonably be generalized" (Polit & Hungler, 1987, p. 195). The target population for this study included all top-level nurse executives working in the acute care hospitals in rural Manitoba. Seventy of the rural Manitoba hospitals listed in the 1992-93 Canadian Hospital Directory (Canadian Hospital Association, 1993) constituted the sampling frame for this study. Delphi questionnaires were mailed to the entire target population as the population was small enough to allow reasonable handling of the volume of data produced.

Procedure

The Delphi technique is a procedure designed to obtain a reliable opinion consensus from a group of experts using a series of questionnaires, interspersed with controlled opinion feedback (Dalkey & Helmer, 1963). Its benefit is that it involves a large number of people in forming a group opinion without the need for multiple meetings (Oberst, Ventura, Frederickson, Schmitt, Noel & Corless, 1981). Nursing has used this technique for a variety of purposes: to identify research priorities (Bond & Bond, 1982; Henry, Moody, Pendergast, O'Donnell, Hutchinson, & Scully, 1987; Lindeman, 1975; McKenzie & Gupton, 1985; Oberst et al.,

1981; Western Consortium for Cancer Nursing Research, 1987); to provide information for curriculum planning (Sullivan & Bryce, 1983); to predict future events in nursing and health care (Hill, 1984); and to select criteria to evaluate nursing care (Farrell & Scherer, 1983). It is a useful technique for involving administrators who cannot come together physically (Delbecq, Van de Ven & Gustafson, 1975). The Delphi technique is, therefore, an appropriate methodology for this study as through a series of mailed questionnaires it will be possible to obtain a majority opinion on the sources of occupational stress from all rural nurse executives who are widespread geographically across Manitoba.

The three key features of the Delphi technique, anonymity, iteration with controlled feedback, and statistical group response (Couper, 1984), strengthen the design of this study. Anonymity allows for freedom of expression without pressure from influential participants (Couper, 1984) and encourages greater frankness of opinion among the nurse executives. All nurse executives' responses are considered equally in the analysis. Iteration with controlled feedback uses successive rounds of questionnaires which incorporate the group's collective opinion (Couper, 1984). This feedback enables the nurse executives to

consider occupational stressors they had not considered, change or support their opinions, and address others' stressors. The end result is a consolidated opinion regarding the major occupational stressors for rural nurse executives. The statistical group response involves providing the mean or median response, along with their individual ratings, back to the respondents so they can see where their responses stand in relation to the group's response (Couper, 1984). Couper suggests that the group median is improved through anonymous feedback.

Ethical Considerations

Ethical approval was obtained from the Ethical Review Committee of the Faculty of Nursing at the University of Manitoba (Appendix B). Prior to mailing any questionnaires, the investigator telephoned potential subjects (Appendix C) to introduce the study and invite them to participate. At the time of mailing the first Delphi questionnaire a letter of introduction (Appendix D), which further described the study and requested consent to participate, was enclosed. In the telephone contact and the letter of introduction each nurse executive was assured confidentiality and anonymity. He/she was informed that participation was voluntary and that he/she could withdraw from the study at any time without recourse. The letter was written in a manner that

tried to stimulate the nurse executives' interest, give them a sense of the importance of their contribution, but not put undue pressure on them to participate. Returned questionnaires were deemed to represent the nurse executives' consent to participate. To ensure respondent anonymity, all questionnaires were coded, mailed and received by a secretary hired by the investigator. Information matching the subjects' identity with the code were kept locked and available only to the secretary doing the mailings. The investigator did not know the identity of the respondents until the analysis was completed. The reminder letters (Appendix E) attempted to elicit the nurse executives' participation without being coercive in any way.

The results are based on group data, not individual responses, thereby assuring the anonymity of participants. Furthermore, results are reported in a way that protects the identity of groups which might be identifiable because of small numbers. For example, data for male participants are not reported as a group as there are very few men in the target population and it would have increased the likelihood of the individual participants being identified.

Application of Delphi Technique

The Delphi procedure in this study consisted of three rounds of questionnaires. A demographic questionnaire,

which included questions about both the respondent and his/her hospital, was also mailed with the Round 1 questionnaire (Appendix F). Questions relating to the nurse executives included years in present position, years of prior nursing executive experience, number of equivalent full time positions supervised, number of departments supervised, salary range, educational preparation, advanced administrative preparation, sex, age and marital status. Questions relating to the hospital included number of beds, average occupancy, number of unionized and non-unionized nursing positions and distance from an urban hospital. This demographic information allowed for a comprehensive description of the sample.

A letter of introduction (Appendices D, H and I) and a self-addressed stamped envelope were sent with each of the three questionnaires. This procedure simplified and, therefore, increased the likelihood of return.

Round 1

The first questionnaire was a semi-structured, number-coded questionnaire designed to generate perceived sources of occupational stress from the nurse executives (Appendix G). "The first questionnaire in a Delphi allows participants to write responses to a broad problem issue"

(Delbecq et al. 1975, p. 90). Couper (1984) cautioned that participants may have difficulty responding to a broad question and suggested that starting with a list of questions or events may avoid irrelevant responses. Delbecq et al. (1975) argued that a broad problem statement allows the respondent to remain problem-focused but prevents them from focusing on a particular idea too soon. Furthermore, a general question avoids competition, status pressures and conformity issues. Since unbiased input from nurse executives was desired the "broad problem" approach was used. Nurse executives were asked to identify at least three major sources of stress that they experienced in their role as rural nurse executives. In addition, they were asked to add examples and brief comments to clarify their sources of stress. The instructions and questionnaire for Round 1 (Appendix G) were pilot-tested for clarity of wording and completion time with three fellow graduate students and two colleagues with nurse executive experience, prior to being mailed to the rural subjects.

Delbecq et al. (1975) recommended sending a reminder letter when questionnaires are not returned. If the questionnaires were not received by the two week deadline, a reminder letter that included an offer to answer any questions (Appendix E) was sent.

Round 2

In the second questionnaire, Round 1 respondents were asked to review and prioritize a summary of items from questionnaire 1 (Delbecq et al., 1975). In addition, the subjects could agree or disagree with items and clarify items with further comments. Questionnaire 2 allowed for identification of areas of agreement and disagreement, and an early understanding of priority stressors. Using the responses to Questionnaire 1, a list of stressors were compiled in random order for use as the basis to Questionnaire 2 (Appendix H). Rural nurse executives were asked to rate how stressful each item was in their job on a scale from 0 (no stress) to 5 (high stress). This rating scale created ordinal level data and allowed the investigator to establish a median for each stressor item. In addition, nurse executives were given the opportunity to add brief comments beside their scores.

Prior to mailing out Questionnaire 2, the instruction sheet and questionnaire (Appendix H) were pretested with two nurse executives outside the target population to check for face validity and ease of administration. As suggested by Delbecq et al. (1975), Questionnaire 2 included ample room for respondents' comments and had an estimated completion time of less than thirty minutes. A reminder letter

(Appendix E) was sent after two weeks to those subjects who had not replied.

Round 3

"The third and final questionnaire permits the participants to review prior responses and express their individual judgements as to the importance of each item" (Delbecq et al., 1975, p.103). This questionnaire allows for both the aggregation of priorities and the expression of individual differences in judgement.

Questionnaire 3 included the group's list of stressors complete with the group's median score and the individual's score for each stressor (Appendix I). Round 2 respondents were asked to reconsider their original ratings in light of others' responses and to qualify their responses where deemed necessary. As with the previous round, the investigator pretested Questionnaire 3 and its instruction sheet (Appendix I) with two nurse executives outside the target population, to check for face validity. One reminder letter was mailed after two weeks as required.

Limitations of the Study

This study presented a number of potential limitations. Certain aspects of the methodology were included to specifically address these limitations.

To lessen the attrition rate in later rounds of the Delphi technique, the investigator attempted to convey the importance of the nurse executives' continued participation with the letter and instruction sheet sent out with each round of questionnaires. In addition, reminder letters were mailed two weeks following each round's questionnaire. Assuring the subjects' anonymity and confidentiality of responses also served to increase participation. To determine whether those nurse executives who dropped out differed in important respects to the remaining participants, hence lessening the generalizability of the findings, demographic data were collected in Round 1 so that a comparison could be made.

All rural nurse executives in the target population were included in the sampling frame in an effort to obtain a representative sample and hence increase the generalizability of the findings. The potential for sample bias through nonresponse exists with the Delphi procedure (Polit & Hungler, 1987). To increase the response rate the investigator telephoned all nurse executives in the target population prior to mailing the first questionnaire to introduce the study and invite them to participate (Appendices C and D). As well, a Manitoba Nursing Research Institute pin was offered as a reward to those nurse

executives who returned all three questionnaires. Reminder letters were sent to reduce problems of nonresponse.

Validity and accuracy is an issue with self-report questionnaires (Polit & Hungler, 1987). The possibility of a social desirability response set existed with the Round 2 questionnaire as the participants may have tended to misrepresent their perceptions of stressfulness by giving answers that were consistent with prevailing nursing administration mores. A similar threat existed with the Round 3 questionnaire as the nurse executives may have been swayed to accept the group's response without considering the content of the stressors. Assuring anonymity and confidentiality fostered openness and frankness in their responses and, thereby, decreased the risk of response bias.

To avoid bias introduced by the subjects' fatigue during the completion of the 44 item questionnaire, three separate sequences of both the stressor categories and the items within the categories were used. Random assignment was used to determine the order in which the categories of stressors appeared in the questionnaire, as well as, the order of items within each category. The subjects were divided into thirds and each third received the same questionnaire sequence for Round 2 and Round 3.

As the investigator, an experienced rural nurse executive, had ideas about the sources of occupational stress and knew many of Manitoba's rural nurse executives personally, the potential for bias imposed by the researcher existed. The Delphi technique was chosen as it used self-report questionnaires thereby eliminating the possibility of interviewer bias (Polit & Hungler, 1987). Rather than using participants' names, a coding system was established for labelling all questionnaires. As well, the secretary hired for the project coded, mailed and received questionnaires. To address the issue of investigator bias during the analysis of the Round 1 data, six nurse executives' responses were coded by two nurse administrator colleagues to assess inter-rater reliability. Details of the procedure and outcome are described in the Round 1 analysis.

CHAPTER 4

RESULTS

The objectives of this study were to:

1) Explore and describe major stressors that have caused nurse executives in rural Manitoba's community hospitals to experience job related stress.

2) Determine the relative intensity of the identified stressors.

Data for this study were collected over a seven month period from October 1993 to May 1994. Initial telephone contacts to explain the study and invite the nurse executives to participate were made between October 14, 1993 and November 3, 1993. The mailing schedule for the pilot tests, questionnaires and reminder letters for the three rounds of the Delphi is summarized in Table 3.

Table 3

Mailing Schedule

Round	Pilot Test	Questionnaire	Reminder Letter
1	September 28/93	October 18-22/93	November 8/93
2	January 7/94	January 24/94	February 7/94
3	March 28/94	April 15/94	May 2/94

Sample Characteristics

From the 70 rural Manitoba hospitals listed in the 1992-93 Canadian Hospital Association Directory (Canadian

Hospital Association, 1993), the investigator located 65 nurse executives who met the inclusion criteria for the study. All agreed to participate in the study. Of the remaining five hospitals, three had a shared nurse executive position with other hospitals in the study, one did not have a non-unionized nurse executive position and one had been converted from an acute care to a long term care institution.

A total of 54 of the 65 nurse executives who agreed to participate in the study returned all three rounds of questionnaires (See Table 4).

Table 4

Response Rate

Round	# Mailed	# Responses	Percent
1	65	60	92
2	60	56	86
3	56	54	83

The risk of serious response bias is considered to be negligible if a response rate is greater than 60 percent (Polit & Hungler, 1987). With an overall response rate of 83 percent, this study's sample may therefore be considered representative of the target population.

Demographic Data

Demographic information (Appendix F) was collected with the Round 1 questionnaire. Unless otherwise indicated, descriptions of the demographic information is based on the 54 subjects who completed all three rounds of questionnaires. Descriptive statistics were used to summarize the demographic data.

The data regarding the nurse executives' age, sex, marital status and children are summarized in Table 5. Most subjects were married (81.5%) females (94.4%) in the 40-49 year range (48.1%) and had no children living at home (37.2%).

Table 5

Personal Information

Variable	n	Percent
Age		
20-29	2	3.7
30-39	14	25.9
40-49	26	48.1
50-59	11	20.4
60 & over	1	1.9
Sex		
Female	51	94.4
Male	3	5.6
Marital Status		
Single	4	7.4
Married	44	81.5
Divorced/Separated	4	7.4
Widowed	2	3.7
Children[a]		
0	16	37.2
1	6	14.0
2	11	25.6
3	7	16.3
4	2	4.7
5	-	-
6	-	-
7	1	2.3

Note. A dash indicates that no subject fell into this designated category.

[a] n = 43

Table 6 summarizes the data related to the subjects' nursing education, additional formal education, administrative preparation, experience in present and previous nurse executive positions and current annual salaries. Only twelve (23.5%) of the nurse executives reported having additional formal education. These 12 subjects were enrolled in or had completed master's degrees in public administration, health administration, business administration or nursing, baccalaureate degrees in nursing, health services administration or arts, or held intensive care nursing or nurse practitioner certificates.

Although most nurse executives had not achieved additional formal education beyond their nursing education programs, 94.4 percent of them reported having advanced administrative preparation. Of these subjects, the majority (51.0%) had completed the Introduction to Nursing Management: Distance Education Certificate Program. This program, previously run by the Canadian Hospital Association, is now offered as a credit course through McMaster University. Others reported having taken certificate programs such as the University of Saskatchewan's Health Care Administration Program, the University of Manitoba's Nursing Administration in the Health Care System Program, the Canadian Hospital

Association's Departmental Management Program or the University of Minnesota's Advanced Studies in Patient Care Administration. Almost 30 percent of the subjects had completed more than one certificate program in administration, most frequently the Introduction to Nursing Management: Distance Education Program plus the University of Saskatchewan's Program.

Table 6

Nurse Executive Education, Experience and Salary

Variable	n	Percent
Nursing Education[a]		
Diploma	40	74.1
Bachelor's Degree in Nursing	14	25.9
Master's Degree in Nursing	-	-
Additional Formal Education[b]		
B.A.	1	8.3
M.H.A.	1	8.3
M.B.A.	1	8.3
Other Degree	8	66.7
> 1 Degree/Certificate	1	8.3
Administrative Preparation[c]		
Introduction to Nursing Management: Distance Education Program	26	51.0
Other Certificate Program	10	15.7
Master's Degree	2	3.9
> 1 Degree/Certificate	15	29.4
Years in Present Position[a]		
< 1	5	9.3
1-5	27	50.0
6-10	5	9.3
11-15	13	24.1
> 15	4	7.4
Years of Previous Nurse Executive Experience[b]		
< 1	2	16.7
1-5	4	33.3
6-10	3	25.0
11-15	2	16.7
> 15	1	8.3
Current Annual Salary[a]		
$40,000 or less	2	3.7
$41,000-45,000	8	14.8
$46,000-50,000	23	42.6
$51,000-55,000	13	24.1
$56,000-60,000	6	11.1
$61,000 or more	2	3.7

Note. A dash indicates that no subject fell into this designated category.
[a] n = 54
[b] n = 12
[c] n = 51

Director of Nursing Services was the most common (57.4%) job title among the nurse executives in the study. The remaining 42.6 percent reported a variety of job titles such as Assistant Executive Director - Patient Services, Director of Patient/Resident Services, Administrator, Director, Facility Coordinator and Head Nurse. Most of the subjects (83.3%) reported being responsible for other departments or programs in addition to nursing. The additional departments or programs that were identified by 20 percent or more of the nurse executive group included Pharmacy, Central Supply, Physiotherapy, Activities, Dietary and Health Records.

As the data regarding the equivalent full time positions and the annual operating budgets under the responsibility of the nurse executives did not exhibit normal distributions the appropriate summary statistics to describe the central tendency and variation of these variables are the median and range, respectively (see Table 7).

Table 7

Equivalent Full Time Positions & Annual Operating Budgets Under Nurse Executives' Responsibilities

Variable	Participants		
	n	Median	Range
Equivalent Full Time Positions			
Unionized nurses	45	20	0-170
Nonunionized nurses	7	1	0- 32
Other	36	9	1- 60
Annual Operating Budget	47	$1,251,090	$35,000-$7,500,000

Information regarding the hospital's number of active treatment beds, average occupancy during the past year and distance from the nearest urban hospital (Brandon or Winnipeg) is summarized in Table 8. One nurse executive's data has been omitted from the data set for beds and occupancy as this subject gave two responses for each question.

Table 8

Hospital Information

Variable	n	Percent
Active Treatment Beds[a]		
< 15	14	26.4
16-30	26	49.1
31-60	7	13.2
61-125	6	11.3
Average Percentage Occupancy in Past Year[a]		
< 10	-	-
11-20	-	-
21-30	1	1.9
31-40	1	1.9
41-50	9	17.0
51-60	12	22.6
61-70	13	24.5
71-80	13	24.5
81-90	1	1.9
91-100	3	5.7
Distance in Miles from Urban Hospital		
< 25	2	3.7
26-50	11	20.4
51-75	12	22.2
76-100	12	22.2
101-125	6	11.1
126-150	3	5.6
151-175	-	-
176-200	-	-
201-250	1	1.9
> 250	7	13.0

Note. A dash indicates that no subject fell into the designated category.

[a]n = 53

In summary, the typical nurse executive in a rural Manitoba community hospital is a married female, 40-49 years of age with no children living at home. She has not earned a further formal degree beyond her basic diploma nursing education, but has completed the Introduction to Nursing Management: Distance Education Certificate Program. She has not previously held a nurse executive position. The typical participant has worked in her current job for 1-5 years, earns $46,000-$50,000 annually and is responsible for 30 equivalent full time positions and an annual budget of $1,251,090. The typical rural Manitoba hospital has 16-30 active treatment beds, an average annual occupancy between 51-80 percent and is 26-100 miles from an urban hospital.

There were four dropouts in Round 2 of the study and an additional two in Round 3. The demographic information for these subjects was compared to the demographics of the typical nurse executive. Because the dropouts were few in number, it was not possible to draw conclusions statistically about their differences. From a qualitative perspective there were also few discernable differences. The dropouts tended to be older, have more experience in their present position and work further from an urban centre in hospitals with lower average annual occupancies than the typical nurse executive.

Data Analysis

Round 1 Analysis

The Delphi procedure required data analysis after each round of questionnaires. The analysis of Round 1 resulted in a summary list of items that reflected the respondents initial opinions (Delbecq et al., 1975). Round 1 responses were analysed using Delbecq and colleagues' (1975) method, resulting in a list of occupational stressors expressed in terms used by the nurse executives.

Round 1 questionnaires were read through several times to develop a general sense of the stressors and terminology used. The identified stressors were transcribed verbatim onto index cards so that each card represented one item from one questionnaire. As suggested by McKenzie and Gupton (1985), items that were ambiguous or incomprehensible were eliminated form the data set. A total of 183 usable items were identified on index cards. After reading the entire data set again, the investigator sorted the index cards so that essentially identical items were placed in a stack.

The next step involved labelling each card stack and establishing a set of labels suitable for coding all responses. "The essential criterion for establishing the list (of labels) is to arrive at a mutually exclusive but

exhaustive set of categories. Each final label must be clear and concise" (Delbecq et al., 1975, p. 95). Whenever possible, the investigator used the subjects' terms or wording in the labels as familiar language would enhance their understanding of the stressors in the Round 2 questionnaire. Table 9 illustrates a sample of the labels and the Round 1 data from which they were derived.

Table 9

Sample Stressor Labels and Round 1 Data

STRESSOR	EXAMPLE	COMMENT
Label: Isolation/lack of support from other nonunion management nurses.		
Lack of support from others, i.e. Out-of-Scope nurses.	When going through a work stoppage, staff or work restructuring process, there is no other out-of-scope nurses.	I don't think that unionized nurses, other departmental directors, the CEO or the board understands the "aloneness" that a rural Director of Patient Care Services can feel in these situations.
Feelings of isolation when you are the only nonunion nurse in the facility.	Dealing with grievances that sometimes have provincial implications or are just plain stressful.	Director of Nursing (DON) support groups extremely valuable.
Isolation - no close network of peers to meet with, meetings of DON's too far away geographically.	Who do I call when I can't figure out a new staffing pattern or would just like to talk about discipline problem?	It is hard to justify driving 2 hrs for a 2 hr meeting & then 2 hr drive home again.
Unavailability of peer support.	I am sole nurse manager in my facility with a good distance to travel to meet my provincial peers.	The distance required to travel to meetings is too time consuming I miss many meetings due to this fact.
Loneliness of position, only nurse in management position.	Coalition of nurse and physicians to pressure nurse executive to agree to situation which is not sound from a management point of view.	It is not uncommon for CEO's to sit on fence in these situations.
Label: Lack of input from rural nurses into health care planning at the provincial level.		
Lack of input from rural nursing into health care reform plans.	The nursing guidelines by Manitoba Health clearly show a lack of understanding on how a rural health centre operates.	Will it change? It's probably too late; the wheels are in motion and I'll just have to make the best of it.

STRESSOR	EXAMPLE	COMMENT
Frustration ++	Correspondence from Manitoba Health with no validation of information or vision of future health delivery - lack of strategy or plan.	Funding guidelines were enforced without any collaboration with stakeholders - MARN, MALPN, DON's, staff, etc.
The systems, i.e. Manitoba Health Organization and Manitoba Health, constantly solicit direction from Boards and CEO's without considering the expertise of the DON's.	All correspondence is directed to Boards or CEO's. With a CEO like above description (Shares only parts of correspondence which leads to misinterpretation of information. No direction or leadership on critical leadership on critical issues. No support for DON if controversy), DON is excluded from decision making.	If a true analysis was done in most rural facilities, DON's are responsible for all care services but there is never any credit given to this - only the fiscal responsibilities.
Label: Management style of CEO.		
Administrative management style.	Change in CEO results in change of management style, i.e. open to closed style.	Adjusting management style the CEO's is stressful to both DON and staff especially from open to closed style.
Personality conflict with CEO.	Leadership style dictatorial, patriarchal. Very demeaning and aggressive. Needs to control.	His approach verges on harassment at times. Occasionally feel there is no trust on his part. Interferes with everyday running of the department.
Beliefs, values and work ethic are in conflict with administrator.	Autocratic employer lacking respect for the worth of people, professionals and women. Withholds information and acts independent of the team process.	Results in a sense of isolation. Destroys self esteem and the team approach to leadership.

Forty-four stressor labels were derived from the card stacks. These labels became the basis for the stressors listed in the Round 2 questionnaire (Appendix H). Some of the index cards contained information that related to more than one label. These cards were duplicated and a copy was placed with each label. For example, one subject identified as a stressor "isolation from peers and educational opportunities. All nursing staff are unionized. Dialogue with peers and opportunity for education is more difficult due to distances." A copy of this card was placed under two labels: isolation/lack of support from other nonunion management nurses, and; isolation from education opportunities for rural nurse executives/rural nurses.

The stressor labels formed natural clusters as many pertained to the same general topic. For example, five of the labels or stressors related to the Chief Executive Officer. Six clusters that emerged related to the chief executive officer, the nurse executive's job, health reform, physicians, staff and staff relationships and Board of Trustees/Community. To provide a framework for organizing the stressor labels for the Round 2 questionnaire the investigator grouped the labels under these six cluster categories. The categories and stressor labels are listed in the Round 2 questionnaire (Appendix H).

The assigned labels were tested for interrater reliability. Two colleagues, an assistant director of nursing and a nursing supervisor from a rural hospital, were asked to read the completed Round 1 questionnaires of six subjects and match the 18 identified stressors with the labels developed by the investigator. Fifteen of the 18 stressors were assigned the same label as the investigator, for an 83.3 percent interrater reliability. An interrater reliability of over 80 percent is acceptable for purposes of determining that investigator bias is not a significant factor during Round 1 analysis (Shelley, 1984).

Round 2 Analysis

Subjects were asked to rate the stressfulness of each item on the list of identified stressors on a scale from 0 (no stress) to 5 (high stress). As this type of scale creates ordinal level data, the median is the appropriate measure of central tendency (Polit & Hungler, 1987). Under the direction of a statistical consultant, the SAS Computer package was used to analyse the Round 2 data. All variables were tested for normality. None were found to assume normal distributions, providing further justification for choosing the median as the measure of central tendency. The medians, which ranged from 1 - 4.5, were used as the group response in the Round 3 questionnaire (Appendix I). Because many of

the stressors had the same median values the means were used for ranking purposes in determining the relative intensity of the stressors. The sixteen stressors that ranked highest in intensity on the stressfulness scale are listed in Table 10. The complete ranking of the stressors for Round 2 is included in Appendix J.

Subjects were requested to add comments regarding the stressors. Specifically they were asked to argue in favour or against an item or request clarification if an item was unclear. Many comments were received. These comments were compiled according to each stressor and read several times to determine if any items overlapped, lacked clarity, or had been interpreted differently by the subjects.

As illustrated in the following examples, the nurse executives' comments added richness to the data and emphasized their numerical scores. One subject, who scored the stressor Management Style of CEO highly, added the comments:

> Autocratic; I must constantly assert my right to fair leadership or CEO will (and has) yell, throw things, beat on the desk with his fist. This is very anxiety producing. I wear a mask and play a role from the time he arrives till he leaves. If

> not, then he completely dominates every aspect of my job. His limited understanding of our problems and needs, combined with a dictator-type style of leadership, contributes to a very high stress level.

The comment of one nurse executive, who scored a four for the stressor: laying off staff in a small community where staff are known personally and/or socially to the nurse executive was "Hospital/PCH (personal care home) is No. 1 employer (in our community) and the sluggish rural economy places responsibility for the livelihoods of farm families on the staff of the facility." For the stressor: inconsistent government directives related to health reform/cutbacks, another nurse executive added "My stress is in the form of frustration and anger - such inconsistent work habits on my part would lead to reprimand and/or dismissal, but must be tolerated due to our double standard". "Conflict consumes energy in enormous amounts. Unions give lip service to patient care" was one comment related to the stressor, dealing with union issues, grievances and arbitrations. Another emphasized the stressfulness of physicians influencing operational matters by adding "physicians answer to no one in small community hospitals. If they leave, the Board knows they will be

stuck with no doctor. A no win situation. All doctors should be salaried by the facility."

Comments were also shared for stressors scored at the lower end of the scale. "I like change - do not find this particular aspect of my role stressful" was the comment given by one subject who scored a one for the stressor: dealing with constant change. Another subject added "The Board members are good listeners and very supportive of administration" regarding the stressor: lack of support/understanding for nurse executive's role by the Board of Trustees.

In general, subjects' written comments did not indicate overlap or lack of clarity. Rather, comments reflected their thoughts and feelings about the stressors and supported their chosen stress scores. When a disparate comment arose the investigator considered it in light of the group's score and comments for that item. In most instances the disparate comment reflected the subject's unique work situation and was not indicative of the item being misunderstood. As comments seemed to be added as qualifiers to chosen stress levels rather than as indicators of overlap or lack of clarity among the listed stressors, the items were left unchanged for the Round 3 questionnaire.

Round 3 Analysis

Nurse executives were asked to review the identified stressors and reconsider their original ratings in light of the group's responses. The SAS computer package was used to analyse the Round 3 data that included the subjects' changes in rating. As none of the variables were found to assume normal distributions the medians were used as the appropriate measure of central tendency. As in Round 2, the means were used for ranking the intensity of the stressors. The medians and means for the sixteen stressors that ranked highest in their degree of stressfulness are identified in Table 10. A complete ranking of the stressors based on the Round 3 data is found in Appendix J.

Table 10
The Top 16 Nurse Executive Stressors Ranked by Intensity in Delphi Round 2 (n=56) and Round 3 (n=54)

Category	Stressor	Round	Rank	Mean	Median
Health Reform	Inconsistent government directives related to health reform/cutbacks. (For example, plans rushed to meet Oct. 1/93 deadline, then plans for cutbacks put on hold indefinitely).	2	1	4.107	4.5
		3	1	4.370	5.0
Health Reform	Concern that application of Manitoba Health's staffing guidelines will compromise the standard/safety of patient care provided.	2	2	3.786	4.0
		3	2	3.870	4.0
Nurse Executive's Job	Nurse executive job parameters are too broad (too many roles/ "hats", too many departments/ programs, spread too thin).	2	4	3.696	4.0
		3	3	3.759	4.0
Nurse Executive's Job	Insufficient time in a day to complete work.	2	6	3.536	4.0
		3	4[a]	3.741	4.0
Health Reform	Change in nurse executives role/ responsibilities related to health reform (new work, more work, less administration time).	2	7	3.527	4.0
		3	4[a]	3.741	4.0
Health Reform	Lack of input from rural nurses into health care planning at the provincial level.	2	3	3.732	4.0
		3	6	3.722	4.0
Health Reform	Laying off staff in a small community where staff are known personally and/or socially to the nurse executive.	2	5	3.554	4.0
		3	7	3.556	4.0
Health Reform	Uncertainty about the future of hospital and the potential economic stress to the community.	2	8	3.518	4.0
		3	8	3.519	4.0
Health Reform	Decreased staff morale related to layoffs/loss of jobs.	2	9	3.455	4.0
		3	9	3.407	4.0

Category	Stressor	Round	Rank	Mean	Median
Health Reform	Threat to job security for nurse executive (reduced hours, layoff).	2	10	3.286	4.0
		3	10	3.222	3.5
Health Reform	Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	2	13[b]	3.107	3.5
		3	11	3.111	3.0
Health Reform	Limited resources available for service delivery due to budgetary restraints (staffing, medical-surgical supplies, pharmacy budget cuts).	2	13[b]	3.107	3.0
		3	12	3.074	3.0
Staff/Staff Relationships	Promoting professional attitudes and behaviours in staff that are content with the "status quo". (Staff apathetic/indifferent to continuing education/professional development).	2	12	3.125	3.0
		3	13	3.056	3.0
Staff/Staff Relationships	Dealing with problems of poor performance, including disciplinary measures.	2	15	3.036	3.0
		3	14	2.963	3.0
Nurse Executive's Job	Isolation from educational opportunities for rural nurse executives/rural nurses.	2	16	2.982	3.0
		3	15	2.926	3.0
Staff/Staff Relationships	Staff and/or physicians resistant to change.	2	11	3.179	3.0
		3	16	2.907	3.0

Note. Stressors are listed in rank order of mean scores for Round 3

[a] mean score was tied at 3.741 for Round 3

[b] mean score was tied at 3.107 for Round 2

As in Round 2, subjects were asked to comment or qualify their opinions as desired for any of the stressors. Noticeably fewer comments were received on the Round 3 questionnaires. The comments were compiled according to each stressor and reviewed in detail to determine whether the Round 3 instructions had lacked clarity. There was no evidence that the instructions had been misunderstood. Comments were added to qualify the subjects' reasons for either changing or not changing their stress score from Round 2 to Round 3.

Some comments were added to defend a stress score that differed from the group's score. For example, the group score (median) for the stressor: isolation/lack of support from other nonunion management nurse was two. Subjects with stress scores of four or five added comments such as "I still feel we are very isolated", "Only nonunion nurse in facility", "Limited amount of support. I am only nonunion nurse in facility", and "We are isolated". On the other hand, subjects with stress scores of one or two offered comments such as "I enjoy the challenge of various 'hats' and the scope of understanding it gives." and "The statement is true. It is not a high source of stress for me.", for the stressor: nurse executive job parameters are too broad (median = 4.0). These comments were considered solely as

justification for disparate scores. As the purpose of the Delphi procedure was to obtain the group's consensus regarding priority stressors, the group's score was given primary consideration.

In addition, some comments were given to demonstrate agreement with the stressor and the corresponding group stress score. "Filmon Fridays directive was another example of crisis management from government" and "Bill 22 information dated March 28, to be implemented April 1, arrived April 5th!" were comments added for the stressor: inconsistent government directives related to health reform/ cutbacks.

Some of the changes in nurse executives' responses between rounds were related to events that had occurred in either their employment situations or their institutions. For example, one subject's comment "previous response from previous employment situation. Situation different now." accompanied a lower Round 3 stress score for the stressors: lack of support from CEO, conflict between nurse executive role and CEO role when nurse executive is "in charge" in CEO's absence, staff lack commitment to hospital, lack of communication/"turf protection" between departments, affecting the delivery of nursing care, and staff and/or physicians resistant to change.

Changes in some nurse executives' job roles/responsibilities during the data collection period accounted for increases in their Round 3 stress scores for the stressors: insufficient time in a day to complete work and change in nurse executives' role/responsibilities related to health reform. One comment that accompanied an increase in stress score from a two in Round 2 to a four in Round 3 was "Have just taken on Assistant Director of Nursing and Staff Development roles". Another added "Quickly changing environment; absorbed more jobs" to a change in stress score from a three to a five.

Six subjects reported situations, in which their Chief Executive Officers had either changed or gone on extended leaves of absence during the data collection period. As a result, some of their stress scores for the CEO-related stressors changed. For example, one subject, whose stress scores for the CEO-related stressors dropped from five to zero, indicated that the CEO had been on an extended leave of absence and would not be returning. Another participant reported an increased stressfulness in Round 3 for the stressors: lack of support from CEO and ineffective organizational structure with the hiring of a new CEO. The stressfulness of the CEO-related stressors clearly depended upon the characteristics of the current CEO.

In both Rounds 2 and 3 there were stressors with identical mean scores. Urgency indicators were used to discriminate between the degree of stressfulness for these items. Specifically, to differentiate between stressors with the same mean scores, the percentage of subjects that ranked each stressor as a five and the percentage that ranked each item as a four or five on the stressfulness scale were calculated. The item with the higher percentage of fives or higher percentage of fours and fives was considered more stressful. Urgency indicators and ranks for stressors within the top 16 category that had tied means are found in Table 11. A complete list of all stressors that had identical mean scores in either Round 2 and Round 3, their urgency indicators, and their relative rankings is contained in Appendix K.

Table 11

Urgency Indicators to Differentiate Between Top 16 Stressors with Identical Mean Scores

Stressor	Median	Mean	%4+5	%5	Rank
Round 3 (n=54)					
Change in nurse executives role/ responsibilities related to health reform.	4	3.741	42.6	16.7	2
Insufficient time in a day to complete work.	4	3.741	64.8	27.8	1
Round 2 (n=56)					
Limited resources available for service delivery due to budgetary restraints.	3	3.107	39.3	16.1	2
Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	3.5	3.107	50.0	28.6	1

A comparison of the medians, means and rankings for the stressors in Round 2 and Round 3 showed that the opinions regarding the stressfulness of the certain items had changed. Some items were ranked as more stressful in Round 3 whereas other items were perceived as less stressful once the group's opinion from Round 2 was considered.

A computer analysis was done to determine whether there were statistically significant changes in the stressors' mean scores between Round 2 and Round 3. The defining factor in this analysis was that most nurse executives did

not change their stress scores between rounds. The percentage of subjects that indicated no change in their stress scores between rounds ranged from 72.2 percent for the stressor: deadlines for implementation of staffing guidelines, did not allow for planning or staff involvement, to 94.3 percent for the stressor: continued "bad feelings" about the Manitoba Nurses' Union Strike of 1991. Table 12 depicts the changes in stress scores from Round 2 to Round 3 for the sixteen stressors that were ranked highest in stressfulness. A complete listing of the stressors and the corresponding changes in stress scores between rounds is located in Appendix L. As at least 72.2 percent of the nurse executives showed no differences in their stress scores for all 44 items, there was clearly no real difference in the mean scores between Round 2 and Round 3 of the Delphi Procedure. This result indicated the commonality of the identified stressors among rural nurse executives. Health reform continued as a major contextual factor throughout the data collection period giving rise to the majority of highly stressful items.

Table 12
Changes in Stress Scores for the Top 16 Nurse Executive Stressors Between Delphi Round 2 and Round 3

Stressor	Change in Stressors: No Change #	%	Increased Stress #	%	Decreased Stress #	%
Inconsistent government directives related to health reform/cutbacks.	46	85.2	8	14.8	0	0
Concern that application of Manitoba Health's staffing guidelines will compromise the standard/safety of patient care provided.	42	77.8	7	13.0	5	9.3
Nurse executive job parameters are too broad.	44	81.5	5	9.3	5	9.3
Insufficient time in a day to complete work.	45	83.3	8	14.8	1	1.9
Change in nurse executives role/ responsibilities related to health reform.[a]	43	81.1	8	15.1	2	3.8
Lack of input from rural nurses into health care planning at the provincial level.	44	81.5	4	7.4	6	11.1
Laying off staff in a small community where staff are known personally and/or socially to the nurse executive.	49	90.1	1	1.9	4	7.4
Uncertainty about the future of hospital and the potential economic stress to the community.	45	83.3	4	7.4	5	9.3
Decreased staff morale related to layoffs/loss of jobs.	42	77.8	5	9.3	7	13.0
Threat to job security for nurse executive.	47	87.0	3	5.6	4	7.4
Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	39	72.2	6	11.1	9	16.7

Stressor	Change in Stressors: No Change #	%	Increased Stress #	%	Decreased Stress #	%
Limited resources available for service delivery due to budgetary restraints.	41	75.9	5	9.3	8	14.8
Promoting professional attitudes and behaviours in staff that are content with the "status quo".	45	83.3	2	3.7	7	13.0
Dealing with problems of poor performance, including disciplinary measures.	46	85.2	1	1.9	7	13.0
Isolation from educational opportunities for rural nurse executives/ rural nurses.	41	75.9	5	9.3	8	14.8
Staff and/or physicians resistant to change.	40	74.1	2	3.7	12	22.2

[a]n = 53

In summary, there were 44 items identified as sources of occupational stress for top-level nurse executives in rural Manitoba's community hospitals. The use of the Delphi procedure resulted in the development of a consolidated opinion as to which stressors the nurse executives perceived as most stressful. Firstly, the subjects were asked to rate how stressful each item was in their particular job. Secondly, they were asked to reconsider their original rating in light of the group's median response for each item. The means were used to determine the relative intensity of the identified stressors. Of the 16 stressors that ranked highest in the degree of stressfulness, ten pertained to health reform, three related to the nurse

executive's job and three were associated with staff and staff relationships. Inconsistent government directives, concern that application of government's staffing guidelines would compromise patient care, inadequate time for planning and staff involvement in guideline application, changes in the nurse executive's roles and responsibilities, threats to job security for nurse executives, laying off staff in a small community, decreased staff morale related to layoffs, uncertainty about the hospital's future, lack of nursing input into health care planning and limited resources available for service delivery were the major stressors arising from health reform.

Job parameters that were too broad, having insufficient time in the day to complete their work and being isolated from educational opportunities were job factors that the nurse executives found to be highly stressful. Stressors related to staff and staff relationships that were highly stressful included promoting professional attitudes and behaviours in staff that are content with the "status quo", dealing with problems of poor performance and resistance to change on part of staff and physicians. Some changes in the ranking of stressors were observed between Round 2 and Round 3, however these changes were not found to be significant.

CHAPTER 5

DISCUSSION

A paucity of information exists relevant to work-related stress for rural nurse executives, particularly in a Canadian setting (Arndt & Laeger, 1970b; Carey, et al., 1988; Cohen, 1989, 1990; Johnson, 1986; Kann, 1991; Kovner & Oliver, 1977; Scalzi, 1984, 1988, 1990). Consensus emerged as to the major work-related stressors for nurse executives in rural Manitoba's community hospitals over three rounds of the Delphi procedure used in this study. Stressors arising from effects of the government plan for health reform were generally the most stressful for this nurse executive group. Other issues that were highly stressful related to the nurse executives' jobs and to staff and staff relationships.

The following discussion of the research findings is organized according to Cooper and Marshall's (1978) Sources of Managerial Stress Model. The discussion begins with the sources of stress arising within the institution, then moves to stressors occuring outside the organization's boundary, and ends with major stressors not found in Cooper and Marshall's (1978) model. The literature review provides the basis for comparison of this study's findings with those of previous research.

Stressors are discussed either with reference to their ranking by intensity in Round 3 (Appendix J) or, more generally, in terms of their relative degree of perceived stressfulness. For purposes of discussing the relative degree of stressfulness, the 44 items were arbitrarily divided into thirds according to their ranks and referred to as high, medium or low in perceived stressfulness. As the top 16 ranked stressors formed the same cluster in Round 2 and Round 3 they were considered the high stressor category. Stressors that ranked 17-30 were considered as medium range stressors. The low range included those stressors with ranks 31-44.

Stressors Within the Organization

Factors intrinsic to the job, the role in the organization, relationships at work, career development and the organization structure and climate guide the discussion of stressors arising within the organization.

Factors Intrinsic to the Job

Intrinsic job factors purported to cause stress for managers include having too much work, too many decisions, time pressures and deadlines, long hours, having to cope with changes and the expenses of making mistakes (Cooper & Marshall, 1978). Job parameters that were too broad and the

resultant heavy workload was the third most stressful stressor identified in this study. Heavy workload/overload has been previously reported by executives (Burke & Belcourt, 1974), health care executives (Lappa, 1989; Quick et al., 1985), and nurse executives (Arndt & Laeger, 1970b; Kann, 1994; Johnson, 1986; Cohen, 1989; Scalzi, 1984). The diversity of rural nurse executives' roles (Chapman, 1968; Henry & Moody, 1986; Johnson & Barba, 1992) was described by many participants in this study. Two subjects' comments illustrated their "jack-of-all-trades" roles:

> "If you need a maternity nurse, equipment fixed, someone to teach CPR (cardiopulmonary resuscitation), someone to talk to a grieving family, ambulance supplies checked, a room at the PCH painted, a nurse to start IV (intravenous), someone to work on budget, sit on a reform committee, etc., etc. - Call the DON (Director of Nursing)!"

Another added, "Role includes: scheduling, purchasing, inservicing, planning, direct patient/resident care when necessary - both on unit and ambulance transfers, providing annual performance appraisals for >50 staff members, multiple committee representation, managing, liaising, crisis intervention". Not only do rural nurse executives assume a greater variety of roles within the nursing

department (manager, direct care provider, staff development officer, infection control officer) than their urban counterparts, many also assume roles held by other departments in larger hospitals (purchasing agent, pharmacist). This diversity of roles contributes to their overwhelming workloads and the associated perceived stress.

Insufficient time in the day to complete work ranked fourth in intensity of stressfulness among the study's participants. Comments such as, "trying to ensure I meet requirements of job description in 8 hour days is impossible. Time frames of projects - health reform - makes for anxious moments" and "Never enough time to complete work. There are always interruptions with day to day things making it difficult to work on and complete projects" clearly articulated the subjects' time pressures and deadlines. In addition, the government's July 1993 directive to implement staffing guidelines by October 1, 1993 gave rise to the highly stressful item: deadlines for implementation of staffing guidelines did not allow for planning or staff involvement. Experiencing time pressures and deadlines has been reported by both nurse executives (Cohen, 1989; Scalzi, 1984) and health care executives (Mullen, 1985; Numerof et al., 1984; White & Wisdom, 1985; Wisdom, 1984). The subjects' diverse roles also predisposed

them to stress related to time pressures and deadlines. Furthermore, many participants' time pressures intensified during the course of the study because of organizational changes related to health reform. Some subjects had taken on additional roles, such as Assistant Director of Nursing and Staff Development roles, while others reported having their hours cut from full time without a corresponding reduction in responsibilities.

As a result of having job parameters that were too broad and being faced with time pressures and deadlines many nurse executives reported working long hours. One subject commented "more work is being taken home, (am) often awake at night reviewing mental task checklist". Another offered, "almost every night I bring work home, plus attend several evening meetings". Nurse executives in both rural and long term care settings were also found to work long hours (Henry & Moody, 1986; Kann, 1991). Rural nurse executive colleagues have discussed doing project work at home in the evening to avoid interruptions and the conflict of other work roles. In addition, many attend work-related meetings during the evening without compensation for this time. Long work hours is likely to become a greater stressor given the trends occurring with health reform.

Dealing with constant change at work was identified in this study although it was not one of the highly stressful

items (see Appendix J). Coping with change was not identified as a major stressor in other related studies (Cohen, 1989, Kann, 1991, Scalzi, 1984). Health reform has caused many changes in Manitoba's health care system. Rural nurse executives play a key role in facilitating change in their local hospitals. Dealing with constant change was found to be stressful by some participants while others viewed change as a positive challenge or as "part of the job". Consequently this stressor ranked only twentieth in intensity of stressfulness. Those subjects that found change stressful often made reference to the uncertainties and changes stemming from health reform. "This has only been a problem since Health Care Reform" and "this has been exceedingly stressful in the past 12 - 18 months" were such comments.

Poor monetary remuneration for rural nurse executives' job responsibilities was an intrinsic job stressor identified in this study that had not been reported in other related studies (Cohen, 1989, Kann, 1991, Scalzi, 1984). Manitoba Health's former funding guidelines for senior management positions in rural hospitals resulted in the nurse executives earning less or minimally more than their unionized staff nurses who earn weekend, shift and responsibility premiums in addition to their base salaries.

Having broad job parameters and an overwhelming workload in combination with a minimal salary differential from their subordinates, resulted in this study's nurse executives feeling undervalued and underpaid.

Role In Organization

Stressors arising from the manager's role in the organization may include role ambiguity, role conflict, having responsibility for people, having too little responsibility, lack of managerial support, dealing with increasing standards of performance and coping with rapid technological change (Cooper & Marshall, 1978).

Role ambiguity was not identified as a stressor in this study. Lack of clarity about roles has contributed to the overall role stress of nurse executives in some previous studies (Arndt & Laeger, 1970b; Cohen, 1989) but not in others (Scalzi, 1990). The lack of clarity identified in this study related to directives from Manitoba Health regarding application of new staffing guidelines and Bill 22. Bill 22 was enabling legislation introduced to assist health care employers in meeting their budgetary targets for the fiscal years 1993/94 and 1994/95. It allowed employers to impose upon employees an unpaid leave of absence of up to 15 days each year (Manitoba Health Organizations, 1993).

Comments regarding lack of clarity about work objectives or about the scope and responsibilities of their jobs were not evident.

Conflict between the nurse executive role and CEO role when the nurse executive was in charge of the hospital in the CEO's absence was initially identified as a stressor, but the overall consensus was that it was one of the least stressful items for the group as a whole (see Appendix J). However, comments offered by participants in relation to various other stressors indicated that they experienced the role conflicts repeatedly reported by other health care managers (Arndt & Laeger, 1970b; Burke, 1989; Cohen, 1989; Kann, 1991; Kovner & Oliver, 1977; Mullen, 1985; Numerof, et al., 1984; Quick, et al., 1985; Scalzi, 1984; Wisdom, 1984). One subject in this study described the nurse executive's role as "very fragmented with many demands from diverse departments on many different issues." Comments such as "everyone gives the rural DON the message that they don't get enough of your time (hospital nurse, PCH staff, ambulance personnel, dietician, pharmacist)", "trying to please all of the people all of the time" and "staff not realizing how many directions the nurse executive is pulled" reflected the conflicting demands experienced by rural nurse executives. "The DON role is a very central one in rural

Manitoba (hospitals) and involves relationships with nursing staff, medical staff, CEO, management staff, support staff, medical records, clinic, business office, etc." aptly described the diversified role set of rural nurse executives that predisposed them to role conflicts.

The "jack-of-all trades" role of the rural nurse executive resulted in them experiencing inter-role conflicts. In addition, the stressor: change in nurse executive's role/responsibilities related to health reform (cut backs in administrative time, shared DON position between hospitals, combined CEO/DON role, increased direct care provider role) further exposed them to role conflict.

Having responsibility for people is more stressful than having responsibility for things as it involves spending more time interacting with others, attending meetings, working alone and trying to meet deadlines (Cooper & Marshall, 1978). Stressors related to having responsibility for people were identified in this study. Dealing with problems of poor performance, including disciplinary measures, and dealing with union issues, grievances and arbitrations ranked fourteenth and eighteenth respectively in the degree of perceived stressfulness. Similar personnel problems were also stressful for Cohen's (1989) nurse executives. Poor performance and union-related issues were

likely problematic for many rural nurse executives as they lack the expertise to deal with these matters and do not have the support of other nonunionized nurse managers or human resource managers in their workplaces as do their urban colleagues. Furthermore, one might expect that encountering these issues in a small community hospital would result in conflict between the nurse executives' work and community roles as often staff are known professionally, personally and socially. In this study supervising staff who were peers and/or were known personally and socially was identified as a stressor, however the group consensus was that it was a low range stressor (see Appendix J). Most nurse executives were either new to their community, chose not to socialize with their staff, or felt they were able to effectively separate their work and community roles.

As the nurse executive is responsible for ensuring an adequate complement of nursing staff, difficulty in recruitment and retention of permanent and casual staff can be stressful. Problems of recruitment and retention were mentioned in this study, however they ranked low in amount of stress produced. Staffing difficulties, including recruitment and retention of qualified staff has been highly stressful for both nurse executives (Cohen, 1989; Kann, 1991) and health care executives (Lappa, 1989; Mullen, 1984)

in other settings. One would have expected recruitment and retention to rural hospitals to be more stressful. Is the discrepancy attributable to a stable work force in rural communities or is it related to the fact that many hospitals are currently faced with downsizing dilemmas?

Relations Within Organization

The nature of relationships with superiors, subordinates and colleagues can be a source of occupational stress for managers (Cooper & Marshall, 1978). Some nurse executives in the study experienced difficult relationships with their superiors, the chief executive officers and, indirectly, the hospital's Board of Trustees.

The management style of chief executive officers, the subjects' immediate superiors, caused strained working relations for some subjects. Working with chief executive officers they described as autocratic, patriarchal, closed, a procrastinator was difficult. Others found their chief executive officers' ineffectiveness to be stressful. Ineffective bosses were often unavailable for consultation because of commitments outside their hospitals, had poor decision making skills and/or failed to provide direction or leadership for their institutions. Both the management style and ineffectiveness of their superiors were moderately

stressful items for the group as a whole (see Appendix J). Other nurse executives (Cohen, 1989; Kovner & Oliver, 1977; Scalzi, 1984) also reported stressful relationships with their bosses. This similarity in findings lends further support to the stressfulness associated with poor relationships with superiors.

Poor relationships with subordinates, such as problems with delegating and managing by participation (Cooper & Marshall, 1978), were not identified as occupational stressors in this study or other related studies (Arndt & Laeger, 1970b; Cohen, 1989; Burke, 1989; Johnson, 1986; Kann, 1991; Kovner & Oliver, 1977; Lappa, 1989; Mullen, 1985; Scalzi, 1984; Wisdom, 1984). Participatory management and delegation are perhaps more accepted skills for managers today than they were in the 1970's. To what extent either were practised was unknown from these studies.

Unique to this study was the stress associated with continued "bad feelings" about the Manitoba Nurse's Union Strike of 1991. While this work stoppage caused permanent scars in some employer-employee relationships, the majority of subjects had either not experienced the strike in their present positions or did not perceive any residual stress from the strike in their hospitals.

Resolving conflict among staff, departments or physicians was perceived to be moderately stressful by this study's nurse executives. Lack of cooperative relationships and being caught in the middle of conflicts at work has been reported as stressful among other health care managers (Cohen, 1989; Mullen, 1984; Wisdom, 1984). This congruency of findings further supports the purported stressfulness managers experience when dealing with personnel issues.

Cooper and Marshall (1978) identified collegial rivalry and lack of social support in difficult situations as potential stressors for managers. Collegial rivalry was not an obvious stressor for nurse executives in this or other studies (Arndt & Laeger, 1970b; Cohen, 1989; Kann, 1991; Scalzi, 1984). Thus collegial rivalry does not appear to play a significant role in the stressful experiences of nurse executives.

Lack of managerial support was not highly stressful for this study's participants. Lack of support from other nonunion management nurses, chief executive officers, Boards of Trustees, and staff nurses were stressors that indicated insufficient managerial support. In the final analysis, all four ranked medium or low in intensity of perceived stressfulness (see Appendix J). Lack of support from superiors, subordinates and/or colleagues has been a

previously reported stressor for executives in health care (Cohen 1989; Cooper & Melhuish, 1980; Quick et al., 1985, Scalzi, 1984). It was a major stressor for Scalzi's (1984) nurse executives. These stressors likely rated lower overall in the degree of stressfulness because other stressors related to health reform were more pressing at the time. Also, while some subjects' comments indicated that lack of support from their chief executive officer created great stress for them, others offered that their chief executive officers were very supportive. Furthermore, although most nurse executives did not have nursing colleagues at the same level in their organization, many had developed networks of support with other nurse executives in their region and/or around the province.

Upon closer examination of the lack of support stressors, lack of support/understanding of staff was observed to be more stressful than lack of support from the chief executive officer, the Board of Trustees or other nonunion management nurses (see Appendix J). Perhaps conflicting expectations between the nurse executives' professional and managerial roles (Carey et al., 1988) made the subjects more sensitive to the perceived lack of support/understanding from direct care providers.

Career Development

Potential stressors related to career development include lack of job security, fear of redundancy or obsolescence, status incongruity and concerns of under or over promotion and frustration at reaching one's career ceiling (Cooper & Marshall, 1978).

Whereas threat to job security for nurse executives was found to be highly stressful in this study (see Appendix J), it had not been a priority stressor for other nurse executives (Arndt & Laeger, 1970b; Cohen, 1989; Johnson, 1986; Kann, 1991; Kovner & Oliver, 1977; Scalzi, 1984). The difference may be situation specific in that recent funding cuts for administration resulted in many nurse executives having their hours reduced. Others feared that with regionalization and further budgetary restraints, their positions would become redundant or obsolete.

Over-promoted managers are those managers promoted to higher positions which they have difficulty filling and consequently overwork to maintain their jobs and hide their insecurities (Cooper & Marshall, 1978). Feeling ill-prepared educationally or experientially for the scope of their responsibilities would reflect on the over-promoted nurse executive's job performance. As lack of education

and/or experience for their responsibilities/duties was not perceived to be highly stressful in this study or previous studies (Arndt & Laeger, 1970b; Cohen, 1989; Kann, 1991; Scalzi, 1984) over-promotion does not appear to be a major issue among nurse executives. One might have expected this study's participants to experience more stress related to their educational preparation given the complexities of today's hospitals and the fact that most subjects were only prepared at the diploma level plus held a certificate in nursing management.

While not addressed in this study's model or in related studies, the investigator purports that new managers' feelings of comfort are also linked to the adequacy of orientation to their positions. Inadequate orientation to the nurse executive position was identified as a stressor in this study, however it ranked low in intensity of perceived stressfulness. Some subjects commented that lack of orientation was an issue when they commenced their jobs but it was no longer a stressor at the time of data collection. The stressfulness related to orientation was therefore a factor of the length of service in that position.

Related to career development and the manager's ability to adapt to changing circumstances in the work environment is the availability of ongoing educational opportunities for

the manager. Isolation from educational opportunities for rural nurse executives and their staff fell in the top third of the rank-ordered stressors. This item was not a stressor in other nurse executive studies as they were conducted in metropolitan, urban, suburban or less isolated rural settings (Cohen, 1989; Kann, 1991; Scalzi, 1984). However, Anderson and Kimber (1991) and the Interlake/East Regional nurse executives (group interview, October, 1991) had previously flagged access to continuing education as an issue for rural nurses. As more distance education programs and improved communication technology becomes available to Manitoba's rural nurses, it is expected that isolation from educational opportunities will become less of an issue.

Organizational Structure and Climate

Stressors such as limited participation in decision making, lack of effective consultation and poor communications within the organization tend to threaten the manager's freedom, autonomy and identity (Cooper & Marshall, 1978). In this study, lack of participation in decision making was evident in the stressor: having limited understanding of and involvement in the budget process, although it was not highly stressful overall. Limited input into decisions on hospital planning and policy development was a source of job dissatisfaction for Kovner and Oliver's

(1977) study on nurse executives. As well, McMillan's (1983) nursing directors' organizational power was limited by their lack of control over their budgets. In more recent studies (Cohen, 1989; Kann, 1991; Scalzi, 1984) lack of participation in organizational decision making has not been a major issue. As previously suggested, perhaps participatory management is more accepted and practised in the 1990's.

Ineffective organizational structures, including unclear or poorly followed lines of authority and failure to take ownership of problems, and poor communication/turf protection between departments affecting the delivery of nursing care were stressors identified in this study. Both stressors ranked low in degree of perceived stressfulness. Problems arising from the organizational structure were not noted in other related studies (Cohen, 1989; Kann, 1991; Scalzi, 1984). Communication difficulties was a stressor of lesser importance in Cohen's (1989) study. These findings confirmed that issues of organizational structure and interdepartmental communications are not major stressors for nurse executives.

Two stressors in this study that were not specified in Cooper and Marshall's (1978) model, but that relate to organizational climate were promoting professional attitudes

and behaviours in staff who are content with the "status quo" and staff's/physicians' resistance to change. While neither stressor had been found in other related studies (Cohen, 1989; Kann, 1991; Scalzi, 1984), both were perceived to be highly stressful by this study's participants (see Appendix J). Subjects expressed frustration with their staff's indifference to continuing education and resistance to change amid the climate of change in today's health care system. Perhaps certain factors associated with working in small rural hospitals contribute to apathy toward professional development and the corresponding resistance to change. Staff turnover is minimal in many rural hospitals as the staff have settled in the community and there are few other employment opportunities. When the introduction of new staff and ideas are limited, attitudes and practices can easily become entrenched. Consequently, change is perceived as a threat rather than as an opportunity to enhance standards of care.

Staff who lack commitment to the hospital was another stressor found in this study that had not been previously identified by nurse or health care executives (Burke, 1989; Cohen, 1989; Kann, 1991; Kovner & Oliver, 1977; Lappa, 1989; Mullen, 1984; Numerof et al., 1984; Scalzi, 1984; Wisdom, 1984). However, the consensus of participants was that lack

of staff commitment was not highly stressful (see Appendix J). The comment given by one subject likely captured the essence of this stressor, "very few staff (lack commitment) - You can count them on your fingers of one hand but these are the ones who are the thorns in your side..." Others offered that staff commitment had changed with the recent threat of job losses in their institutions. Hence, this lack of commitment may be considered another situation specific stressor.

Sex-role stereotyping was evident in comments of female nurse executives who were assigned the secretarial duties at multidisciplinary committee meetings. When presented to all subjects, they ranked sex-role stereotyping last in the degree of perceived stressfulness. Sex-role stereotyping had not been raised as a stressor among other nurse executives (Cohen, 1989; Kann, 1991; Scalzi, 1984). These findings lead one to question, does sex-role stereotyping not occur in the health care system or is sex-role stereotyping not recognized or acknowledged by nurse executives? It is likely the latter, given the long-standing views that secretarial work is women's work and nurses are "hand maidens" to physicians.

Extra-organizational Source of Stress

Cooper and Marshall (1978) described the category of external job stressors as "a 'catch-all' for all those interfaces between life outside and life inside the organization that might put pressure on the manager" (p. 94). The model focused on the stress arising from the conflicting demands between the manager's work and personal and family life. When applying the model to managers in the health care system, there are other potential sources of stress outside the institutions that need to be considered. The following discussion addresses the external stressors identified by Cooper and Marshall (1978) as well as those stressors unique to the health care system.

Personal and Family Life Demands

Neither the nurse executives in this study or previous studies (Cohen, 1989; Kann, 1991; Kovner & Oliver, 1977; Scalzi, 1984) identified family problems, life crises or conflicts between work and family demands as external sources of stress (Cooper & Marshall, 1978). In casual discussions with rural nurse executive colleagues, the investigator has been apprised of stressors in the colleagues' "family" lives that have brought pressure to bear on their work lives. Perhaps the wording of the Round

1 instructions (Appendix F) steered subjects away from identifying stressors related to their personal lives.

One potential source of occupational stress not present in Cooper and Marshall's (1978) model comes from the hospital's governing body, the Board of Trustees. This source of stress was considered external because the Board members are public representatives appointed by the town councils or rural municipalities. The hospital Board's role is to set policy and ensure that the hospital is run in accordance with the act and regulations set forth by the Minister of Health.

Governing Board Issues

Three stressors identified in this study originated from the hospital's Board of Trustees. They were "turf" protection by Board members when involved in regional planning for health reform, Board members' limited knowledge of their role/functions and, lastly, Board members' involvement in operational matters. The group's consensus was that none of the above stressors caused high stress levels. In most cases, the nurse executives reported to the chief executive officers, creating a buffer between the Board and themselves. Perhaps this buffer lessened the impact of these stressors. Board pressure was identified as a cause of stress for chief executive officers in Lappa's (1991)

survey, however, it also ranked low in the amount of stress it produced. That Board-related issues were not raised as stressors in other studies (Cohen, 1989; Kann, 1991; Mullen, 1984; Numerof et al., 1984; Scalzi, 1984; Wisdom, 1984) may be due to subjects having limited contact or involvement with their hospitals' Boards or there may not have been a Board in their organizational structures. Furthermore, the data collection tools used in other studies may not have been sensitive to Board-related issues.

Dealing with community criticism and pressure was a stressor common to both this study and Lappa's (1989) survey. However, community pressure and criticism were not perceived to be highly stressful in either study, perhaps because this stress can be controlled by taking the time to investigate the concern and explain the hospital's position to the public. In addition, the interview guides used in nursing studies (Cohen, 1989; Scalzi, 1984) did not focus on issues arising from the nurse executives' interface with the community.

Physician-Related Factors

Another group of stressors not identified in Cooper and Marshall's (1978) model, but which caused stress for nurse executives, pertained to physicians. Physicians do not usually have line authority in the organizational structures of Manitoba's rural hospitals, but their interface with hospitals are often felt in terms of "hospital politics". Doctors failing to follow hospital rules, and their power in influencing operational matters, were two stressors perceived to be moderately stressful. Cohen's (1989) subjects reported a lack of power over their departments, some of which stemmed from "the old 'nurse-physician game' of 'who is the real boss here'" (p. 122), as a mid-range stressor. Hence, this study further supports the finding that nurse executives are also subjected to the stress associated with nurse-physician power struggles, albeit at a different level in the organizational structure.

A lack of qualified and experienced physicians was raised as a stressor, however, it ranked low overall in amount of stress produced. A few participants commented on physician competency problems, a component of Scalzi's (1984) quality concern stressor. A greater number of comments referred to stress associated with the frequent turnover of physicians in their communities. Hence, the

stress in rural Manitoba hospitals is more related to the organizational changes required to accommodate a new physician's practices.

Other Sources of Stress

A final group of stressors found in this study that was not identified in Cooper and Marshall's (1978) model, related to Manitoba Health's reform initiatives and funding policies. A few of the health reform stressors were discussed as they applied to intra-organizational sources of stress; however, the majority of stressors in this category could not be pinpointed as arising solely from within or outside the organizational boundary. Health reform issues tended to be broader or more encompassing than the categories delineated in Cooper and Marshall's (1978) model and, therefore, are discussed as a unique category.

Of the top 16 stressors that ranked highest in the degree of perceived stressfulness, ten pertained to Manitoba Health's recent health reform initiatives and funding policies. The key events that contributed to this group of stressors were the introduction of Manitoba Health's (1992) plan to realign up to 200 rural hospital beds with more community-based and long term care services, the government's mandate to develop proposals for regional

associations, and the imposed budgetary restraints and staffing guidelines to redirect funds from hospitals to community care. As this study's data were collected during the same period that Manitoba's rural hospitals were experiencing the first major effects of health reform, many of the participants' priority stressors centred around health reform. To appreciate the impact of health reform on this study's findings it is necessary to chronologically review the events of health reform occurring prior to and during the data collection period.

In the Spring of 1993, Manitoba Health informed rural hospitals that severe fiscal realities necessitated budget restraints starting the fiscal year 1993/94. On July 15, 1993 Manitoba Health issued staffing guidelines for the nursing, dietary and housekeeping departments, along with an October 1, 1993 deadline for implementation of 50 percent (Phase I) of the guideline and April 1, 1994 for the remaining 50 percent (Phase II). Application of the staffing guidelines meant downsizing and layoffs in most rural hospitals as well as a perceived threat to the standard of health care service provided to rural communities. Rural nurse executives were forced to quickly develop plans to accomplish the first 50 percent reduction. The October 1st deadline did not allow for adequate planning

or collaboration with staff causing anger, anxiety and poor morale to pervade their institutions.

On October 1, 1993, the deadline for implementation of Phase I, Mr. Frank Maynard, then Deputy Minister of Health, advised rural hospitals that the application of the staffing guidelines was "on hold". The stated reason for this "pause" policy was to allow for an in-depth review of staffing guidelines for all hospital departments, in consultation with representatives from rural hospitals. Nurse executives who had hastily developed new staffing plans and given layoff notices to unionized employees next had to tell their staff that all plans were now on hold, resulting in a "loss of credibility with staff". Round 1 questionnaires were mailed October 18 - 22, 1993, soon after the announcement of the "pause" policy.

Round 2 questionnaires were mailed January 22, 1994, at a time when the participants were expecting to begin the staffing guideline review. Moreover, the subjects were still dealing with their staff's anger and poor morale as well as the uncertainty of when and how the revised guidelines would effect their hospitals.

The third round of questionnaires was mailed April 15, 1994. The review process did not get underway until June,

1994, eight months after the "pause" policy was put into effect. After delaying the review by eight months, Manitoba Health imposed short time lines for the review process. The scenario of waiting months for Manitoba Health to issue directives and then having only a few weeks to implement them has occurred repeatedly since health reform was first introduced, adding to the stress experienced by rural nurse executives.

A discussion of those stressful items related to health reform that were not discussed with intra-organizational stressors follows. Inconsistent government directives related to health reform/cutbacks caused the greatest occupational stress among this study's participants. Feelings of frustration, anger and powerlessness with the government's inconsistencies were evident in such comments as "(we suffered) a loss of credibility with staff", "Has been a major stressor in the past year - creating lack of trust in staff nurses and decreased morale", and "Filmon Fridays (Bill 22) directive - another example of crisis management from government". That inconsistent government directives have not caused major stress for other nurse executives (Cohen, 1989; Kann, 1991; Scalzi, 1984) suggests that this stress is attributable to Manitoba Health's unique practices in conveying policy directives.

Concern that application of Manitoba Health's staffing guidelines would compromise the standard/safety of patient care provided was the second most stressful item in this study. This stressor arose from the threat of severe cutbacks in staff related to the application of staffing guidelines, scheduled for October, 1993. If the cutbacks became a reality, the subjects feared that understaffing would jeopardize the standard and safety of care. As the guideline review was still in process at the completion of data collection, the concern that the application of staffing guidelines would ultimately effect patient care continued. Linked closely to the concern about the standard and safety of patient care was the high stress of having limited resources available for services delivery due to budgetary restraints in areas such as medical-surgical supplies and drug costs. Quality of patient care concerns, some of which stemmed from decreased financial resources and understaffing, is not new among nurse executives (Cohen, 1989; Scalzi, 1984). In fact, lack of funding resulting in a decreased level of service to clients was the most stressful item for Cohen's (1989) subjects. Because nurse executives are, in part, responsible for the standard of patient care, any threat to the quality of care delivered is perceived to be stressful.

Lack of rural nurses' input into health care planning at the provincial level was also rated as highly stressful in this study. Participants' frustration with their lack of involvement in developing the staffing guidelines for rural hospitals was obvious in their comments, "the realities of rural nursing are not taken into account..." and "even with discussion at Manitoba Health level, there was still no recognition that input from rural nurses was needed." Cohen's (1989) subjects were also excluded from planning at the state level. The political system made all decisions regarding the funding for health programs, giving rise to ethical issues for nurse executives related to rationing care. Exclusion of nurse executives from planning at the provincial level reinforces the powerlessness of nurses in defining provincial health policies.

To accomplish the staffing reductions necessary to meet the guideline targets, nurse executives were anticipating deleting positions and laying off the incumbents. Laying off staff in a small community where staff are known personally and/or socially to the nurse executive and the resultant decreased staff morale were two highly stressful items unique to this study (Cohen, 1989; Kann, 1991; Scalzi, 1984). Comments such as "I have felt very anxious and fearful as my decisions effect the nurse, her family and the

viability of their farm, etc." indicated the nurse executives' awareness of their staff's personal circumstances and the anticipated hardships that layoffs would cause. Having to impose stress on others was a source of stress for this study's subjects. Also found only in this study was nurse executives' stress related to the uncertainty about the future of their hospital and the potential economic stress to their communities (Cohen, 1989; Kann, 1991; Scalzi, 1984). That rural nurse executives find these effects of health reform on their staff and hospitals highly stressful may be a reflection of their caring and concern for the well-being of their staff and the viability of the community as a whole.

Revisions to the Conceptual Framework

To conclude the discussion of findings, the investigator revisited the conceptual framework within the context of the health care system in rural Manitoba today. All of the intra-organizational stressor categories and many of the specific stressors delineated in Cooper and Marshall's (1978) model were relevant to nurse executives working in rural Manitoba's community hospitals. In addition, there were some sources of stress within the institution that, while not specifically identified by Cooper and Marshall, did fit into the general categories identified. The

categories for extra-organizational sources of stress need to be expanded to include the specific interfaces between life outside and life inside a hospital that can create stress for managers. A revised model that reflects the interfaces unique to a health care setting is depicted in Figure 2.

Cooper and Marshall's (1978) model did not consider the context within which the stressors occurred. This study's findings demonstrated that contextual factors in the environment influenced the subjects' perceptions of stressors. Health reform was a key factor in the health care environment at the time, however, it was more encompassing and pervasive than any of the individual stressor categories in the model. Therefore, health reform was more appropriately considered as a contextual factor. All other stressors needed to be interpreted within the context of health reform. The revised model (Figure 2) illustrates contextual factors of health reform as a circle within which the manager's occupational stressors are to be interpreted.

Another proposed revision is the inclusion of contextual factors specific to a rural setting. While many of the sources of occupational stress for rural nurse executives could be described within the model, they were definitely

influenced by factors considered to be uniquely rural. For example, rural nurse executives' stress associated with heavy workload and time pressures stemmed in part from their diversity of roles within and beyond the nursing department. Furthermore, living and working in small communities where people are socially and economically intertwined predisposed rural nurse executives to experiencing stress when faced with staff layoffs, uncertainty about their hospitals' futures, and the resultant economic stress on their communities. Such professional and personal role diffusion is a rural phenomenon (Long and Weinert, 1987).

Isolation was another uniquely rural factor evident in a number of identified stressors. Lack of support from other nonunion management nurses, isolation from educational opportunities, and problems with recruitment and retention of nurses and physicians were partly attributable to being geographically dislocated from urban centres.

The rural setting also influenced the physician-related stressors. The power of physicians was often enhanced when they were in limited supply. Some nurse executives voiced their frustration with local physican manpower issues and at physicians being allowed to break the rules and/or influence operational matters. "Physicians answer to no one in small country hosptials. If they leave, the Board knows they will be stuck without a doctor. A no win situation!"

Figure 2 depicts the rural contextual factors as a second circle extending beyond the contextual factors of health reform. Health reform is considered as a temporary factor affecting the health care system, whereas the rural contextual factors will remain constant. Hence, the contextual factors related to health reform must be considered within the framework of the rural setting and are therefore depicted as cradled within the rural contextual factors.

Cooper and Marshall's (1978) model assumed that the manager's stressors occured within a stable environment and that they were static over time. Coping with change at work was identified as a stressful intrinsic job factor. The findings of this study suggest that change is not limited to stressful intrinsic job factors. Change is omnipresent in today's health care system. As a result, the stressors experienced within this setting varied both in content and magnitude. Health reform was the primary change agent that altered the perception of stressors in this study. For example, the subjects' stress related to time pressures intensified when their hours were cut, without a reduction in responsibilities, to meet revised budgetary guidelines for administration. Also, lack of job security stemmed from health reform changes occuring at both institutional and

regional levels. Other major changes affecting health care, such as a major disease epidemic, may produce different results in future studies. Therefore, the model as revised acknowledges the variability of stressors within an unstable environment.

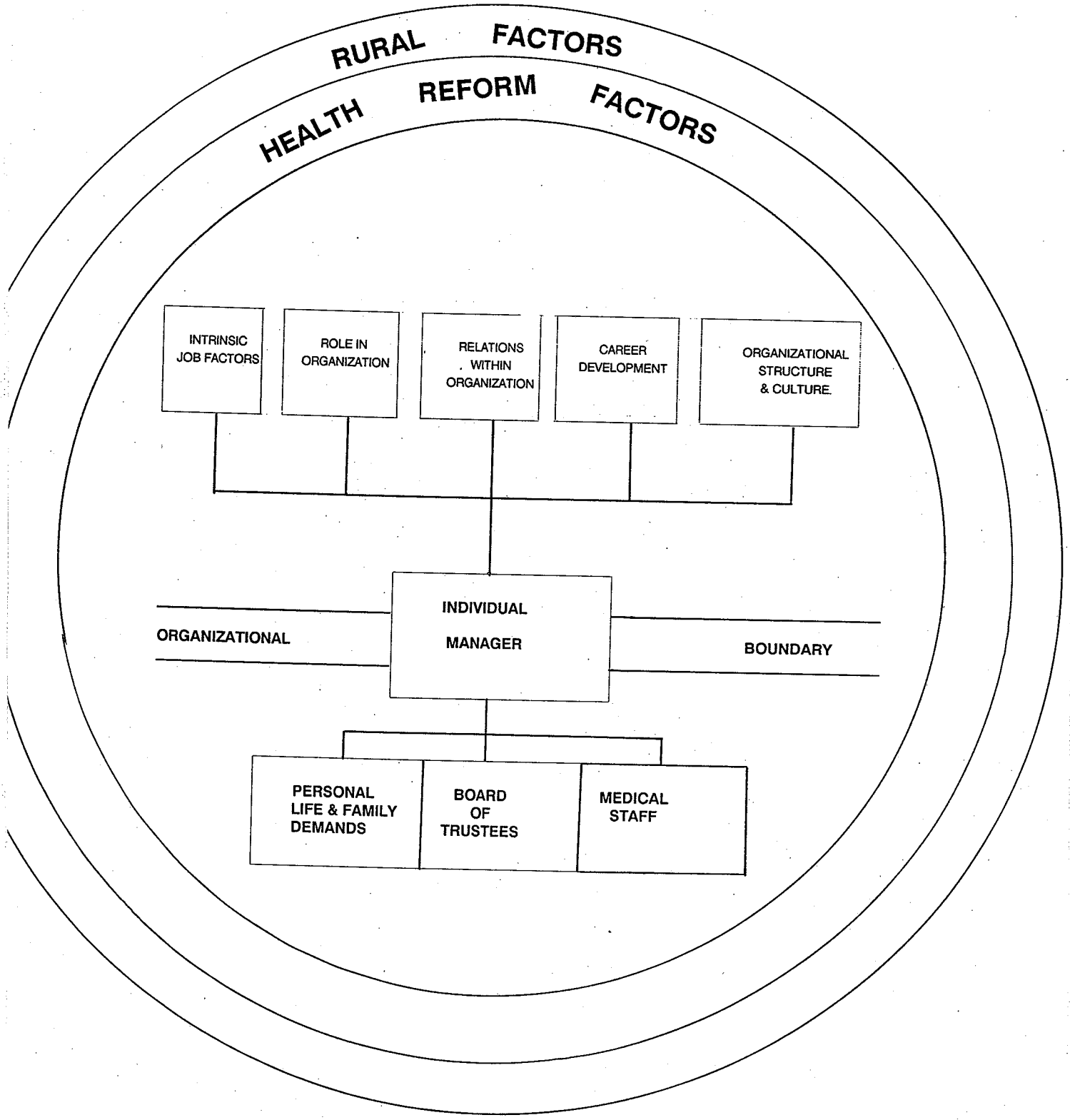

FIGURE 2: **Revised Model: Sources of Managerial Stress in the Health Care System.**

Implications for Nursing

The occupational stressors identified in this study have implications for the nurse executive's practice. What can nurse executives, their superiors, and their professional association and educational institutions do to lessen nurse executives' perceived stress?

The following suggestions and recommendations are based on the research findings, the literature review, and the discussion of the results. They generally focus on those stressors perceived to be most stressful. The implications are proposed with consideration of health reform, the major contextual element behind many of the priority stressors, and the omnipresence of change in Manitoba's health care system today.

Wakefield (1992) delineated three steps for nurses to control workplace stress. While Wakefield's focus was the staff nurse, the principles are transferrable to this study's nurse executives. Recognition is the first step in managing a stress problem. Knowing and being able to identify the signs and symptoms that indicate nurse executives are not coping with excessive job stress is the key to controlling their stress.

The second step for nurse executives to manage occupational stress is to understand why they are

experiencing it (Wakefield, 1992). This study's findings provide nurse executives with insights to the sources of stress that they collectively perceived to be most stressful. The methodology used required each subject's introspection during data collection. Comments offered by subjects verified that, as individuals, they found this process personally enlightening. Two subjects who had rated many of the items as highly stressful added the comments, "This questionnaire scares me. When do I expect my MI? No wonder I go home at the end of the day exhausted!" and "You may wonder why I'm in the job! Certainly many of the stressors identified do apply."

Wakefield (1992) suggested that nurses examine their work environment to determine which stressors cause them to experience apprehension, uncertainty, and a lack of control in changing the situation and, as a result, to feel powerless, anxious and stressed. Armed with the results of this study, nurse executives could scrutinize their work situation to determine whether the stressors they perceive to be most stressful are similar to these findings or unique to their positions. As there is usually only one nurse executive in a rural hospital, the incumbent has no benchmark with which to compare his/her perceived job stress. This process will allow nurse executives to

recognize that they are not alone in experiencing job stress. Once nurse executives are aware of both their common and unique stressors they can begin to individually and collectively develop strategies to address them.

The third step in managing work-related stress is to try to change the perception of the stressor (Wakefield, 1992). Striving for increased control over the work environment lessens perceptions of powerlessness and inevitability. Nurse executives can attempt to gain greater workplace control in many ways. As many of the priority stressors related to health reform nurse executives need to focus their efforts on controlling these stressors.

To enhance their influence in planning their work environment, nurse executives must take a proactive approach in acquiring greater involvement in planning at the hospital executive and board levels. They must also obtain nurse executive representation on regional and provincial committees whose mandates are to operationalize Manitoba Health's (1992) reform plan. The benefits of nurse executives' participation are twofold. They contribute a strong patient-centred perspective to planning and policy setting at all levels. As individuals they will feel their opinions and expertise can make a difference in decisions that may effect their work environment and the standard of

patient care delivered. Their contributions may help to identify inconsistent government directives and unrealistic deadlines, and avoid future directives that threaten both the government's and nurse executive's credibility.

Continuing education is critical in preparing nurse executives to deal with the changes happening in their hospitals. Advanced knowledge and skills obtained through courses or seminars on organizational restructuring, managing organizational change, leadership in a time of layoffs, and other such relevant topics could allow nurse executives to feel more competent, confident, and in control of their workplace environments.

Nurse executives' concerns about job security can also be partly addressed through education. By taking distance education programs they can ready themselves for new or expanded roles should their position be changed or deleted, or should opportunities for shared administration or other types of diversification become available. Nurse executives can also assume greater control of their destinies by polishing their interview skills and developing a professional curriculum vitae for use in applying for new positions.

Work overload and time pressures are stressors common to nurse executives (Cohen, 1989; Kann, 1990; Scalzi, 1984).

Health reform has added a new dimension to these stressors for Manitoba's rural nurse executives. Many are having their hours reduced at the same time their responsibilities are being expanded. They need to consider innovative methods of handling this workload. Driedger (1994) reported that rural nurse executives do not have dedicated secretarial support and, consequently, must perform secretarial and clerical functions. An evaluation of the non-executive functions done by these nurse executives and the allocation of secretarial, technical and other administrative resources that would allow nurse executives to attend to priority executive functions were recommended (Driedger, 1994). Delegation of certain administrative functions, such as scheduling and completion of time sheets, may also be an appropriate means of finding more time for executive functions. Time management courses are suggested to assist nurse executives in evaluating their workload, determining their priorities, and optimizing their workdays.

Strategies for enhancement of social support from colleagues would be beneficial in helping nurse executives cope with stressful situations (Cohen, 1989). Some subjects indicated their involvement in regional and provincial nurse administrators' interest groups. Participation is encouraged as it facilitates problem solving and information

sharing plus provides emotional support. Conference call meetings are a realistic alternative for nurse executives who are widespread geographically. Networking on an individual basis, including computerized communication, is also suggested as a valuable support strategy in working through stressful situations. Nurse executives also need to develop supports within their institutions whenever possible. Supportive relationships with the chief executive officer, fellow executive members or department heads would foster collaboration and participative decision making, as well as, emotional support in stressful times.

Actual and anticipated changes related to health reform and budgetary restraints have created an environment of uncertainty and unrest in rural hospitals. Some staff fear they may lose their jobs while others are angry and resentful of the changes required of them within the institution. Nurse executives' stress arises from having to impose these government-mandated changes on their staff. They need to understand the dynamics of change in an organization and develop a skill set that will assist them in successfully leading their staff through these changes.

Duck (1993) emphasized the need for open communication with staff during organizational changes. Messages need to be consistent, clear and endlessly repeated to avoid

damaging rumours and for staff to come to terms with the change. Nurse executives could meet regularly with the staff to inform and update them on the status of health reform changes. Even if there is no new information, it would provide an opportunity to review previous information, answer questions, and dispel rumours.

Empowerment of staff is another strategy for facilitating change (Duck, 1993). Involving staff in the planning and decision making regarding the application of staffing guidelines and changes in the delivery of service may ease the staff's transition and, thereby, lessen the associated stress for nurse executives.

Enhancing their conflict management and negotiation skills would better prepare nurse executives to deal with difficult and often stressful interactions whether they be with their staff, Manitoba Health representatives, or the Manitoba Nurses Union. Learning to negotiate a win-win outcome for both parties will increase the nurse executive's credibility and lessen the stress of such encounters.

Decreased staff morale may be a sign that actual or anticipated downsizing in rural hospitals has caused a phenomenon known as layoff survivor sickness. This phenomenon includes the attitudes, feelings, perceptions and

symptoms that are manifested in employees who remain in an organization after layoffs (Triolo, Allgeier & Schwartz, 1995). It is suggested that nurse executives become familiar with the symptoms of layoff survivor sickness, the signs of ineffective coping mechanisms and appropriate intervention strategies to help staff work through the changes. Noer (1993) advocates a four-step intervention model that nurse executives may find useful. Level 1 interventions deal with the survivors' perspective of the layoff process. Level 2 interventions help the survivors grieve by allowing for catharsis of repressed feelings and emotions. Level 3 interventions help the survivors' regain a sense of personal control and self esteem. Level 4 interventions create systems and processes to prevent future occurrences of survival sickness.

Chief executive officers in Manitoba's rural hospital have an important role in creating a supportive environment in which nurse executives can better address the identified stressors. It is suggested that chief executive officers include nurse executives in developing job descriptions that maximize their expertise and include a realistic workload. Furthermore, they need to ensure that appropriate resources are in place to allow nurse executives to fulfill these evolving roles. Involving nurse executives in

organizational planning and decision making plus encouraging their participation on regional and provincial committees acknowledges their valuable contribution to the delivery of health services.

Chief executive officers need to be readily available for consultation, direction, and support when nurse executives are dealing with difficult situations involving the staff, unions, physicians or the public. Challenging Manitoba Health on directives that are inconsistent, involve unrealistic deadlines or will compromise the standard of patient care would further support nurse executives. In addition, encouraging nurse executives' attendance at seminars on managing transitions, conflict resolution or other relevant topics and/or hiring consultants with expertise in restructuring, labour management and negotiating skills would assist nurse executives in planning and implementing changes in today's turbulent health care system.

Establishing a mechanism by which rural nurse executives can access human resource supports is recommended. Most rural hospitals do not have human resource managers. As Manitoba Health Organizations has limited expertise and resources available for consultation, nurse executives often struggle alone with performance

problems, union-related matters and other labour management issues. W. Byron, Vice President, Human Resources Management Services, Manitoba Health Organizations, (Manitoba Nurse Administrators Interest Group, April, 1995) indicated a desire to collaborate with the human resource departments from Winnipeg hospitals to develop a pool of human resource expertise that could be shared with rural hospitals. Introduction of shared human resource services, coordinated by Manitoba Health Organizations, is wholeheartedly endorsed as it could provide the guidance rural executives need when faced with deleting positions and laying off staff.

The rural nurse executives' professional association needs to play an active role in lessening their perceived stress. Many nurses have the support of a union when experiencing employer/employee problems. Nurse executives are not unionized and tend to feel isolated when they encounter difficulties with their chief executive officers or Boards of Trustees. The professional association could provide strong guidance and support to nurse executives facing difficult relationships at work by creating a consultant, nursing administration position.

Stressors related to professional attitudes and behaviours of staff, standards of care and scope of practice

could also be addressed with input from the nurse executives' professional association. It is suggested that nurse executives consult with the association on these matters and that, in turn, the association assist nurse executives in clearly articulating the issues and developing strategies to address them.

The Manitoba Association of Registered Nurses has contemplated disbanding its Nursing Administration Committee. The Manitoba Nurse Administrators' Interest Group, of which the investigator and many other rural nurse executives are members, has requested that the Association not disband this committee as it is seen as nurse administrators' formal link with the association (Interest Group meeting, December 1994). This interest group has recommended that this committee be maintained and strengthened as a forum for addressing items of common concern to all nurse administrators and for developing an index of persons with administrative expertise. Rural nurse executives need these supports, being the only nonunionized management nurse in their institutions.

The study's findings also have implications for the educational preparation of rural nurse executives. Most incumbents were prepared at the diploma level plus held a certificate in nursing unit management. Neither program has

prepared nurse executives for today's expanding roles nor to manage amid the dynamics of today's turbulent health care system. Furthermore, the study participants found their isolation from educational opportunities to be particularly stressful. Job and/or family responsibilities make travelling and/or relocating for courses impractical. Educational institutions that offer programs for nurse executives can respond to these needs by increasing the availability of distance education courses. As well, the professional association needs to continue it's support for the development of distance education courses at the master's level.

Courses or seminars that address health reform initiatives across Canada, changing roles for nurse executives, and other topics previously mentioned would better prepare nurse executives to cope with today's job stressors and, also, would allow opportunities for timely dialogue on these issues. Teleconferences provide an interactive alternative for delivery of educational programs for nurse executives who are geographically dispersed.

Scalzi (1984) suggested that educational programs for nurse executives include management skills needed to effect organizational change and interpersonal skills needed to get cooperation from people over whom they have no authority.

An internship program in which students would be able to practice these skills, gain insight into the nurse executive's diverse role, and obtain experience in leading in a time of change was also recommended. These suggestions are also pertinent to the preparation of rural nurse executives.

Recommendations for Future Research

A review of the results and discussion of findings gave rise to a number of recommendations for future research. These suggestions focus on aspects of design and methodology.

This study was conducted at a time when Manitoba Health's reform plan was the major contextual factor, causing many actual and anticipated changes in the rural health care system. As a result, many of the priority stressor items were attributed to health reform initiatives. These results lead one to question what rural nurse executives priority stressors would be once health reform is no longer the major contextual factor in the health care environment? As a longitudinal design is "useful for studying the dynamics of a variable over time" (Polit & Hungler, 1987, p. 200), a similar study with a longitudinal design may be a better way to examine rural nurse executives

stress over time. A major consideration with a longitudinal design is the risk of attrition threatening the generalizability of the findings (Polit & Hungler, 1987).

Nurse executives in rural Manitoba's community hospitals form a small distinct population, thereby limiting the generalizability of findings to other nurse executive groups. A replication study in another population of nurse executives, such as a rural acute care group in another province or nurse executives in long term care facilities, is suggested to determine whether similar occupational stressors exist among other nurse executives. This type of study would address the generalizability of findings.

A number of intervention strategies were suggested in the implications for nursing section. Subsequent studies might include outcome measures in order to evaluate the effect of certain strategies on the perceived stressfulness of the associated stressors. One example would be to assess the effect that a shared, coordinated human resource service has on the perceived stressfulness of layoffs, union issues, performance or other human resource management problems. Another study could examine the effect of a centralized index of persons with administrative expertise on the perceived sources of occupational stress.

The methodology used in this study did not address the characteristics of the individual nurse executives that may affect their perceptions of stress. Cooper and Marshall (1978) cite the manager's personality, motivation, tolerance for ambiguity, adaptability and behavioural patterns as factors that influence the manager's ability to cope with stress. Because the individuals' characteristics are a key component of the model, future studies should explore these characteristics in relation to the individuals' perceptions of stress.

A natural extension for future research in the area of rural nurse executive stress is the inclusion of the stress mediating variables, social support and coping strategies. As both variables have been addressed in other nurse executive studies (Cohen, 1989; Scalzi, 1984), their inclusion in future research would determine whether there is support for previous findings.

In the future the inclusion of a second stress tool to measure the nurse executive's stress levels is suggested. This addition adds a new dimension to the study that corroborates the intensity of stress experienced by nurse executives.

Study Conclusions

Very little research has been reported in the area of nurse executive stress. This study provides descriptive data regarding the major stressors, including their relative intensities, that cause nurse executives in rural Manitoba's community hospitals to experience job-related stress. It is the first reported investigation of nurse executives' stress in Canada and in a rural setting.

Forty-four stressor items were identified, many of which were consistent with previous findings in nursing and health care administration stress-related research. Most of the stressors ranking highest in degree of perceived stressfulness pertained to the government's health reform initiatives. As health reform was broader and more encompassing than any of the intra- or extra-organizational stressor categories, it was more appropriately considered as a contextual factor. As well, contextual factors specific to a rural setting were identified. Inclusion of contextual variables advanced the theory base of nurse executive stress and expanded Cooper and Marshall's (1978) model for application to a rural health care setting.

The identification of rural nurse executives' major occupational stressors provides the subjects with knowledge

regarding previously unknown mutual concerns. Based on this knowledge, nurse executives may be better able to individually or collectively plan strategies to lessen or alleviate several of the stressors. An awareness of the priority stressors also provides a basis for further research in rural nursing administration.

REFERENCES

Anderson, J., & Kimber, K (1991). Meeting the continuing education needs of nurses in rural settings. The Journal of Education in Nursing, 22(1), 29-34.

Arndt, C. A. & Laeger, E. (1970a). Role strain in a diversified role set: the director of nursing service, part I. Nursing Research, 19(3), 253-259.

Arndt, C. A. & Laeger, E. (1970b). Role strain in a diversified role set: the director of nursing service, part II. Nursing Research, 19(6), 495-501.

Barnett, R. C. & Baruch, G. K. (1983). Women's involvement in multiple roles, role strain, and psychological distress (Report NSF No. BNS 77-26756). Wellesley, MA: Wellesley College.

Bond, S. & Bond, J. (1982). A Delphi survey of clinical nursing research priorities. Journal of Advanced Nursing, 7(6), 565-575.

Brink, P. J. & Wood, M. J. (1989). Advanced design in nursing research. Newbury Park, CA: Sage.

Burke, G. C. (1989). Understanding the dynamic role of the hospital executive: the view is better from the top. Hospital and Health Services Administration, 34(1), 99-112.

Burke, R. J. & Belcourt, M. L. (1974). Managerial role stress and coping responses. Journal of Business Administration, 5(2), 55-68.

Burke, G. C. & Scalzi, C. C. (1988). Role stress in hospital executives and nursing executives. Health Care Management Review, 13(3), 67-72.

Bushy, A., (1990). Rural determinants in family health: Considerations for community nurses. Family and Community Health, 12(4), 29-38.

Canadian College of Health Service Executives. (1992). [Manitoba Chapter List, 1992]. Unpublished raw data.

Canadian College of Health Service Executives. (c1990). An invitation to enhance your management skills. Ottawa: Author.

Canadian Hospital Association. (1992). Canadian Hospital Directory, 1992-1993, 40. Ottawa, ON: Author.

Carey, S. T., Craighead, P. S. & Netzel, C. (1988). Conflicting role expectations for the director of nursing position: a new standard. Nursing Administration Quarterly, 12(2), 32-44.

Chapman, A. (1968). Administrative practices of directors of nursing service in small general hospitals. Doctoral dissertion, Teachers College. Columbia University, New York.

Chusmir, L. H. & Durand, D. E. (1987). Stress and the working woman. Personnel, 64, 30-43.

Cohen, J. H. (1989). Nurse executives' psychological well-being: the relationships among stress, social support, coping and optimism. Dissertation Abstracts International, 50(5), 1850-B. (University Microfilms no. 8917911).

Cohen, J. H. (1990). Community nurse executives' psychologic well-being: relationships among stressors, social support, coping & optimism. Public Health Nursing, 7(4), 194-203.

Cooper, C. L. & Marshall, J. (1978). Sources of managerial and white collar stress. In C. L. Cooper & R. Payne (Eds.), Stress at work, (pp. 81-105), New York: Wiley.

Cooper, C. L. & Melhuish, A. (1980). Occupational stress and managers. Journal of Occupational Medicine, 22(9), 588-592.

Couper, M. R., (1984). The Delphi technique: characteristics and sequence model. Advances in Nursing Science, 7(1), 72-77.

Dalkey, N. & Helmer, O., (1963). An experimental application of the Delphi method to the use of experts. Management Science, 9(3), 458-467.

Delbecq, A. L., Van de Ven, A. H. & Gustafson, D. H., (1975). Group techniques for program planning: A guide to nominal group and Delphi process. Glenview, Ill: Scott, Foresman and Company, 174 pp.

DeLongis, A., Folkman, S. & Lazarus, R. S. (1988). The impact of daily stress on health and mood: psychological and social resources as mediators. Journal of Personality and Social Psychology, 54(3), 486-495.

Downs, S. L. (1980). Small hospitals will have to redefine their role. Health Management Forum. Winter, 63-73.

Driedger, D. I. (1994). The roles & responsibilities of community hospital chief executive nurses in rural Manitoba: a descriptive study. Unpublished master's thesis, University of Manitoba, Winnipeg.

Duck, J. D. (1993). Managing change: the art of balancing. Harvard Business Review, 71(6), 109-118.

Erickson, E. H. (1980). The nursing service director, 1880-1980. Journal of Nursing Administration, 4, 6-12.

Farrell, P. & Scherer, K., (1983). The Delphi technique as a method for selecting criteria to evaluate nursing care. Nursing Papers, 15(1), 57-58.

Fenton, M. V., Rounds, L., & Iha, S. (1988). The nursing centre in a rural community: Promotion of family and community health. Family and Community Health, 11(2), 14-24.

Fuszard, B. Slocum, L. I., & Wiggers, D. E. (1990). Rural nurses part II: Surviving the nursing shortage. Journal of Nursing Administration, 20(5), 41-46.

Greenhaus, J. H. & Beutell, N. J. (1985). Sources of conflict between work and family roles. Academy of Management Review, 10(1), 76-88.

Hardy, M. E. & Hardy, W. L., (1988). Role stress and role strain. In M. E. Hardy & M. E. Conway (Eds.), Role theory: Perspectives for health professionals, (2nd ed.). Norwalk, CT: Appleton & Lange, 159-255 pp.

Harvey, S. H. & Raider, M. C. (1984). Administrator burnout. Administration in Social Work, 8(2), 81-89.

Henry, B. M., & Moody, L. E. (1986). Nursing administration in small rural hospitals. The Journal of Nursing Administration, 16(7/8), 37-44.

Henry, B., Moody, L. E., Pendergast, J. F., O'Donnell, J., Hutchinson, S. A. & Scully, G., (1987). Delineation of nursing administration research priorities. Nursing Research, 36(5), 309-314.

Herzberg, F., Mausner, B. & Snyderman, B. (1959). Motivation to work. New York: Wiley.

Hill, B. A. S., (1984). A Delphi application health care, practice, education and education administration; circa 1992. Image, 16(1), 6-8.

Horne, J. M. (1989). Health care in rural Manitoba: Resources and related issues of access. Healthcare Management Forum, 2(2), 6-11.

Jamieson, L., (1981, May). Rural health - better service, bigger demands. Health Care, 14-19.

Johnson, K. R. & Barba, M. (1992). The nurse administrator in the rural hospital: selected issues, challenges and regards. In P. Winstead-Fry, J. C. Tiffany & R. V. Shipee-Rice (Eds.), Rural health nursing - stories of creativity, commitment and connectedness (pp. 240-270). New York: National League for Nursing. (Pub. No. 21-2408).

Johnson, M. L. (1986). The nurse executive role: research relevant to managing. Nursing Administration Quarterly, 11, 60-65.

Kahn, R. H., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). Organizational stress: studies in role conflict and ambiguity. New York: Wiley.

Kann, K. M. (1991). It's stressful at the top. Geriatric Nursing, 12(3), 142.

Kopelman, R. E., Greenhaus, J. H., & Connolly, T. F. (1983). A model of work, family, and interrole conflict: a construct validation study. Organizational Behaviour and Human Performance, 32, 198-215.

Kovner, A. R. (1989). The hospital-based health care program: A consortium approach. Hospital & Health Services Administration, 34(3), 325-331.

Kovner, C. T. & Oliver, R. S. (1977). Directors of nursing satisfaction and dissatisfaction. Nursing Administration Quarterly, 2, 57-63.

Kulbok, P. P. (1982). Role diversity of nursing administrators: an obstacle to effective leadership? Nursing and Health Care, 3, 199-203.

Lahaie, V. (1990). The small rural hospital: Rx for survival. Dimensions in Health Services, 67(2), 32-35.

Lappa, K. (1989), Sept. 20). More than 98% of health care CEO's feel stressed. Hospitals, 63, 50-55.

Lindeman, C. A., (1975). Delphi survey of priorities in clinical nursing research. Nursing Research, 24(6), 434-441.

Long, K. A., & Weinert, C. (1989). Rural nursing: Developing the theory base. Scholarly Inquiry for Nursing practice: An International Journal, 3(2), 113-132.

Manitoba Association of Registered Nurses. (1991). [Demographic information for ministerial council on nursing education in the province of Manitoba]. Unpublished raw data.

Manitoba Health (1992). Quality health for Manitobans: The action plan. Winnipeg, MB: Author.

Manitoba Health Organizations (1994). Application to the health sector of Bill 22, the public sector reduced work week and compensation management act. Winnipeg, MB: Author.

Manitoba Health Organizations (1993). Issues regarding Bill 22, the public sector reduced work week and compensation act. Winnipeg, MB: Author.

Manitoba Health Organizations (1990, April). Results of a Survey of Health Care Worker Positions and Vacancies in Hospitals and Personal Care Homes in Manitoba. Winnipeg, MB: Author.

Manitoba Health Services Commission. (1992). [Population statistics]. Unpublished raw data.

Manitoba Health Services Commission. (1991). Annual report 1990-91. Winnipeg, MB: Author.

McKenzie, M. E. & Gupton, A., (1985). Clinical nursing research priority survey for Manitoba. Unpublished manuscript.

McMillan, B. A. (1983). On being a manager in rural Manitoba. Nursing Management, 14(8), 34-36.

Mullen, W. E. (1985). Identification and ranking of stressors in nursing home administrators. The Gerontologist, 25, 370-375.

Noer, D. M. (1993). Leadership in an age of layoffs. Issues and Observations, 13(3), 1-5.

Numerof, R. E., Hendin, S. A., & Cramer, K. D. (1984). Stress in health administrators: sources, symptoms, and coping strategies. Nursing Economics, (1), 270-278.

Nyberg, J. (1989). Roles and rewards in nursing administration. Nursing Administration Quarterly, 13(3), 36-39.

Oberst, M. T., Ventura, M., Frederickson, K., Schmitt, M., Noel, N. & Corless, F., (1981). Nursing research priorities identified by NYSNA. Journal N.Y.S.N.A., 12(1), 21-25.

Polit, D. F. & Hungler, B. P., (1987). Nursing research principles & methods (3rd ed.). New York: J. B. Lippincott, 571 pp.

Porter, L. & Lawler, E. (1968). Managerial attitudes and performance. Hamerwood, I. L.: Richard D. Irwin, Inc.

Quick, J. C., Dalton, J. E., Nelson, D. L. & Quick, J. D. (1985, September/October). Health administration can be stressful...but not necessarily distressful. Hospital & Health Services Administration, 101-111.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1, 385-401.

Reilly, B. J., & Legge, J. S., (1980). Saving the rural community hospital: An endangered species. Hospital & Health Services Administration, Special II, 17-23.

Rizzo, J. H., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. Administrative Science Quarterly, 15, 150-163.

Robinson, M. L. (1987, December 5). Rural providers ask: What's a hospital? Hospitals, 48-52.

Rural Health Services Task Force, (1990). Interim Report to Health Advisory Network, Winnipeg, MB: Manitoba Health.

Scalzi, C. C. (1984). An exploratory study of the relationship between role conflict and ambiguity and depressive symptoms in top level nurse administrators. Dissertation Abstract International, 45(9), 2872-B. (University Microfilms no. 8428561).

Scalzi, C. C. (1988). Role stress and coping strategies of nurse executives. Journal of Nursing Administration, 18(3), 34-38.

Scalzi, C. C., (1990). Role stress in top-level nurse executives. Western Journal of Nursing Research, 12(1), 85-94.

Schuler, R. S., Aldag, R. J. & Brief, A. P. (1977). Role conflict and ambiguity: A scale analysis. Organizational Behaviour and Human Performance, 20 111-128.

Shelley, S. (1984). Research methods in nursing and health. Toronto: Little, Brown & Company.

Snoek, J. D. (1966). Role strain in diversified role sets. The American Journal of Sociology, 71(4), 363-372.

Styles, M. M. (1988). Realities and paradoxes of the nurse administrator's role. Canadian Journal of Nursing Administration, 1(4), 15-20.

Sullivan, E. & Bryce, C., (1983). Nursing's future use of the Delphi technique for curriculum planning. Journal of Nursing Education, 22(5), 187-189.

Triolo, P. K., Allgeier, P. A., and Schwartz, C. E. (1995). Layoff survivor sickness: minimizing the sequela of organizational transformation. Journal of Nursing Administration, 25(3), 56-63.

Wakefield, M., (1992). Stress control for nurses. The Canadian Nurse, 88(4), 24-25.

Wakefield, M., (1990). Health care in rural America: A view from the nation's capital. Nursing Economics, 8, 83-89.

Weinert, C. & Long, K. A., (1987). Understanding the health care needs of rural families. Family Relations, 36, 450-455.

Western Consortium for Cancer Nursing Research (1987). Priorities for cancer nursing research: a Canadian replication. Cancer Nursing, 10(6), 319-326.

White, D. D. & Wisdom, B. L. (1985). Stress and the hospital administrator: sources and solutions. Hospital and Health Services Administration, 30, 112-119.

Wiens, A. G. (1990). Expanded nurse autonomy: Models for small rural hospitals. Journal of Nursing Administration, 20(12), 15-22.

Wilson, H. S., (1989). Research in Nursing (2nd ed.). Don Mills, ONT: Addison-Wesley, 738 pp.

Wisdom, B. L. (1984, July). Primary sources of hospital administrator stress. Journal of Occupational Behaviour, 5, 229-232.

Wolfgang, A. P. (1988, Spring). Job stress in the health professions: a study of physicians, nurse & pharmacists. Behavioural Medicine, 14, 43-47. [Health Professions Stress Index (HPSI)].

APPENDICES

Appendix A: Map of Manitoba Hospitals

Appendix B: Ethical Review Committee - Approval Form

Appendix C: Telephone Contact with Potential Participants

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Appendix E: Reminder Letter - Round 1

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Round 1 Questionnaire

Appendix H: Letter of Introduction to Round 2 Questionnaire

Instructions for Responding to Round 2 Questionnaire

Round 2 Questionnaire

Appendix I: Letter of Introduction to Round 3 Questionnaire

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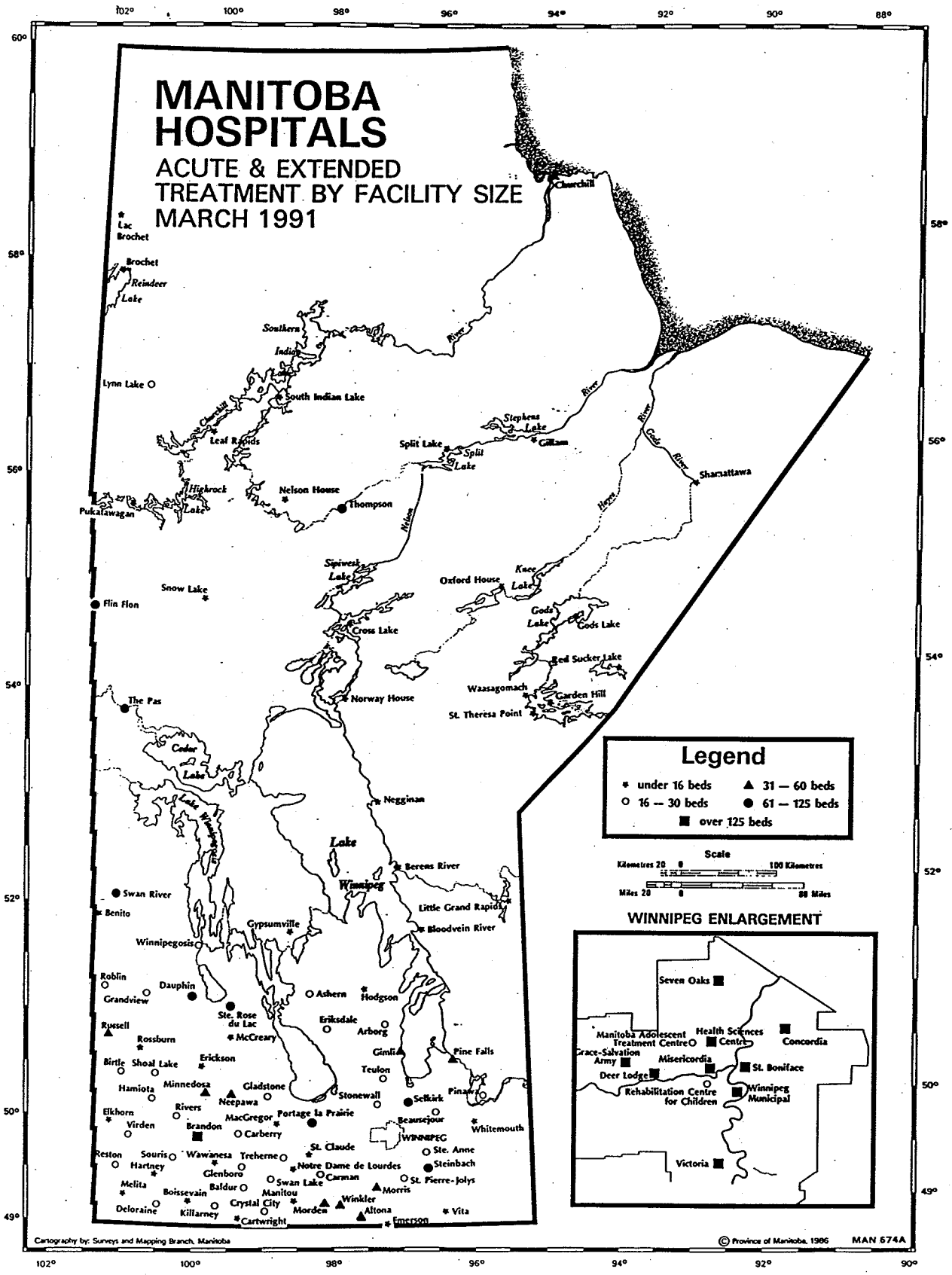
Round 3 Questionnaire

Appendix J: Nurse Executive Stressors Ranked by Intensity in Delphi Round 2 and Round 3

Appendix K: Urgency Indicators to Differentiate Between Stressors with Identical Mean Scores

Appendix L: Change in Stress Scores Between Delphi Round 2 and Round 3.

Appendix A



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The University of Manitoba

FACULTY OF NURSING
ETHICAL REVIEW COMMITTEE

APPROVAL FORM

Proposal Number N#93/27

Proposal Title: "Sources of occupational stresses for nurse executives in rural Manitoba's community hospitals."

Name and Title of Researcher(s): Sharon M. Edmundson
Faculty of Nursing, Master of Nursing Program
University of Manitoba

Date of Review: September 13, 1993.

APPROVED BY THE COMMITTEE: September 13, 1993.

Comments: Proposal APPROVED with the submitted changes as outlined in your correspondence of September 27, 1993.

Date: October 1/93

Karen I. Chalmers, PhD, RN — Chairperson
Associate Professor
University of Manitoba Faculty of Nursing

Position

NOTE:
Any significant changes in the proposal should be reported to the Chairperson for the Ethical Review Committee's consideration, in advance of implementation of such changes.

Revised: 92/05/08/se

Appendix C

Telephone Contact with Potential Participant

Hello, this is Sharon Edmundson calling. I am a graduate student in the Faculty of Nursing at the University of Manitoba. In partial fulfilment of the program I am conducting a research study on the sources of occupational stress for nurse executives in rural Manitoba's community hospitals. Your name is listed in the Canadian Hospital Directory as the top-level nurse executive for _____ Hospital.

I am phoning to invite you to participate in this research study. Is this a convenient time for you to talk or would you prefer that I call at another time? (If the answer is "yes, it is a convenient time", the investigator will continue. If the answer is "another time is better", the investigator will inquire as to a convenient date & time).

Your opinion is important to this study because as a practising nurse executive you are familiar with the situations which cause you to experience stress in your role as a rural nurse executive. While there are no immediate benefits to participating in this study, the information you provide will help to enhance nurse executives' awareness of the major issues which cause their job-related stress and to provide a basis for developing strategies to address these issues.

If you agree to participate it will involve filling out a series of three successive questionnaires over a 4 to 6 month period. Each questionnaire will require approximately 30 minutes to complete.

You are not obligated to participate in the study. If you choose to participate, you may withdraw from the study at any time. Your participation will remain strictly confidential. Your name will not appear on the questionnaires. Each participant will be assigned a code number that is known only to the investigator, the research assistant and the participant.

My study has been approved by the Faculty of Nursing's Ethical Review Committee. My thesis committee members, Professor Annette Gupton (chair), Dr. Janet Beaton and Dr. Leslie Roos are supervising my research project.

Do you have any questions? Are you interested in participating in this study? (If the answer is "no" the contact is terminated. If the answer is "yes" the investigator will respond). Thank you for agreeing to participate. I will send you the first questionnaire within the next week. May I please verify the spelling of your name and your correct mailing address.

Thank you once again. If you have any questions or wish to discuss the study please call me at please leave message and I will return your call as soon as possible).

Appendix D

Letter of Introduction to Study

Date

Dear Nurse Executive:

I would like to invite you to participate in a research study to determine the sources of occupational stress experienced by nurse executives in rural Manitoba's community hospitals.

This project has been approved by the Ethical Review Committee of the School of Nursing at the University of Manitoba. The study is the focus of my thesis, required to complete my Masters in Nursing at the University of Manitoba. My thesis committee members, Professor Annette Gupton (Committee Chair, Faculty of Nursing), Dr. Janet Beaton (Dean, Faculty of Nursing) and Dr. Leslie Roos (Professor, Department of Community Health Sciences, Faculty of Medicine) are supervising my research project.

Your name was selected from the Canadian Hospital Directory as a nurse executive working in a rural Manitoba hospital. Your opinion is important to the study because as a practising nurse executive you are familiar with the factors which cause you to experience stress in your role as a rural nurse executive. While there are no immediate benefits to participating in the study, the long term benefits will include enhancing nurse executives' awareness of the major issues which cause their occupational stress and providing a basis for developing strategies to address these issues.

There is no obligation to participate and you may withdraw from the study at any time. There are no known risks to study participants. If you agree to participate, you will be asked to fill out a series of three successive questionnaires over a four to six month period. Each questionnaire will require approximately 30 minutes of your time to complete. All return postage will be provided

thereby ensuring that you do not incur any costs associated with this survey. Those nurse executives that return all three completed questionnaires will receive a Manitoba Nursing Research Institute pin at the end of the study.

Your participation in the study will remain strictly confidential. Your name will not appear on the questionnaires. Each participant's questionnaires will be assigned a code number that is known only to the investigator, the research assistant and the participant. The questionnaires will be stored in a locked cupboard accessible only to the investigator. Based on the recommendation of the Medical Research Council, the data will be retained for 7-10 years. The results will be based on group data, not individual responses. Thus, no one will know how you, as an individual, answered the questionnaires. Furthermore, the results will be reported in a way that protects the identity of groups which might be identifiable because of small numbers (eg. males).

Completing the questionnaires indicates your willingness and consent to participate in the study. Each questionnaire will be developed from the data obtained from the immediately preceding questionnaire. Thus each successive questionnaire will be sent to you separately after you return the previous questionnaires. Your continued participation through all three rounds of questionnaires would be appreciated as it would assist in establishing a consolidated opinion regarding the major occupational stressors for rural nurse executives.

Please contact Sharon Edmundson at (please leave a message and I will return your call as soon as possible) with any questions or concerns related to the study. If you would like to receive a summary of the final results of this study please complete the bottom section of this letter and return it with your first questionnaire. Thank you for taking the time to read this letter of invitation.

Sincerely,

Sharon M. Edmundson
Principal Investigator

Please mail a summary of the study findings to:

Name:_____

Street:_____

City:_____

Postal Code:_____

Appendix E

Reminder Letter - Round 1

November 8, 1993

Dear Nurse Executive:

A few weeks ago I sent you a questionnaire asking you to share the sources of occupational stress you experience in your role as a rural nurse executive.

Have you returned your questionnaire yet? If not, would you take a few moments now to complete and return it in the self-addressed stamped envelope that was included with the letter. You have been selected from a very limited sample to participate in this survey and your response is vital to the final results. If you have already returned the survey, please accept my thanks and disregard this reminder.

Thank you in advance for your time and co-operation. Those nurse executives that return all three completed questionnaires will receive a Manitoba Nursing Research Institute pin at the end of the study.

Sincerely,

Sharon M. Edmundson

sme

Reminder Letter - Round 2

February 7, 1994

Dear Nurse Executive:

A few weeks ago I sent you a Round 2 questionnaire for the study "Sources of Occupational Stress for Nurse Executives in Rural Manitoba's Community Hospitals". In this questionnaire you are asked to rate how stressful each stressor is in your particular job.

Have you returned your questionnaire yet? If not, would you take a few moments now to complete and return it in the self-addressed stamped envelope that was included with the letter. As previously stated you were selected from a very limited sample to participate in this survey and your response is vital to the final results. If you have already returned the survey, please accept my thanks and disregard this reminder.

Thank you in advance for your time and co-operation in completing the Round 2 questionnaire.

Sincerely,

Sharon M. Edmundson

sme

Reminder Letter - Round 3

May 2, 1994

Dear Nurse Executive:

A few weeks ago I sent you a Round 3 questionnaire for the study "Sources of Occupational Stress for Nurse Executives in Rural Manitoba's Community Hospitals". In this questionnaire you are asked to review the identified stressors and reconsider your original ratings in light of the responses of others.

Have you returned your questionnaire yet? If not, would you take a few moments now to complete and return it in the self-addressed stamped envelope that was included with the letter. As previously stated, you were selected from a very limited sample to participate in this survey and your response is vital to the final results. If you have already returned the survey, please accept my thanks and disregard this reminder.

Thank you in advance for your time and co-operation in completing the Round 3 questionnaire.

Sincerely,

Sharon M. Edmundson
Principal Investigator

sme

Appendix F

DEMOGRAPHIC INFORMATION

Please check or write in the most appropriate response for each of the following questions:

1. What is your current job title?

   _____ Assistant Executive Director, Patient Services

   _____ Director of Nursing Services

   _____ Other (specify) _____

2. How many years have you been in your present position?

   _____ < 1 year

   _____ 1 - 5 years

   _____ 6 - 10 years

   _____ 11 - 15 years

   _____ > 15 years

3. Before assuming your present position, did you have previous experience as a Director of Nursing or Assistant Executive Director, Patient Services?

   _____ Yes _____ No

   If yes, how many years of previous experience in total?

   _____ < 1 year

   _____ 1 - 5 years

   _____ 6 - 10 years

   _____ 11 - 15 years

   _____ > 15 years

4. In your current position, are you responsible for other departments in addition to the department of Nursing Service?

   _____ Yes _____ No

   If yes, please list other departments.

   _____

   _____

5. How many equivalent full time positions (EFT) are currently under your responsibility?

_____ Unionized nurses
_____ Non-unionized nurses
_____ Other (specify) _____

6. What is the approximate dollar amount of the annual operating budget that is under your responsibility?

_____

7. What is the number of active treatment beds in your hospital?

_____ < 15 beds
_____ 16 - 30 beds
_____ 31 - 60 beds
_____ 61 -125 beds

8. What was your hospital's average percentage occupancy for the past year?

_____ < 10%
_____ 11 - 20%
_____ 21 - 30%
_____ 31 - 40%
_____ 41 - 50%
_____ 51 - 60%
_____ 61 - 70%
_____ 71 - 80%
_____ 81 - 90%
_____ 91 -100%

9. What is the distance from your hospital to the nearest urban hospital (Brandon or Winnipeg)?

_____ < 25 miles
_____ 26 -50 miles
_____ 51 -75 miles
_____ 76 - 100 miles
_____ 101 -125 miles
_____ 126 - 150 miles
_____ 151 - 175 miles
_____ 176 - 200 miles
_____ 201 - 250 miles
_____ > 250 miles

10. What level of nursing education have you achieved?

_____ Diploma
_____ Bachelor's Degree in Nursing
_____ Master's Degree in Nursing

11. Do you have additional formal education?

_____ Yes _____ No

If yes, please check highest degree:

_____ B.A. _____ M.H.A. _____ M.Ed.

_____ B.Sc. _____ M.B.A.

_____ Other (specify)_____

12. Do you have advanced administrative preparation?

_____ Yes _____ No

If yes, please check the program completed:

_____ Introduction to Nursing Management: Distance Education Program (previously called The Nursing Unit Administration Course)

_____ Nursing Administration in the Health Care System Certificate Program (University of Manitoba)

_____ Other (specify)_____

13. Please indicate your sex: ____ Female ____ Male

14. Please check your age range:

_____ 20 to 29 years

_____ 30 to 39 years

_____ 40 to 49 years

_____ 50 to 59 years

_____ 60 years and over

15. Please check your marital status:

_____ Single, never married

_____ Married

_____ Divorced or separated

_____ Widowed

16. Please specify the number of children living at home and their ages.

_____ Number of children_____ Ages

17. Please check your current annual salary range:

_____ $40,000 or less

_____ $41,000 to $45,000

_____ $46,000 to $50,000

_____ $51,000 to $55,000

_____ $56,000 to $60,000

_____ $61,000 or more

Thank you for taking the time to fill in your demographic information.

Appendix G

INSTRUCTION FOR RESPONDING TO ROUND 1 QUESTIONNAIRE

Please indicate 3 major stressors you have experienced in your role as a rural nurse executive. There are three columns, one for a brief description of the stressor, one for an example and a comment column to clarify this stressor and avoid misrepresentation. Your identified stressors, examples and comments should be brief, but specific.

Please have the completed questionnaire in the mail to me by _____.
(2 weeks from date of mailing)

To ensure anonymity please discard the envelope in which the questionnaire was mailed and do not sign the completed questionnaire. A self-addressed, stamped envelope has been enclosed for your convenience.

ROUND 1 QUESTIONNAIRE

Sources of Occupational Stress Survey

List at least three stressors you have experienced in your role as a rural nurse executive. Stressors are events or conditions that cause uncomfortable feelings such as fear, anxiety, worry, concern, frustration or anger. List stressors which stand out in your mind as having caused you to experience the most stress in your role as a rural nurse executive.

STRESSOR	EXAMPLE	COMMENTS
1.		
2.		
3.		

Thank you for taking the time to complete this first questionnaire.

Appendix H

Letter of Introduction to Round 2 Questionnaire

January 24, 1994

Dear Nurse Executive:

Thank you once again for completing the first questionnaire in my study of the sources of occupational stress for nurse executives in rural Manitoba's community hospitals. Ninety-two percent of the nurse executive group returned completed questionnaires. Your interest in and contribution to this study are sincerely appreciated.

As there were many recurring themes in the identified stressors, I have sorted the stressors, so that essentially identical items were grouped together. Next I developed a set of labels that best described the identified stressors. These labels are the basis for the Round 2 questionnaire.

The next task in the study is for you to rate how stressful each of the identified stressors is in your particular job. Enclosed are the Instructions for Responding to Round 2 Questionnaire and the Round 2 Questionnaire. Please return the completed questionnaire to me by **FEBRUARY 7, 1994**.

Your continued participation would be appreciated as it will assist in establishing a consolidated opinion regarding the major occupational stressors for rural nurse executives. A Manitoba Nursing Research Institute pin will be sent to those nurse executives that complete all three questionnaires.

Please contact Sharon Edmundson at (please leave a message and I will return your call as soon as possible) with any questions related to the second questionnaire.

Sincerely,

Sharon M. Edmundson
Principal Investigator

SE/saj

INSTRUCTION FOR RESPONDING TO ROUND 2 QUESTIONNAIRE

Listed on the attached pages are the stressors derived from the Round 1 questionnaire mailing. Please proceed according to the following steps:

1. Review all items on the list.
2. Rate how stressful each item is in your job.
3. Comment on items as you wish. You may argue in favour or against an item or request clarification if the item is unclear to you.
4. Discard the envelope in which this questionnaire was mailed and do not sign the completed questionnaire.
5. Return your response in the enclosed self-addressed, stamped envelope by _____.
(Date)

Sources of Occupational Stress Survey

On a scale of 0-5, with 0 indicating no stress to 5 indicating high stress, circle the answer which best represents how stressful you find each item. Stressfulness refers to the degree to which the event or condition causes uncomfortable feelings such as fear, anxiety, worry, concern, frustration or anger. Circle one response for each item.

KEY: NS = No Stress
HS = High Stress

ITEMS	QUESTION To what degree is this item stressful for you?	COMMENTS
STRESSORS RELATED TO THE CHIEF EXECUTIVE OFFICER (CEO)		
1. Lack of support from CEO (regarding decision making, instituting changes, continuing education).	NS 0 1 2 3 4 5 HS	
2. Conflict between nurse executive role and CEO role when nurse executive is "in charge" in CEO's absence.	NS 0 1 2 3 4 5 HS	
3. Ineffective CEO (often unavailable, poor decision making skills, lack of direction/ leadership).	NS 0 1 2 3 4 5 HS	
4. Management style of CEO (autocratic, patriarchal, closed, procrastinator).	NS 0 1 2 3 4 5 HS	
5. Ineffective organizational structure (lines of authority unclear or not followed, no one takes ownership of problems/issues).	NS 0 1 2 3 4 5 HS	

ITEMS	QUESTION To what degree is this item stressful for you?	COMMENTS

STRESSORS RELATED TO THE NURSE EXECUTIVE'S JOB

1.	Continued "bad feelings" about the Manitoba Nurse's Union Strike of 1991.	NS 0 1 2 3 4 5 HS	
2.	Inadequate orientation to the nurse executive position.	NS 0 1 2 3 4 5 HS	
3.	Isolation/lack of support from other nonunion management nurses.	NS 0 1 2 3 4 5 HS	
4.	Lack of education and/or experience for nurse executive's responsibilities/duties.	NS 0 1 2 3 4 5 HS	
5.	Limited understanding of and involvement in the budget process.	NS 0 1 2 3 4 5 HS	
6.	Insufficient time in a day to complete work.	NS 0 1 2 3 4 5 HS	
7.	Poor monetary remuneration for rural nurse executive's job responsibilities.	NS 0 1 2 3 4 5 HS	
8.	Dealing with constant change.	NS 0 1 2 3 4 5 HS	
9.	Isolation from education opportunities for rural nurse executives/rural nurses.	NS 0 1 2 3 4 5 HS	

ITEMS	QUESTION To what degree is this item stressful for you?	COMMENTS
10. Subjected to sex-role stereotyping (women expected to take minutes, make coffee).	NS 0 1 2 3 4 5 HS	
11. Nurse executive job parameters are too broad (too many roles/"hats", too many departments/programs, spread too thin).	NS 0 1 2 3 4 5 HS	
STRESSORS RELATED TO HEALTH REFORM		
1. Concern that application of Manitoba Health's staffing guidelines will compromise the standard/safety of patient care provided.	NS 0 1 2 3 4 5 HS	
2. Laying off staff in a small community where staff are known personally and/or socially to the nurse executive.	NS 0 1 2 3 4 5 HS	
3. Threat to job security for nurse executive(reduced hours, layoff).	NS 0 1 2 3 4 5 HS	
4. Uncertainty about the future of hospital and the potential economic stress to the community.	NS 0 1 2 3 4 5 HS	
5. Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	NS 0 1 2 3 4 5 HS	
6. Change in nurse executives role/ responsibilities related to health reform (new work, more work, less administration time).	NS 0 1 2 3 4 5 HS	

ITEMS	QUESTION To what degree is this item stressful for you?	COMMENTS
7. Inconsistent government directives related to health reform/cutbacks. (For example, plans rushed to meet Oct. 1/93 deadline, then plans for cutbacks put on hold indefinitely).	NS 0 1 2 3 4 5 HS	
8. "Turf protection" by Board members when involved in regional planning for health reform.	NS 0 1 2 3 4 5 HS	
9. Decreased staff morale related to layoffs/loss of jobs.	NS 0 1 2 3 4 5 HS	
10. Lack of input from rural nurses into health care planning at the provincial level.	NS 0 1 2 3 4 5 HS	
11. Limited resources available for service delivery due to budgetary restraints (staffing, medical-surgical supplies, pharmacy budget cuts).	NS 0 1 2 3 4 5 HS	
STRESSORS RELATED TO PHYSICIANS		
1. Physicans not following hospital "rules" (violating medical bylaws/ hospital policies, expecting nurses to provide care beyond their expertise and/or scope of practice).	NS 0 1 2 3 4 5 HS	
2. The power of physicians influencing operational matters (staffing levels, nursing practice standards, staff discipline situations).	NS 0 1 2 3 4 5 HS	

ITEMS	QUESTION To what degree is this item stressful for you?	COMMENTS
3. Lack of qualified experienced physicians (high turnover, 24 hour coverage, incompetence).	NS 0 1 2 3 4 5 HS	

STRESSORS RELATED TO STAFF AND STAFF RELATIONSHIPS

1. Staff and/or physicians resistant to change.	NS 0 1 2 3 4 5 HS	
2. Dealing with union issues, grievances and arbitrations.	NS 0 1 2 3 4 5 HS	
3. Dealing with problems of poor performance, including disciplinary measures.	NS 0 1 2 3 4 5 HS	
4. Staff lack commitment to hospital ("all take and no give" as related to hours of work).	NS 0 1 2 3 4 5 HS	
5. Resolving conflicts among staff, departments, physicians (Being "caught in the middle").	NS 0 1 2 3 4 5 HS	
6. Lack of communication/"turf protection" between departments, affecting the delivery of nursing care.	NS 0 1 2 3 4 5 HS	
7. Supervising staff that were peers and/or are known personally and socially by the nurse executive (the "family" environment of a small hospital/community).	NS 0 1 2 3 4 5 HS	
8. Difficulty in recruitment and retention of permanent and casual staff.	NS 0 1 2 3 4 5 HS	

ITEMS	QUESTION To what degree is this item stressful for you?	COMMENTS
9. Promoting professional attitudes and behaviours in staff that are content with the "status quo". (Staff apathetic/ indifferent to continuing education/ professional development).	NS 0 1 2 3 4 5 HS	
10. Staff do not understand the nurse executive's role/responsibilities.	NS 0 1 2 3 4 5 HS	

STRESSORS RELATED TO THE BOARD OF TRUSTEES/COMMUNITY

1. Dealing with community criticism/pressure.	NS 0 1 2 3 4 5 HS	
2. Lack of support/understanding for nurse executive's role by the Board of Trustees.	NS 0 1 2 3 4 5 HS	
3. Board of Trustees' involvement in operational matters.	NS 0 1 2 3 4 5 HS	
4. Board of Trustees' limited knowledge of their role/functions.	NS 0 1 2 3 4 5 HS	

GENERAL COMMENTS:

Thank you for taking the time to complete the second questionnaire.

Appendix I

Letter of Introduction to Round 3 Questionnaire

April 15, 1994

Dear Nurse Executive:

Thank you for completing the second questionnaire in my study of the sources of occupational stress for nurse executives in rural Manitoba's community hospitals. Once again ninety-two percent of the nurse executive group returned their questionnaires. Your ongoing contribution to this study is sincerely appreciated.

In the second questionnaire you rated how stressful each of the identified stressors was in your particular job. Using your responses, I calculated the median group response for each stressor. The group response indicates how stressful each of the stressors was for the group as a whole.

Your last task in the study is to review the identified stressors and reconsider your original ratings in light of the responses of others. Enclosed are the Instructions for Responding to Round 3 Questionnaire and the Round 3 Questionnaire. Please return the completed questionnaire to me by **APRIL 29, 1994**.

Your continued participation would be appreciated as it will assist in establishing a consolidated opinion regarding the major occupational stressors for rural nurse executives. A Manitoba Nursing Research Institute pin will be sent to those nurse executives that complete this third and final questionnaire.

Please contact Sharon Edmundson at (please leave a message and I will return your call as soon as possible) with any questions related to the second questionnaire.

Sincerely,

Sharon M. Edmundson
Principal Investigator

SE/saj

INSTRUCTIONS FOR RESPONDING TO ROUND 3 QUESTIONNAIRE

Listed on the attached pages are the major occupational stressors, your responses and the group's response from the Round 2 questionnaire. Please proceed according to the following steps:

1. Review all items and their ratings according to Round 2 data.
2. Review each item and reconsider your original rating of the item in light of the response of others.
3. Circle any changes in rating you may want to make or circle no change if you with your rating to remain the same.
4. Comment or qualify your opinion as desired, limiting your comments to no more than three short precise statements.
5. Discard the envelope in which this questionnaire was mailed and do not sign the completed questionnaire.
6. Please return the completed questionnaire in the mail to me by _____.
   (Date)

A self-addressed, stamped envelope has been enclosed for your convenience.

ROUND 3 QUESTIONNAIRE

Sources of Occupational Stress Survey

Your responses from the Round 2 questionnaire are listed in column 1. The group's median responses are found in column 2. In column 3 I am asking you to reconsider your original ratings in light of the responses of others. If you do not wish to change your rating, circle no change (NC). If you wish to change your rating, circle your new response using the scale of 0-5, with 0 indicating no stress to 5 indicating high stress. Stressfulness refers to the degree to which the event or conditions causes uncomfortable feelings such as fear, anxiety, worry, concern, frustration or anger. Circle one response for each item.

KEY: NS = No Stress
HS = High Stress
NC = No Change

ITEMS	Column 1: Your Response in Round 2	Column 2: Group Response in Round 2	Column 3: No Change / Change my Response to	COMMENTS
STRESSORS RELATED TO THE CHIEF EXECUTIVE OFFICER (CEO)				
1. Lack of support from CEO (regarding decision making, instituting changes, continuing education).	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
2. Conflict between nurse executive role and CEO role when nurse executive is "in charge" in CEO's absence.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
3. Ineffective CEO (often unavailable, poor decision making skills, lack of direction/ leadership).	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
4. Management style of CEO (autocratic, patriarchal, closed, procrastinator).	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
5. Ineffective organizational structure (lines of authority unclear or not followed, no one takes ownership of problems/issues).	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	

ITEMS	Column 1: Your Response in Round 2	Column 2: Group Response in Round 2	Column 3: No Change / Change my Response to	COMMENTS
STRESSORS RELATED TO THE NURSE EXECUTIVE'S JOB				
1. Continued "bad feelings" about the Manitoba Nurse's Union Strike of 1991.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
2. Inadequate orientation to the nurse executive position.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
3. Isolation/lack of support from other nonunion management nurses.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
4. Lack of education and/or experience for nurse executive's responsibilities/duties.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
5. Limited understanding of and involvement in the budget process.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
6. Insufficient time in a day to complete work.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
7. Poor monetary remuneration for rural nurse executive's job responsibilities.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
8. Dealing with constant change.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
9. Isolation from education opportunities for rural nurse executives/rural nurses.	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	
10. Subjected to sex-role stereotyping (women expected to take minutes, make coffee).	NS 0 1 2 3 4 5 HS	NS 0 1 2 3 4 5 HS	NC NS 0 1 2 3 4 5 HS	

ITEMS	Column 1: Your Response in Round 2	Column 2: Group Response in Round 2	Column 3: No Change / Change my Response to	COMMENTS
11. Nurse executive job parameters are too broad (too many roles/"hats", too many departments/programs, spread too thin).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
STRESSORS RELATED TO HEALTH REFORM				
1. Concern that application of Manitoba Health's staffing guidelines will compromise the standard/safety of patient care provided.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
2. Laying off staff in a small community where staff are known personally and/or socially to the nurse executive.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
3. Threat to job security for nurse executive(reduced hours, layoff).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
4. Uncertainty about the future of hospital and the potential economic stress to the community.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
5. Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
6. Change in nurse executives role/ responsibilities related to health reform (new work, more work, less administration time).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
7. Inconsistent government directives related to health reform/cutbacks. (For example, plans rushed to meet Oct. 1/93 deadline, then plans for cutbacks put on hold indefinitely).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	
8. "Turf protection" by Board members when involved in regional planning for health reform.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC / NS HS 0 1 2 3 4 5	

ITEMS	Column 1: Your Response in Round 2	Column 2: Group Response in Round 2	Column 3: No Change / Change my Response to	COMMENTS
9. Decreased staff morale related to layoffs/loss of jobs.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
10. Lack of input from rural nurses into health care planning at the provincial level.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
11. Limited resources available for service delivery due to budgetary restraints (staffing, medical-surgical supplies, pharmacy budget cuts).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
STRESSORS RELATED TO PHYSICIANS				
1. Physicans not following hospital "rules" (violating medical bylaws/ hospital policies, expecting nurses to provide care beyond their expertise and/or scope of practice).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
2. The power of physicians influencing operational matters (staffing levels, nursing practice standards, staff discipline situations).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
3. Lack of qualified experienced physicians (high turnover, 24 hour coverage, incompetence).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
STRESSORS RELATED TO STAFF AND STAFF RELATIONSHIPS				
1. Staff and/or physicians resistant to change.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
2. Dealing with union issues, grievances and arbitrations.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	

ITEMS	Column 1: Your Response in Round 2	Column 2: Group Response in Round 2	Column 3: No Change / Change my Response to	COMMENTS
3. Dealing with problems of poor performance, including disciplinary measures.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
4. Staff lack commitment to hospital ("all take and no give" as related to hours of work).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
5. Resolving conflicts among staff, departments, physicians (Being "caught in the middle").	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
6. Lack of communication/"turf protection" between departments, affecting the delivery of nursing care.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
7. Supervising staff that were peers and/or are known personally and socially by the nurse executive (the "family" environment of a small hospital/community).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
8. Difficulty in recruitment and retention of permanent and casual staff.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
9. Promoting professional attitudes and behaviours in staff that are content with the "status quo". (Staff apathetic/ indifferent to continuing education/ professional development).	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	
10. Staff do not understand the nurse executive's role/responsibilities.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC NS HS 0 1 2 3 4 5	

ITEMS	Column 1: Your Response in Round 2	Column 2: Group Response in Round 2	Column 3: No Change	Column 3: Change my Response to	COMMENTS
STRESSORS RELATED TO THE BOARD OF TRUSTEES/COMMUNITY					
1. Dealing with community criticism/pressure.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC	NS HS 0 1 2 3 4 5	
2. Lack of support/understanding for nurse executive's role by the Board of Trustees.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC	NS HS 0 1 2 3 4 5	
3. Board of Trustees' involvement in operational matters.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC	NS HS 0 1 2 3 4 5	
4. Board of Trustees' limited knowledge of their role/functions.	NS HS 0 1 2 3 4 5	NS HS 0 1 2 3 4 5	NC	NS HS 0 1 2 3 4 5	

GENERAL COMMENTS:

Thank you for taking the time to complete the third and final questionnaire.

Appendix J

Nurse Executive Stressors Ranked by Intensity in Delphi Round 2 (n=56) and Round 3 (n=54)

Category	Stressor	Round	Rank	Mean	Median
Health Reform	Inconsistent government directives related to health reform/cutbacks. (For example, plans rushed to meet Oct. 1/93 deadline, then plans for cutbacks put on hold indefinitely).	2	1	4.107	4.5
		3	1	4.370	5.0
Health Reform	Concern that application of Manitoba Health's staffing guidelines will compromise the standard/safety of patient care provided.	2	2	3.786	4.0
		3	2	3.870	4.0
Nurse Executive's Job	Nurse executive job parameters are too broad (too many roles/ "hats", too many departments/ programs, spread too thin).	2	4	3.696	4.0
		3	3	3.759	4.0
Nurse Executive's Job	Insufficient time in a day to complete work.	2	6	3.536	4.0
		3	4[a]	3.741	4.0
Health Reform	Change in nurse executives role/ responsibilities related to health reform (new work, more work, less administration time).	2	7	3.527	4.0
		3	4[a]	3.741	4.0
Health Reform	Lack of input from rural nurses into health care planning at the provincial level.	2	3	3.732	4.0
		3	6	3.722	4.0
Health Reform	Laying off staff in a small community where staff are known personally and/or socially to the nurse executive.	2	5	3.554	4.0
		3	7	3.556	4.0
Health Reform	Uncertainty about the future of hospital and the potential economic stress to the community.	2	8	3.518	4.0
		3	8	3.519	4.0
Health Reform	Decreased staff morale related to layoffs/loss of jobs.	2	9	3.455	4.0
		3	9	3.407	4.0

Category	Stressor	Round	Rank	Mean	Median
Health Reform	Threat to job security for nurse executive (reduced hours, layoff).	2	10	3.286	4.0
		3	10	3.222	3.5
Health Reform	Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	2	13[b]	3.107	3.5
		3	11	3.111	3.0
Health Reform	Limited resources available for service delivery due to budgetary restraints (staffing, medical-surgical supplies, pharmacy budget cuts).	2	13[b]	3.107	3.0
		3	12	3.074	3.0
Staff/Staff Relationships	Promoting professional attitudes and behaviours in staff that are content with the "status quo". (Staff apathetic/indifferent to continuing education/professional development).	2	12	3.125	3.0
		3	13	3.056	3.0
Staff/Staff Relationships	Dealing with problems of poor performance, including disciplinary measures.	2	15	3.036	3.0
		3	14	2.963	3.0
Nurse Executive's Job	Isolation from educational opportunities for rural nurse executives/rural nurses.	2	16	2.982	3.0
		3	15	2.926	3.0
Staff/Staff Relationships	Staff and/or physicians resistant to change.	2	11	3.179	3.0
		3	16	2.907	3.0
Staff/Staff Relationships	Staff do not understand the nurse executive's role/responsibilities.	2	18	2.893	3.0
		3	17	2.852	3.0
Staff/Staff Relationships	Dealing with union issues, grievances and arbitrations.	2	17	2.911	3.0
		3	18	2.833	3.0
Staff/Staff Relationships	Resolving conflicts among staff, departments, physicians (Being "caught in the middle.")	2	19	2.857	3.0
		3	19	2.815	3.0
Nurse Executive's Job	Dealing with constant change.	2	23	2.732	3.0
		3	20	2.778	3.0
Health Reform	"Turf protection" by Board members when involved in regional planning for health reform.	2	20	2.839	3.0
		3	21	2.759	3.0
Board/ Community	Board of Trustees' limited knowledge of their role/functions.	2	22	2.745	3.0
		3	22	2.604	3.0

Category	Stressor	Round	Rank	Mean	Median
Physicians	Physicians not following hospital "rules" (violating medical bylaws/ hospital policies, expecting nurses to provide care beyond their expertise and/or scope of practice).	2	21	2.804	3.0
		3	23	2.593	3.0
Nurse Executive's Job	Poor monetary remuneration for rural nurse executive's job responsibilities.	2	26	2.564	3.0
		3	24	2.574	3.0
Board/ Community	Dealing with community criticism/ pressure.	2	24[c]	2.571	3.0
		3	25	2.556	3.0
Physicians	The power of physicians influencing operational matters (staffing levels, nursing practice standards, staff discipline situations).	2	24[c]	2.571	3.0
		3	26	2.389	3.0
CEO	Management style of CEO (autocratic, patriarchal, closed, procrastinator).	2	28	2.426	3.0
		3	27	2.302	3.0
Staff/Staff Relationships	Staff lack commitment to hospital ("all take and no give" as related to hours of work).	2	29[d]	2.393	2.0
		3	28	2.204	2.0
CEO	Ineffective CEO (often unavailable, poor decision making skills, lack of direction/leadership).	2	27	2.453	2.0
		3	29	2.189	2.0
Nurse Executive's Job	Limited understanding of and involvement in the budget process.	2	29[d]	2.393	2.0
		3	30	2.185	2.0
Nurse Executive's Job	Isolation/lack of support from other nonunion management nurses.	2	31	2.375	2.0
		3	31	2.130	2.0
Staff/Staff Relationships	Lack of communication/"turf protection" between departments, effecting the delivery of nursing care.	2	32	2.179	2.0
		3	32	2.000	2.0
Nurse Executive's Job	Inadequate orientation to the nurse executive position.	2	35[f]	2.036	2.0
		3	33[e]	1.981	2.0
Nurse Executive's Job	Lack of education and/or experience for nurse executive's responsibilities/duties.	2	42	1.362	2.0
		3	33[e]	1.981	2.0

Category	Stressor	Round	Rank	Mean	Median
Staff/Staff Relationships	Supervising staff that were peers and/or are known personally and socially by the nurse executive (the "family" environment of a small hospital/community).	2	35[f]	2.036	2.0
		3	35	1.870	2.0
CEO	Ineffective organizational structure (lines of authority unclear or not followed, no one takes ownership of problems/issues).	2	35[f]	2.036	2.0
		3	36	1.811	2.0
Physicians	Lack of qualified experienced physicians (high turnover, 24 hour coverage, incompetence).	2	34	2.071	1.5
		3	37	1.796	1.0
CEO	Lack of support from CEO (regarding decision making, instituting changes, continuing education).	2	33	2.132	2.0
		3	38	1.792	2.0
Board/ Community	Board of Trustees' involvement in operational matters. .	2	38	1.982	2.0
		3	39	1.755	2.0
Board/ Community	Lack of support/understanding for nurse executive's role by the Board of Trustees'.	2	40	1.873	1.0
		3	40	1.566	1.0
CEO	Conflict between nurse executive role and CEO role when nurse executive is "in charge" in CEO's absence.	2	39	1.887	1.0
		3	41	1.491	1.0
Staff/Staff Relationships	Difficulty in recruitment and retention of permanent and casual staff.	2	41	1.571	1.0
		3	42	1.463	1.0
Nurse Executive's Job	Continued "bad feelings" about the Manitoba Nurse's Union Strike of 1991.	2	43[g]	1.273	1.0
		3	43	1.185	1.0
Nurse Executive's Job	Subjected to sex-role stereotyping (women expected to take minutes, make coffee).	2	43[g]	1.273	1.0
		3	44	1.093	1.0

Note. Stressors are listed in rank order of mean scores for Round 3

[a] mean score was tied at 3.741 for Round 3

[b] mean score was tied at 3.107 for Round 2

[c] mean score was tied at 2.571 for Round 2

[d] mean score was tied at 2.393 for Round 2

[e] mean score was tied at 1.981 for Round 3

[f] mean score was tied at 2.036 for Round 2

[g] mean score was tied at 1.273 for Round 2

Appendix K

Urgency Indicators to Differentiate Between Stressors with Identical Mean Scores

Stressor	Median	Mean	%4+5	%5	Rank
Round 3 (n=54)					
Change in nurse executives role/ responsibilities related to health reform.	4	3.741	42.6	16.7	2
Insufficient time in a day to complete work.	4	3.741	64.8	27.8	1
Inadequate orientation to the nurse executive position.	2	1.981	18.5	9.3	1
Lack of education and/or experience for nurse executive's responsibilities/duties.	2	1.981	16.7	1.9	2
Round 2 (n=56)					
Limited resources available for service delivery due to budgetary restraints.	3	3.107	39.3	16.1	2
Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	3.5	3.107	50.0	28.6	1
The power of physicians influencing operational matters.	3	2.571	35.7	12.5	1
Dealing with community criticism/ pressure.	3	2.571	26.8	7.1	2
Staff lack commitment to hospital.	2	2.393	19.6	1.8	2
Limited understanding of and involvement in the budget process.	2	2.393	30.4	10.7	1
Supervising staff that were peers and/or are know personally and socially by the nurse executive.	2	2.036	19.6	3.6	3
Ineffective organizational structure.	2	2.036	18.2	9.1	2
Inadequate orientation to the nurse executive position.	2	2.036	21.4	12.5	1
Continued "bad feelings" about the Manitoba Nurse's Union Strike of 1991.	1	1.273	9.1	5.6	1
Subjected to sex-role stereotyping.	1	1.273	7.3	1.8	2

Appendix L

Changes in Stress Scores Between Delphi Round 2 and Round 3

Stressor	Change in Stressors: No Change #	%	Increased Stress #	%	Decreased Stress #	%
Inconsistent government directives related to health reform/cutbacks.	46	85.2	8	14.8	0	0
Concern that application of Manitoba Health's staffing guidelines will compromise the standard/safety of patient care provided.	42	77.8	7	13.0	5	9.3
Nurse executive job parameters are too broad.	44	81.5	5	9.3	5	9.3
Insufficient time in a day to complete work.	45	83.3	8	14.8	1	1.9
Change in nurse executives role/ responsibilities related to health reform.[c]	43	81.1	8	15.1	2	3.8
Lack of input from rural nurses into health care planning at the provincial level.	44	81.5	4	7.4	6	11.1
Laying off staff in a small community where staff are known personally and/or socially to the nurse executive.	49	90.1	1	1.9	4	7.4
Uncertainty about the future of hospital and the potential economic stress to the community.	45	83.3	4	7.4	5	9.3
Decreased staff morale related to layoffs/loss of jobs.	42	77.8	5	9.3	7	13.0
Threat to job security for nurse executive.	47	87.0	3	5.6	4	7.4
Deadlines for implementation of staffing guidelines did not allow for planning or staff involvement.	39	72.2	6	11.1	9	16.7
Limited resources available for service delivery due to budgetary restraints.	41	75.9	5	9.3	8	14.8

Stressor	Change in Stressors: No Change #	No Change %	Increased Stress #	Increased Stress %	Decreased Stress #	Decreased Stress %
Promoting professional attitudes and behaviours in staff that are content with the "status quo".	45	83.3	2	3.7	7	13.0
Dealing with problems of poor performance, including disciplinary measures.	46	85.2	1	1.9	7	13.0
Isolation from education opportunities for rural nurse executives/ rural nurses.	41	75.9	5	9.3	8	14.8
Staff and/or physicians resistant to change.	40	74.1	2	3.7	12	22.2
Staff do not understand the nurse executive's role/responsibilities.	47	87.0	3	5.6	4	7.4
Dealing with union issues, grievances and arbitrations.	45	83.3	3	5.6	6	11.1
Resolving conflicts among staff, departments, physicians.	50	92.6	1	1.9	3	5.6
Dealing with constant change	40	74.1	8	14.8	6	11.1
"Turf protection" by Board Members when involved in regional planning for health reform.	45	83.3	3	5.6	6	11.1
Board of Trustees' limited knowledge of their role/functions.[c]	41	77.4	4	7.5	8	15.1
Physicians not following hospital "rules".	42	77.8	3	5.6	9	16.7
Poor monetary remuneration for rural nurse executive's job responsibilities.c	46	86.8	3	5.7	4	7.5
Dealing with community criticism/pressure.	46	85.2	4	7.4	4	7.4
The power of physicians influencing operation matters.	45	83.3	3	5.6	6	11.1
Management style of CEO.[b]	47	90.4	3	5.8	2	3.8

Stressor	Change in Stressors: No Change #	No Change %	Increased Stress #	Increased Stress %	Decreased Stress #	Decreased Stress %
Staff lack commitment to hospital.	41	75.9	2	3.7	11	20.4
Ineffective CEO.[a]	40	78.4	3	5.9	8	15.7
Limited understanding of and involvement in the budget process.	41	75.9	2	3.7	11	20.4
Isolation/lack of support from other nonunion management nurses.	45	83.3	1	1.9	8	14.8
Lack of communication/"turf protection" between departments, affecting the delivery of nursing care.	45	83.3	1	1.9	8	14.8
Inadequate orientation to the nurse executive position.	45	83.3	5	9.3	4	7.4
Lack of education and/or experience for nurse executive's responsibilities/duties.	48	88.9	3	5.6	3	5.6
Supervision staff that were peers and/or are known personally and socially by the nurse executive.	48	88.9	0	0	6	11.1
Ineffective organizational structure.[c]	40	75.5	5	9.4	8	15.1
Lack of qualified experienced physicians.	43	79.6	1	1.9	10	18.5
Lack of support from CEO.[c]	40	78.4	3	5.9	8	15.7
Board of Trustees' involvement in operational matters.[c]	43	81.1	2	3.8	8	15.1
Lack of support/understanding for nurse executive's role by the Board of Trustees.[c]	44	83.0	1	1.9	9	17.0
Conflict between nurse executive role and CEO role when nurse executive is "in charge" in CEO's absence.	43	84.3	1	2.0	7	13.7

Stressor	Change in Stressors: No Change #	No Change %	Increased Stress #	Increased Stress %	Decreased Stress #	Decreased Stress %
Difficulty in recruitement and retention of permanent and casual staff.	43	79.6	3	5.6	8	14.8
Continued "bad feelings" about the Manitoba Nurse's Union Strike of 1991.[c]	50	94.3	0	0	3	5.7
Subjected to sex-role stereotyping.[c]	46	86.8	1	1.9	6	11.3

[a] n = 51
[b] n = 52
[c] n = 53