

NEONATAL INTENSIVE CARE NURSES
AND THE EXPERIENCE OF MORAL DISTRESS

by

BARBARA J. WHEELER

A thesis
submitted to the University of Manitoba
in partial fulfillment of the requirements
for the degree of

MASTER OF NURSING

Faculty of Nursing
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DEDICATION

To my husband Brian, for his endless support and encouragement.

To my children Laura, Dana, and especially Jeffrey, for their patience and understanding during the many times when my "school work" pre-empted the "fun stuff".

ABSTRACT

A proliferation in the variety of treatment options available have presented health care professionals with complex ethical situations whose resolution may be stressful. These situations may be especially difficult for nurses due to their relative place in the hospital bureaucracy. Conflicting loyalties and responsibilities to licensing bodies, employing institutions, physicians, other nurses, patients and their families render nurses especially prone to suffer moral distress, a feeling of psychological disequilibrium.

A descriptive correlational design was used to explore the degree to which NICU nurses experience moral distress in carrying out their day-to-day patient care responsibilities. As well, the relationship between frequency of exposure to ethically-charged patient care situations and the degree of moral distress experienced was examined.

Measurement instruments included the Moral Distress Scale and a Biographical Data Sheet. Wilkinson's (1987/88) Moral Distress Model provided the conceptual framework for the study.

Seventy-nine nurse respondents reported experiencing a moderately high degree of moral distress when carrying out

their daily responsibilities (mean moral distress level 5.48 on a scale of one to seven). Mean moral distress level was significantly positively correlated with mean frequency of exposure to the 27 clinical situations described in the Moral Distress Scale ($r = 0.29568$, $p = 0.0082$).

Prior research has shown that moral distress may result in decreased quality of patient care or could contribute to nurses leaving their jobs and perhaps the nursing profession. Data indicate moral distress is a concern for nurses in this sample. Recommendations are made for nursing education, administration and research.

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Dr. Annette Gupton, who acted as my thesis committee chairperson, provided expert advice, together with unending encouragement and support. Her ability to maintain a humorous outlook, while challenging me to meet my goals, was invaluable.

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CHAPTER 1

OVERVIEW OF THE STUDYStatement of the Problem

Much has been written about stress in Nursing, particularly in Intensive Care or Critical Care settings. Articles published, initially, were anecdotal in nature; more recently there have been many empirical attempts to study the stress experience in Nursing. Research, to date, has focussed on identification and categorization of stress-provoking stimuli, quantification of the frequency and severity of the stimuli, and on coping mechanisms utilized by nurses who experience job-related stress (Bailey, Steffen & Grout, 1980; Bibbings, 1987; MacNeil & Weisz, 1987; Stehle, 1981; and Stone, Jebesen, Walk & Belsham, 1984).

One area which is beginning to be explored involves the potentially stressful effects of controversial ethical issues which arise in the clinical area. Ethically-charged situations often result from the rapidly-increasing capability of technology in medicine and health care today (Buchanan & Cook, 1992; Davis, 1977; Hastings Center Report, 1987; Kemp, 1985; Murphy, 1983; Oehler, Davidson, Starr & Lee, 1991; Smith, 1989; and Stewart-Amidei, 1988). The greatly-expanded variety of treatment options available have, at times, presented health care professionals with

complex ethical situations whose resolution may be stressful.

These situations may be especially difficult for nurses because of their relative place in the hospital bureaucracy (Buchanan & Cook, 1992; Corley & Mauksch, 1993; Davis & Aroskar, 1978; de Jong, 1984; Freedman, 1980; Kelley, 1991; Lamb, 1985; and Wilkinson, 1987/88).

Owing to their peculiar position in the health-care power structure, and because of their conflicting loyalties and responsibilities--to licensing bodies, employing institutions, physicians, other nurses, patients, and patients' families--nurses are especially prone to suffer moral distress (Wilkinson, 1987/88, p. 16).

Since nurses frequently must yield to the decisions of other health care professionals or to bureaucratic rules (Buchanan & Cook, 1992), their own personal values may be compromised. This compromise may lead to the experience of moral distress.

The Neonatal Intensive Care Unit (NICU) is an area in which "new" treatment options are common. Consequently, one might surmise that NICU nurses are confronted with many ethically-charged situations. It has been suggested that the stress they may experience as a result of their relative powerlessness in ethical decision-making could ultimately

lead to decreased quality of patient care (Buchanan & Cook, 1992; Fenton, 1988; Rushton, 1992; Weeks, 1978; and Wilkinson, 1987/88) or could contribute to nurses leaving their jobs and perhaps the nursing profession (Oehler, Davidson, Starr, & Lee, 1991; Weeks, 1978; and Wilkinson, 1987/88).

This study will explore ethically-charged patient care situations and their effects on NICU nurses. The research questions are:

1. To what extent do NICU nurses experience moral distress in carrying out their day-to-day patient care responsibilities? and,
2. What is the relationship between frequency of exposure to ethically-charged situations and the degree of moral distress experienced?

Definition of Terms

For the purposes of this study, the following terms are defined as:

stress: a construct designating a broad class of events involving interaction between environmental stimuli and the adjustive capabilities of the organism, evoking some kind and degree of negative affect (fear, anxiety, frustration, depression, guilt, etc.) and marked by strong motivation in

difficult or impossible situations (Jacobson & Lawrence, in Jacobson & McGrath, 1983, p.9).

Ethically-charged situations: situations wherein efforts to preserve and prolong life appear to conflict with the desire to limit suffering. This concept is borrowed from Mitchell and Rutherford (1987), who summarize it by stating "sometimes it seems impossible to separate doing good from doing harm" (p. 603).

Moral distress: the psychological disequilibrium and negative feeling state experienced when a person makes a moral decision but does not follow through by performing the moral behavior indicated by that decision (Wilkinson, 1987/88, p. 16).

Conceptual Framework

The basic concept of ethically-charged situations as a source of stress for NICU nurses provides a meaningful context for the study. Judith Wilkinson's Moral Distress Model (1987/88) (Appendix A) provides a framework for examining the nature and effects of stress-provoking ethical issues in NICU nursing.

Wilkinson's model is derived from two moral distress equations, which she developed to summarize the findings of her theory-generating research.

Experience

Moral situation + Moral Decision about right action + Perceived inability to act
 = Painful feelings and psychological disequilibrium

Effect

Coping behavior + Frequency of cases = Effect on wholeness = Effect on patient care

Moral distress is defined as having situational, cognitive, action, and feeling dimensions. Wilkinson notes that when a moral issue (situational dimension) exists, a nurse will make a decision about the "right" course of action to take (cognitive dimension). If there are actual or perceived contextual constraints, the nurse may modify her planned response (action dimension), which can result in painful feelings and psychological disequilibrium.

The more detailed Moral Distress Model clearly incorporates nurses' cognitive, feeling and action states within the context of a stressful situation, and offers some predictions regarding the effects the experience may have on the nurse. The decision regarding the "right" moral course of action is affected by the nurse's cognitive moral framework and by feelings of empathy for the patient. Nursing experience and knowledge of available options will influence the nurse's ability to circumvent constraints, possibly allowing implementation of the nurse's moral

decision. Some actual constraints do, however, exist in most situations, thereby affecting the nurse's ability to act. The result may be negative feelings and psychological discomfort--in other words, the experience of moral distress.

The model recognizes that although moral distress may occur, it can be dealt with effectively. Effective coping behaviors restore a nurse's sense of control and contribute to a sense of personal and professional wholeness. Ineffective coping behaviors may result in a nurse feeling overwhelmed and powerless, contributing to a decreased quality of patient care and a corresponding decrease in the nurse's self-esteem.

This model will guide the researcher to systematically investigate various dimensions of the moral distress experience in the NICU.

CHAPTER II

REVIEW OF THE LITERATUREStress in Nursing

Although the stress phenomenon in nursing has been extensively explored, interpretation of findings is difficult as investigators have utilized a variety of unique organizational frameworks. A select group of studies will be reviewed, for the purpose of understanding stress in the Intensive Care or Critical Care setting.

In the 1960's, shortly after Intensive Care Units (ICUs) became commonplace throughout North America, most research focussed on the stressful effects of the ICU's physical environment (Bibbings, 1987; and Stehle, 1981). The atmosphere in the ICUs was so different from anything nurses had experienced before, with monitors, complex machinery, and critically ill patients, it is understandable that researchers at this time were most interested in investigating stressors that were external to the nurse, that is, the environment.

Carnevale, Annibale, Grenier, Guy and Ottoni (1987) report that environmentally-induced stress was the greatest source of stress in the Pediatric ICU (PICU) they studied. It was rated more highly than patient or family-induced stress by a sample (n = 25) of PICU nurses. The fact that all subjects worked in the same nursing unit, however,

limits the generalizability of this finding, as does the small sample size.

Spoth and Konewko (1987) examined the effect of three categories of stressors on ICU staff: physical environment, professional/interpersonal environment and direct patient care. Unlike Carnevale et al., they found that the majority of stressors rated as most severe were in the patient care category (n = 241 nurses, from one cardiac ICU, two neurological ICUs and three general ICUs). Similar results were obtained by Huckabay and Jagla (1979), who found that patient care concerns were ranked first in terms of perceived stressfulness among ICU nurses from six hospitals (n=46).

It is results such as these, together with a growing familiarity with and adjustment to the ICU environment, which caused a shift in focus of ICU stress research from one of mainly external stressors to internal or psychological stressors in ICU nursing. Several internal stressors have been identified, including feelings of inadequacy (Lewis & Robinson, 1986), exposure to death and dying (Bibbings, 1987; Fenton, 1988; Jacobson, 1978, Lewis et al., 1986; and Spoth et al., 1987) and "patient care" (Bailey, Steffen & Grout, 1980; and Dewe, 1989). A consistent finding is that much stress experienced by ICU nurses has its origins in difficulties with interpersonal

relationships (Bailey et al., 1980; and Dewe, 1989), particularly those involving the doctor/nurse relationship (Bailey et al., 1980; Dewe, 1989; Jacobson, 1978; Rodney, 1988; and Summers, 1989). Although none of the studies cited clearly articulates the precise nature of the problem with the nurse-physician relationship, Dewe (1989) briefly discusses this issue. She found nurses experienced stress when they disagreed with the medical treatment prescribed, when there was inter-professional disagreement regarding how much information a patient or family should be given, and when they felt doctors did not understand social and emotional needs of their patients.

Rodney (1988) reports nurses' frustration results from their inability to intervene on behalf of the patient. She discusses how physician orders and hospital policies often interfere with nurses' ethical obligations to their patients. It seems, then, that differing value systems are central to the problems with the doctor-nurse relationship, and that ethical issues often precipitate disagreements.

Grundstein-Amado's (1992) study corroborates this theory. She found that in a small (n = 18) sample of doctors and nurses, the two groups act out different values, motivations, and expectations, and there is a definite communication gap between them. Nurses were found to value information related to the patient's feelings, coping

mechanisms, life history and the dynamics of the relationship between the family and the patient. Doctors, however, were mainly concerned with medical and technical details when they attempted to construct an accurate picture of the problem. Grundstein-Amado concludes there is a need for a new foundation, based on common professional attributes of the two groups, to which both groups are committed.

Davis and Aroskar (1978) note "the sheer power stemming from the free movement accorded to the physician within an otherwise formal (hospital) bureaucracy sharply contrasts with the role of the nurse, which is profoundly affected by her obligation to represent continuity of time and place" (p. 35-36). The authors compare professional versus semi-professional workers. Professionals are seen as part of a moral community in which social links to clients and colleagues in theirs and related professions are needed. These links provide for acknowledgement of professional contributions between groups. In contrast, semiprofessional organizations are more bureaucratic and workers must adhere to rules governing not only central work tasks, but various other extraneous details of conduct on the job. Semiprofessionals tend not to have a strong reference group orientation to their colleagues, thus they do not see the generalized colleague group as a source of norms. They

become more willing to accept an administrative superior as such a source, rendering them more likely to conform to bureaucratic norms. The authors' discuss nurses as an "oppressed" group of semi-professionals, which has become submissive as a result of the oppression. If nurses do passively conform to bureaucratic norms, their compromise of personal values increases the risk of experiencing moral distress.

Ethical Issues as a Source of Stress

The difficulty nurses have regarding ethical issues in the workplace usually results from their multiple role obligations, for example, obligations to the patient, the physician, the employing institution and to themselves (Beauchamp & Childress, 1983; Beebe & Thompson, 1979; Benjamin & Curtis, 1986; Binder, 1983; Copstead, 1983; Corley & Mauksch, 1993; Curtin, 1980; Davis, 1981; Davis, 1977; Davis & Aroskar, 1983; Davis & Aroskar, 1978; Freedman, 1980; Greenlaw, 1980; Jameton, 1984; Ketefian, 1985; Lamb, 1985; Lumpp, 1979; Mappes, 1981; Murphy, 1983; Omery, 1985; Penticuff, 1987; Rodney, 1989; Rodney, 1987; Smith & Davis, 1980; and Wilkinson, 1987/88). The general theme of all of these publications is consistent: when the nurse's own moral judgment runs counter to the plan of care he or she must implement, the nurse experiences stress.

Solutions to this complex problem will be discussed by reviewing findings and viewpoints of several of the authors listed above. The vast majority of publications are editorial articles, and are not empirical research. The nature of the problem lends itself to editorial debate, thus review of this type of article on ethical issues is most appropriate. As well, the small number of studies published in this area supports the contention that more research is needed in the area of nursing ethics.

Several authors recommend that when a nurse faces a choice between obligation to a patient versus obligation to a physician or to the organization, obligation to the patient is primary (Benjamin & Curtis, 1986; Greenlaw, 1980; Mitchell, C, 1984). These authors do not, however, address the issue of how nurses cope with a situation where they choose not to fulfill a felt obligation to the physician or the organization. In other words, the deleterious effect of integrity-compromising decisions and/or actions is not acknowledged or addressed.

Muyskens (1982) advocates a careful exploration of any situation which presents a moral dilemma. The recommended solution of "the greatest balance of good over evil for all persons" (p. 20) is clearly a utilitarian one. Again, there is no discussion of the anxiety or unrest caused by the

necessity to make a decision which involves a major compromise of individual values.

A multi-disciplinary shared decision-making process is advocated by several authors (Berg & Isler, 1977; Davis, 1977; Harris, C, 1973; Jameton, 1984; Lo, 1984; Muyskens, 1982; and Rodney, 1989). Benjamin and Curtis (1986) label this strategy an "integrity-preserving compromise" (p. 106) for nurses. The goal is to avoid nurses' discomfort in implementing the medically ordered plan of care, by involving nursing and soliciting input from that professional group at the outset of the decision-making process. It is not clear, however, from any of the authors how this laudable goal may be accomplished in the clinical area.

Benjamin and Curtis (1986) briefly address the issue of conscientious refusal for nurses. This, according to these authors, must be based on personal sanction, not external authority. Unfortunately, the effects of such a refusal are not discussed, nor are the nurse's feelings and/or coping mechanisms. Lumpp (1979), a strong advocate of patient autonomy and patient advocacy, acknowledges the unique role of the nurse in bioethical decision-making, concluding that "...the nurse must be true to the relationship with (her/him)self. This is a situation in which the nurse's moral conscience may be in disagreement with the (treatment)

approach, and (he or she) may therefore have to withdraw from the situation" (p. 20). Lumpp is one of few authors who recognize that withdrawal or conscientious objection is a viable alternative. Unfortunately, although "theoretically, nurses can refuse to be involved in treatment plans or procedures with which they disagree, ...workplace realities usually preclude this alternative" (Degner & Beaton, 1987, p. 80). In other words, contextual constraints represent an important obstacle for nurses, and at times these may be insurmountable.

A common situation which invokes feelings of intense resentment among nurses is that experienced when nurses must implement aggressive treatment regimes with which they do not agree (Degner & Beaton, 1987). Nurses meet with varying degrees of success when they attempt to make their concerns over such matters known to medical staff. This can further escalate feelings of powerlessness that began with lack of involvement in the initial decision-making phase.

That multiple loyalties of nurses contribute to feelings of stress appears to be well-accepted in the literature, as it has been described repeatedly (American Hospital Association, 1985; Bailey 1986; Beauchamp et al., 1983; Davis et al., 1983, Fenton, 1988; Fowler, 1989; Kemp, 1985; Penticuff, 1987; Rodney, 1988; Smith, 1989; Thompson &

Thompson, 1981; and Wilkinson, 1987/88). Despite this apparent consensus, very few studies have been done to explore and/or verify the accuracy of the assertion. The following section will review empirical work focussing on negative feelings experienced by nurses when they are unable to implement what they have decided is the "right" moral decision.

Research on Moral Distress

Wilkinson (1987/88) uses the term "moral distress" to label the feeling experienced by nurses whose moral values are incongruent with those of the decision-makers in the clinical area. The purpose of her landmark study (the first to explore what the nurse actually does in these situations) was to investigate the phenomenon of moral distress, as experienced by staff nurses in hospitals, and to generate theory regarding the relationship between moral aspects of nursing practice and the quality of patient care. She interviewed 24 nurses who identified themselves as having experienced moral distress, using general open-ended questions, in an attempt to discover principles implied by experiences the subjects described. Constant comparative data analysis revealed harm to patients (pain and suffering) and treating patients as "objects" (i.e. dehumanizing them) were frequent themes. Constraints to acting out moral

decisions were identified, and further categorized as internal (e.g. socialization to follow orders, futility of past actions, self-doubt) or external (e.g. physicians, the law, nursing and hospital administration).

Rodney (1988) identified similar constraints in her phenomenological study aimed at describing nurses' ethical perspectives on nursing dying patients in a critical care setting. Rodney identified a theme of senselessness in three major areas: a senseless decision-making process, senselessness in terms of what was being experienced by patients and family members; and senselessness in terms of the activities nurses found themselves involved in to implement treatment regimes. "Most of the dilemmas identified in the nurses' descriptions were framed in a conflict between the nurses' obligation to the physician and institution and her duties to the patient and family" (Rodney, 1987, p. 212). There were many instances of nurses acquiescing to decisions made by other health care professionals, with resultant feelings of anger, frustration and powerlessness (Rodney, 1987).

Wilkinson's (1987/88) data suggests ICU nurses may experience moral distress more frequently than nurses from other clinical areas, and that it may be related to their leaving critical care nursing. Older and more experienced nurses reported a lower incidence of moral distress than

younger, less experienced nurses (Wilkinson, 1987/88; and Davis, 1981). This finding may be due to more experienced nurses' ability to present their perspective and to persuade others of its merit, thus influencing clinical decision-making. It may also be a result of older nurses being socialized into a passive role, that is, one of a subservient worker whose prime responsibility is to follow orders. All subjects in Wilkinson's study reported strong negative feelings (anger, frustration and guilt), and the majority felt that moral distress was detrimental to both their personal and professional "wholeness" (e.g. loss of self-worth, depression). Subjects, when asked to speculate as to the effect of moral distress on patient care, were equally divided in perceiving patient care as better, worse, or not affected. Wilkinson calls for further research to investigate how the experience of moral distress affects the quality of patient care.

Fenton (1987) interviewed a convenience sample of 10 nurses--five Intensive Care Nursing (ICN) course instructors, and five ICN course students--with a goal of understanding the subjective reality of a lived experience with moral distress. In her qualitative study, she found that the phenomenon was frequently experienced by ICU nurses, and that nurses' feelings of distress may remain unresolved for many years. She speculates that moral

distress may be an important determining factor in job satisfaction and retention of nurses. She calls for nursing administration and nursing education to acknowledge the reality of moral distress and to assist nurses to resolve personal conflicts.

A study by Berger, Severson and Chvatal (1991) sought to:

- "1) determine the frequency with which nurses encounter specific ethical issues in their practice, and to examine how disturbed they are by them;
- 2) determine the relationship of demographic and work-related variables to frequency and disturbance;
- 3) identify resources that nurses use to clarify ethical issues they encounter; and
- 4) determine nurses' opinions of the role of institutional ethics committees" (p. 514-515).

A random stratified proportional sample (30 per cent) was drawn from four surgical units, three medical units, three intensive care units, and nursing administration. Subjects completed a questionnaire developed for the study, the Ethical Issues in Nursing questionnaire. This tool was based on the literature and personal experience of the researchers and from practicing nurses and faculty. Content validity was established by a panel of clinical nurses and faculty who reviewed the instrument for completeness of its

domain and clarity of the items. Participants rated 32 items according to how frequently they encounter each issue, then according to how disturbed they felt about each issue. A Likert-type scale was used for each variable, with values ranging from 0 to 4. Next, subjects rated the overall frequency of ethical issues encountered in their practice and their overall level of disturbance. Resources used to help nurses clarify ethical issues were identified. Finally, subjects were asked to provide information about their institutional ethics committee and their opinions regarding it.

Findings included a relatively low overall frequency score, indicating that in general, these nurses encountered few ethical issues. The five issues encountered most frequently were inadequate staffing, prolonging life with heroic measures, inappropriate allocation of resources, dealing with situations where patients are discussed inappropriately, and dealing with colleagues' irresponsible activity.

The mean ranking of the level of disturbance experienced by nurses indicated that as a group, nurses were "somewhat" or "quite a bit" disturbed by these issues. Nurses reported rarely encountering professional issues such as substance abuse among colleagues, illegal activity of colleagues, patient abuse or record alteration.

No statistically significant relationships were found between education, age, or experience, and either the frequency of issues or the disturbance reported. The study found a statistically significant association at the .05 level between the overall frequency of issues identified and the practice area. "Intensive care nurses and administrators reported encountering ethical issues more frequently than either surgical or medical nurses, who did not significantly differ from each other" (Berger et al., 1991, p. 519). The study found that the nurse's level of disturbance increases with the frequency of issues encountered.

Berger et al. (1991) report that nurses identify "personal values" as the strategy used most frequently to clarify ethical issues, with 52 percent of nurses believing a referral to the institutional ethics committee should be mandatory. The article does not describe what is meant by using personal values as a strategy to clarify ethical issues, nor does it elaborate regarding the role of the institutional ethics committee.

Berger and colleagues' (1991) general conclusion concurs with that of many writers of anecdotal literature: "The difficulty with nursing ethics is that nursing practice is a clinical art with moral overtones which is carried out in a bureaucratic setting constrained by institutional

policies, where there is great potential for a clash between professional cultural values and corporate values" (p. 519). The authors recommend that nursing administration provide a climate in which nurses can be involved in decisions affecting their practice, including implementation of institutional ethics committees. Nursing ethics rounds are identified, together with educational sessions, to assist nurses to use formal ethical discernment principles. The authors note, however, that

the group discussion approach often used to help nurses cope with disturbing ethical issues may not be appropriate for the bureaucratic issues identified in this study as the major problems encountered in practice. A more effective strategy might be to develop a shared governance model that promotes staff participation in decision making on the allocation of resources, scheduling, and other issues of concern (p. 520-521).

Research regarding the effects of ethical issues on nurses is in its infancy. The few studies done to date have verified that nurses do experience stress as a result of ethical conflicts, however, much more needs to be explored in regard to coping with this pervasive phenomenon.

Moral Distress: A New Experience?

A brief history of nursing ethics compiled by Davis and Aroskar (1978) notes that loyalty to the physician was the paramount concern for nurses in the past. This idea reflects the nature of the socialization process of nursing years ago, the female role, and hierarchy within the health care system. This philosophy is evident in several older (generally pre-1980's) articles, suggesting that moral distress among nurses is a phenomenon of recent importance. Wilkinson's (1987/88) finding that older nurses are less likely to experience moral distress lends credence to this contention.

Allen (1974) reports on a Canadian Nurses' Association (CNA) survey in which 22 nurses responded to a request printed in the professional journal which had a circulation of more than 100,000 nurses at that time. Nurses were asked to describe ethically-problematic situations in detail. Data analysis techniques were not described. Allen reports that ethically-problematic situations centered around common themes, represented by three questions nurses asked themselves:

1. To whom am I responsible?
2. I know what should be done, but what course of action should I take?

3. If in general, the quality of care is unsatisfactory, what can I do?

The author acknowledges that there is often conflict between meeting the needs of the individual patient and following directives from medicine, hospital policy, the law and religion. The conclusion reached is that "the nurse, if she knew how to determine to whom she was responsible, would then know whose directive should be followed" (Allen, 1974, p. 23). There is no discussion regarding the possibility or existence of moral distress--just a simplistic recommendation to identify to whom the nurse should direct her compliance. This conclusion, together with the remarkably low response rate for the survey, suggests a limited awareness of or belief in the importance of nursing or individual values or perspectives.

In 1917, Sarah Dock stated simply that "obedience is the cornerstone of good nursing...no matter how gifted, [an individual] will never become a reliable nurse until [he or she] can obey without question" (p. 394). To its credit, nursing has advanced to the point where nursing students are socialized from the beginning of their professional education to be responsible for completing independent patient assessments, and for maintaining a questioning attitude, always striving to detect and treat changes in a person's response to illness. Unfortunately, there remain

some lay individuals, and health care professionals, who have not recognized this advancement of the nursing profession.

Nurses who protested the compromise of their personal value systems at work were at one point labelled by physicians as having psychiatric disabilities. This happened in 1970, when therapeutic abortions were legalized in the United States. Within a month after the new law took effect, the chief of staff of a major hospital sought urgent psychiatric consultation to help the hospital deal with "the acute psychological reactions of many of their nurses who were so upset by their abortion work that some were even threatening to quit their jobs" (Char & McDermott Jr., 1972, p. 952). The authors met with nurses individually and in groups, and concluded that "the nurses' symptomatology fell in the category of a transient reactive disorder" (p. 953), and noted that only one nurse had "a more severe psychiatric disability" (p. 953).

Nurses identified role confusion and identity crisis as problems--they had been trained to preserve life and now they were asked to assist in the termination of it (Char & McDermott, 1972). The authors noted that "as good nurses they were brought up with the tradition of respecting physicians and willingly following their orders. But they now found that they had feelings of resentment and doubts

about the physicians and their work that further threatened their identity as nurses" (Char & McDermott, 1972, p. 954-955). The authors claim to have resolved the problems through a series of meetings with the nurses, and to have identified that the "improvements" were due to the following factors:

1. Abreaction: the nurses worked through pent-up thoughts and feelings, and discovered they were not alone in their perceptions, and that it was permissible to have such thoughts;
2. use of psychiatrists as positive therapeutic figures. "The nurses, eager for help and leadership from physicians whom they could again respect, quickly formed positive relationships with us" (Char & McDermott, 1972, p. 955). The gaps between nursing, medicine, and hospital administration were addressed, and each group was assisted to see the other's perspective;
3. re-establishing a more positive identification with their patients. Nurses were helped to see abortion patients as persons in their own right, rather than as simply as promiscuous women;
4. regaining objectivity about abortions. Discussions resulted in most nurses favoring the new legalization of abortions, and "they saw again

that what is aborted is a protoplasmic mass and not a real, live, grown-up individual" (Char & McDermott, 1972, p. 956).

5. realizing the urgent need for a redefinition of the role, philosophy, and ethics of nursing and medicine to guide us in abortion work. Nurses were encouraged to continue their discussions with one another.

The authors acknowledge that it is likely that physicians who perform abortions are also affected by such work, although probably much less severely than nurses. The rationale for this less intense reaction is that physicians can actively control the degree of their involvement with abortions, depending on their interest, desire, and tolerance for them (Char & McDermott, 1972). The authors recommend that nurses who oppose such work be given the option to do other types of work.

This study, though done more than 20 years ago, mirrors many situations encountered in the 1990's. A "new" treatment, though initially perceived as necessary, resulted in moral distress for nurses. Nurses were unable to implement the moral decision they felt was right for them,

The classic Baby Doe case, in which a Down syndrome child with multiple repairable congenital anomalies was left to die, provided a context for a nurse administrator to voice her feelings regarding nursing autonomy. Creighton (1984), in her comments on the Baby Doe case, states that nurses "should chose to preserve life and render the best nursing care of which they are capable" (p. 18). There seems no room here for a conscientious objector or even a thoughtful nurse. Her recommendations sound like the enactment of vitalism in its most extreme sense--life is always to be protected, regardless of circumstance. Of note is the fact that Crieghton is an administrator (rather than a clinician), thus these words possibly stem from a primary interest in a smooth-running bureaucracy as opposed to the encouragement of ethical behavior for all health care professionals.

Binder (1983) cites Scott and Hart (Organizational America, 1979) in describing modern organizations as those based on "dispensability, specialization, malleability, obedience, planning and paternalism" (p. 116). Binder (1983) further states that "caring values of nurses and other providers do often conflict with administrative values and orientations based on efficiency, standardization, and proceduralism" (p. 117), and further concludes that "unresolved value conflicts...contribute to high personnel

turnover and marginal provision of care" (p. 118). Binder (1983) concludes that the "the issue is not so much one of resolving value conflicts as it is one of integrating personal or more universally held values into an organizational/technologic environment in which individual freedom and responsibility can thrive" (p. 118).

Neonatal Intensive Care Nursing and Ethical Issues

The vast majority of nursing literature pertaining to ICU nursing has studied adult units. Jacobson (1978) conducted the first empirical study looking at stressful situations for NICU nurses. Using a fairly large sample (n = 87) of nurses from seven NICUs in three states, Jacobson used a Delphi approach to develop a tool to measure stress in an NICU. Content validity was established by a panel of five expert neonatal nurse-judges. The most prevalent theme reported as stressful by the nurses was "nurses' philosophical/emotional problems". All situations placed into this category resulted in "inner turmoil" for the nurse. The theme of inner turmoil was also noted by Hutchinson (1984), an anthropologist, in her qualitative study of NICU nurses. This concept of inner turmoil, as described by the two researchers, is similar to descriptions of moral distress provided by more recent researchers

(Fenton, 1987; and Wilkinson, 1987/88). Thus, on the basis of studies by Jacobson (1978) and Hutchinson (1984), it appears that moral distress is a significant source of stress for NICU nurses.

Another area cited as very stressful by Jacobson (1978) was "doctor-nurse problems". In light of this, a study done by three physicians (Berseeth, Kenny & Durant, 1984), investigating differing attitudes of Intensive Care versus Intermediate Care nursery nurses toward high-risk infants and parents is pertinent. The physician group administered a self-developed questionnaire designed to measure the willingness of nurses to employ heroic measures in various circumstances (n = 75). Among their findings, they noted that many nurses expressed a desire to participate in ethical decision-making, but acknowledged that there is evidence of physician reluctance to allow nursing input. The authors then reflect that "because nurses provide the majority of primary care for high-risk infants, it may be reasonable for them to be involved in ethical decisions by meeting with the physician personnel to discuss various aspects of a decision that parents and physicians have made" (p. 511). This discussion after the decision is made is of questionable value in alleviating or preventing moral distress, as ethicists generally agree that participation in ethical decision-making is necessary to avoid the experience

of moral distress (Beauchamp & Childress, 1983; Davis et al., 1983; Penticuff, 1987; and Thompson & Thompson, 1981). Beauchamp and Childress (1983) note that "there will probably be political if not moral problems as long as some professionals make the decisions and order their implementation by other professionals who have not participated in the decision-making" (p. 250).

The dearth of research related specifically to NICU nursing renders understanding of its unique stressors incomplete at present. Further research is needed to better comprehend the role of ethical issues and moral distress in NICU nursing.

CHAPTER III:

METHODOLOGYIntroduction

Neonatal Intensive Care nurses experience many stressors in their daily work (Jacobson, 1978), one of which is moral distress. This study is designed to explore the following issues:

1. To what extent do NICU nurses experience moral distress in carrying out their day-to-day patient care responsibilities? and,
2. What is the relationship between frequency of exposure to ethically-charged situations and the degree of moral distress experienced?

It is appropriate to pose research questions rather than stating hypotheses when the conceptual framework for a correlational survey is one posed by the investigator and not one that has been tested in other studies (Brink & Wood, 1989). This makes clear the tentative nature of the framework and does not give it the appearance of unwarranted strength. Later, the research questions can easily be converted to null hypotheses for statistical testing, without giving them the stature of predictive hypotheses (Brink & Wood, 1989).

Research Design

Brink and Wood (1983) advocate the use of exploratory or Level I questions when examining new areas of insufficient knowledge. Level I questions are concerned with one variable only, and they make reference to the population in which that variable will be found (Brink & Wood, 1983). Number one above is an example of a Level I question.

When a topic has been described to some degree in the research literature, one may move on to Level II questions, which focus on the relationship between two or more variables (Brink & Wood, 1983). Question number two in this study is a Level II question.

Level I and II questions are appropriately studied with descriptive design, and level II questions are suitable for correlational analysis (Brink & Wood, 1983). The proposed study will utilize a descriptive correlational design.

Descriptive research summarizes the status of a phenomena as it currently exists, while correlational studies strive to determine the relationships among variables (Polit & Hungler, 1991). "A correlational design is used when investigators have reason to suspect a relationship among variables and can support their suspicions through literature or previous research....a conceptual framework can... provide justification for

studying (the variables)" (Wood & Brink, 1989, p. 104-105). Wilkinson's Moral Distress Model (Appendix A) provides such justification for studying the relationship between frequency of exposure to ethically-charged situations and the degree of moral distress experienced. Correlational designs are considered to be at least one step beyond descriptive designs since the investigator does not examine variables at random, but looks at specific variables selected from and based on the conceptual framework (Brink & Wood, 1989).

Although there is much emphasis in scientific research on determining the cause of behaviors, conditions, or situations, often we can do little more than describe existing relationships without fully understanding the complex causal pathways that exist (Polit & Hungler, 1991). Unlike experiments, wherein the researcher actively manipulates a variable, in ex post facto ("after the fact") research, the investigator does not have control over the independent variables because they have already occurred. Because of this fact, in non-experimental research, cause-and-effect conclusions should not be drawn (Polit & Hungler, 1991). One may, however, examine correlation, or the degree to which two variables are interrelated, with an ex post facto design.

One of the strengths of ex post facto research is that it is strong in realism; it is rarely criticized for its artificiality (Polit & Hungler, 1991). Because it involves an examination of situations as they are, without imposing treatments or manipulating variables, descriptive correlational design lends itself to the solution of many practical problems.

Setting

The data were collected from two geographic locations: St. Boniface General Hospital and Childrens Hospital. Both are large university-affiliated tertiary care hospitals in Winnipeg, Manitoba, and each hospital has a Neonatal Intensive Care Unit (NICU).

The NICU at St. Boniface is a 12 bed unit. The patients cared for in this setting are primarily in-born, that is, they are infants who were delivered at St. Boniface. Infants remain in NICU until medically stable; they are then transferred to the Intermediate Care Unit, or occasionally directly home.

The NICU at Childrens is an 18 bed unit. Childrens Hospital operates the provincial transport team for neonates, thus that center cares for the majority of infants born outside of a tertiary care center, as well as critically ill infants born at the Womens Center. As with St. Boniface Hospital, infants remain in NICU until they are

medically stable, then they are transferred to the Intermediate Care Unit in the Womens Hospital.

Sample

All nurses employed in the Neonatal Intensive Care Units (NICUs) in St. Boniface General and Childrens Hospital were invited to participate in the investigation (Appendix E). Inclusion criteria included:

- Registered Nurse status;
- permanent employment as a nurse in the NICU; and
- daily responsibilities which include care of neonates in the NICU.

The total population of nurses working in these areas was used to ensure as large a sample as possible. The population of NICU nurses in this city is not large, thus probability sampling, while theoretically increasing the likelihood of obtaining a representative sample, would also limit the number of potential subjects. It is recognized that with the use of nonprobability sampling, the researcher must provide detailed information about the sample so that others may assess its representativeness (Wood & Brink, 1989). This has been accomplished through the collection and summarization of demographic information regarding the subjects.

Instrumentation

When the objective is to discover another's thoughts or feelings, the most effective method is to ask questions (Brink & Wood, 1983). Written questionnaires are appropriate for such studies, and they are advantageous in that subjects "are more likely to feel that they can remain anonymous and thus may be more likely to express controversial opinions" (Brink & Wood, 1983, p. 113), than if they were being interviewed and had to give an opinion directly to the interviewer. Also, the written question is consistent from subject to subject, minimizing the possibility of variations in interpretation. There will always be, however, the chance that different individuals will interpret the same question, even in written form, differently.

Measurement instruments to identify or quantify the experience of moral distress are few. Dr. Mary C. Corley, at the Medical College of Virginia, is the only nurse researcher of whom Judith Wilkinson (originator of the Moral Distress Model) was aware who was working on this aspect (J. Wilkinson, personal communication, December 1991).

Dr. Corley has created the Moral Distress Scale, a 32 item questionnaire utilizing a Likert-type format. Items are based on Judith Wilkinson's master's thesis, and the instrument has been used four times to date with adult critical care nurses. Test-retest reliability over a one-

month period is reported as .86 and Cronbach's alpha as .93 (Dr. M. Corley, personal communication, December 1992). Content validity was established by submission of the instrument to a panel of three nurse experts in ethics. "Because of the many suggestions made on the first submission to the three experts, the items were revised and one judge was replaced. After the second review by the three experts, the Content Validity Index for all items was 100 percent" (Dr. M. Corley, personal communication, December 1992).

Corley's Moral Distress Scale was developed for use with nurses who care for adult patients in an American health care setting. The Scale was modified for the present study to accommodate differences between the Canadian and American health care systems, and particulars regarding care of an essentially incompetent patient population. That is, NICU nurses confront slightly different issues regarding areas such as consent and truth-telling as compared with nurses who work exclusively with adult patients. For these reasons, five items were deleted. Three items were added, including:

1. a long answer item, to allow for subject input regarding situations which invoke moral distress, but which were not referred to in the instrument,

2. a question asking nurses what degree of involvement they feel they currently have in ethical decision-making in the clinical area, and,
3. a question asking nurses to rate how they feel the current level of stress within the unit compares with the level of stress present most of the time.

The addition of these items allows a more comprehensive understanding of the experience of moral distress. The first item creates an opportunity for nurses to share experiences in daily practice which evoke feelings of moral distress. The information provided data regarding morally stressful situations which may be unique to the NICU. The second item allowed the investigator to discern whether or not the issue of nurses feeling powerless in ethical decision-making, so frequently described in the literature, is in fact an issue for the nurses studied. The third item helped to assess the fluctuating stress level within the NICU; in effect, it addresses a possible confounding variable, that of the clinical climate at the time the questionnaires are completed. If there was an ethically-charged situation in the NICU at the time when the nurses completed the questionnaires, they may have responded differently than if there had not been any recent situations where ethical decision-making was difficult.

In addition to the three newly-generated questions, some items received editorial changes, largely to incorporate different terminology between the U.S. and Canada. For instance, "Code Blue" was changed to read "99", which reflects common Canadian terminology. As well, a second scale was added to the original Moral Distress Scale, to examine the issue of frequency of exposure to ethically-charged situations in a more detailed manner than done previously.

These modifications were made after consultation with a nurse expert in instrument construction (Dr. L. Kristjanson, personal communication, July 1993), and statistical consultation with Dr. J. Sloan (personal communication, September 1993). Dr. Corley, after a review of the changes made, granted her approval and permission to proceed with the use of the modified instrument (personal communication, September, 1993).

The modified Moral Distress Scale was pretested. Five nurse experts (four with extensive clinical and research expertise in NICU nursing and one with expertise in instrument development) were recruited. L. Davis (1992) recommends a panel comprised of individuals with clinical expertise as well as those with expertise in the structural aspects of instrument construction. In accordance with these recommendations, nursing experts who represent each

of these areas formed the panel of experts. Three of these were Clinical Nurse Specialists in Special Care Nurseries i.e. Intermediate Care Nursery and NICU, one was a Masters-prepared nurse with expertise in Neonatal Nursing research and education, and the fifth was a doctorally-prepared nurse educator/researcher with expertise in instrument development.

Imle and Atwood's (1988) strategy for retaining qualitative validity while gaining quantitative reliability and validity was utilized as a framework for the instrument review by the panel of experts. Imle and Atwood (1988) used qualitative research to inductively develop and define concepts; these concepts were further used to generate a measurement scale. The authors were concerned because "while inductive qualitative methods are appropriate to discover and delineate ...empirically grounded concepts, the transformations necessary to produce quantitative items for use with psychometric procedures may not preserve the meaning of the concepts" (p. 62). The researchers applied a practical procedure for assessing the validity and internal consistency of inductively generated domains in pilot testing their scale, which was constructed from qualitatively generated concepts. A modified version of their format for assessing clarity, apparent internal consistency and content validity was utilized by the expert

panel in the review of the Moral Distress Scale. This is an appropriate application of Imle and Atwood's strategies, as the Moral Distress Scale was developed from qualitative study data reported by Judith Wilkinson (1985 and 1987/88) in her investigation of moral distress (Dr. M. Corley, personal communication, December 1992). Specifically, the experts were asked to

- a) review questions for clarity and appropriateness,
- b) assess whether questions reflect typical
Canadian NICU nursing practice,
- c) assess for internal consistency, and
- d) identify "bothersome" questions.

As well, the panel of experts was asked to help determine time required for completion of the questionnaires. This information was of interest to nurses who were asked to volunteer their time for instrument completion.

Nurse experts concurred that face validity was apparent, and that items were generally clear and appropriate for use with this population. Minor editorial revisions were made to the modified instrument, based on feedback from the panel of experts. Data collection began in the larger group after the pretest and revisions were completed.

In addition to the Moral Distress Scale, subjects were asked to complete a Biographical Data Sheet (Appendix C).

Information attained from this questionnaire enabled the investigator to describe the sample in a comprehensive manner. As well, it provided data on variables such as education and years of experience in nursing, which were used in secondary analysis to analyze the association between demographic characteristics and the level of moral distress experienced by the respondent.

Procedure

Approval of access to St. Boniface General Hospital and Childrens Hospital was obtained. The investigator contracted with the Head Nurses of each unit, asking for their assistance in introducing the study. Specifically, Head Nurses were asked to inform nursing staff that a nurse researcher was interested in discussing an upcoming project with them briefly. With nursing staff approval, the investigator informed them about the study during a unit staff meeting, utilizing Appendix E as a framework for discussion. After this introduction, a poster (Appendix F) was placed in each unit, approximately two weeks prior to the first scheduled data collection time. The poster simply directed those interested in participating in a nursing study involving NICU nurses to the specific data collection times, or to the investigator for further information.

Several data collection times were scheduled to coincide with staff coffee or lunch breaks. These took place on all nursing shifts, and on both weekdays and weekends. This enabled those nurses who work in a permanent evening or night shift position to take part in the study, and enhanced the likelihood of a high participation rate among staff. Data collection took place over a two week period at each setting (i.e. four weeks in total). This relatively brief time frame reduced the risk of historical threats to internal validity, which could have influenced the responses of the subjects.

Prior to arriving at the unit for data collection, the researcher telephoned the charge nurse to ascertain the workload in the unit. If circumstances were such that nurses would be able to take their scheduled breaks, the charge nurse was asked to inform staff that the researcher was coming in to speak to them briefly. On arrival in the unit, nurses were asked for two to three minutes of their time while the researcher reviewed the purpose for being there, and invited them to listen to more information about the study and possibly to participate. Nurses were invited to a conference room located near the NICU, where the researcher provided coffee and muffins. (This was done to expedite the goal of using break time to learn about and complete the questionnaire.) The invitation to participate

was reiterated, and nurses were asked to complete the two questionnaires.

The investigator left the room during completion of questionnaires, remaining in an adjacent room in order to be available to answer questions. Nurses were instructed to return completed questionnaires in an unmarked, sealed envelope to a box placed in the room. They were thanked for their participation, and reminded not to discuss the study with their colleagues until data collection was complete.

For nurses interested in participating, but unable to attend one of the group data collection sessions, the two questionnaires and an envelope in which to return them to the investigator via hospital mail were made available. All nurses, whether in attendance at a group session or completing the questionnaires on their own, received identical information regarding confidentiality, anonymity, and the right to discontinue participation at any time (Appendix E).

When questionnaires are used to study variables representing personal issues, the possibility of unpleasant self-discovery must be considered (Brink & Wood, 1989). These authors recommend that the investigator be prepared to assist subjects with feelings about self-revelation. Study participants were advised that further information, in the form of journal articles, was available. A copy of

Wilkinson's (1987/88) article--the most comprehensive discussion of moral distress in the literature at present--was placed in each of the nursing units after data collection was complete. In addition, subjects were informed that the investigator would present the research findings to unit staff on completion of the project.

Ethical Considerations

Ethical review was obtained from the Ethical Review Committee of the Faculty of Nursing at the University of Manitoba (Appendix D). Formal access to the involved hospitals was obtained prior to commencement of data collection.

Prospective subjects were briefed on the purpose of the study and invited to participate pending their meeting inclusion criteria. There are no known risks associated with participation in the study, however, Brink and Wood (1989) advise that when questionnaires are used to study variables representing personal issues, the possibility of unpleasant self-discovery must be considered. As stated previously, nurses were provided with further resources on request. There were no direct benefits to be derived from participation in the study, at least from an individual perspective. These facts were clearly articulated to subjects, as was the assurance of confidentiality of all

data. Subjects were assured that their participation was strictly on a voluntary basis and that there was opportunity to discontinue participation at any time if the subject so wished, without recrimination. There were no monetary costs to participation, similarly, there was no remuneration for such participation.

Only the investigator, the thesis committee chairperson, the internal thesis committee member, and a statistical consultant had access to the raw data. To protect the anonymity of respondents, and to encourage more frank and complete data, the external committee member (a physician in one of the NICUs where data collection took place) had access only to coded and grouped data. All completed questionnaires are stored in a locked filing cabinet.

Data Analysis

Calculations of frequency distribution, measures of central tendency, and variability completely describe a set of data (Polit & Hungler, 1991). Demographic data was summarized with descriptive statistics, as was data from the Moral Distress Scale.

The data on moral distress and frequency of exposure to ethically-charged situations was analyzed with bivariate descriptive statistics, which describe the degree and

magnitude of relationships between two variables (Polit & Hungler, 1991). As well, bivariate statistics were used to examine possible relationships between demographic variables and the level of moral distress experienced.

Content analysis was used to summarize findings from the qualitative questions added to the Moral Distress Scale. Content analysis is useful for quantifying information in an objective and systematic way (Polit & Hungler, 1987). The intent of content analysis is to make inferences from the actual message (Cole 1988), rather than merely describe it. Mutually exclusive and exhaustive categories were developed to sort the data, however a miscellaneous category was created also. This is permissible (Cole, 1988), as it allows for inclusion of unexpected results, enriching the data generated. Occurrences of the concept categories were enumerated, then interpretation, based on the research questions and the theoretical framework, was done. This strategy ensures objective and systematic data analysis, and assures that another individual could replicate the results by following the same instructions as the investigator. Categories were based on the literature and on the investigator's personal experience as an NICU nurse (Appendix G).

Once the research data was analyzed for the relationship between the frequency of exposure to ethically-

charged situations and the experience of moral distress, further analysis examined issues related to instrument modification and differences between the two settings from which data were collected.

CHAPTER IV

RESULTSData Analysis

The purpose of this study was to explore two questions:

1. To what extent do NICU nurses experience moral distress in carrying out their day-to-day patient care responsibilities? and,
2. What is the relationship between frequency of exposure to ethically-charged situations and the degree of moral distress experienced?

Seventy-nine NICU nurse respondents completed the Moral Distress Scale (Appendix B) as well as a Biographical Data Sheet (Appendix C). Data were coded and transcribed onto a computer file by the investigator. The SAS computer package was used for data analysis.

Demographic data were summarized with descriptive statistics. The level of moral distress experienced for each of the 27 situations presented in the Moral Distress Scale was determined, together with a mean moral distress level for each participant. The frequency of exposure to each of the 27 items was explored similarly.

For this study, the level of statistical significance selected was 0.05. The level of significance determines the chance of erroneously rejecting the null hypothesis, with .05 (or accepting the risk that out of 100 samples, a true

null hypothesis would be rejected five times) being recognized as an acceptable level for scientific research (Polit & Hungler, 1987). Lowering the risk of committing a Type I error, for example, using stricter criteria for level of significance, increases the risk of committing a Type II error, or accepting a false null hypothesis (Polit & Hungler, 1987).

This chapter reports findings from the data analysis. The sample characteristics will be described, then the research questions will be addressed. Finally, data will be examined for possible relationships between various demographic variables and the experience of moral distress.

The Sample

The total population consisted of 128 eligible nurses (54 at one hospital; 74 at the other). Of these, 82 were available to attend one of the 16 scheduled data collection sessions. The remaining 46 nurses were not at the hospital when the researcher was (due to vacation time, leaves of absence or unusual scheduling), despite the researcher's attendance in the units on weekdays, weekends, and on all three nursing shifts. The latter group of nurses was invited to participate via the informational poster (Appendix G), and questionnaires with Information for Nurses sheets (Appendix F), which were made available through one designated nurse at each center. All nurses present on the

unit when the researcher arrived to do data collection chose to hear more about the study, and of 82 nurses directly approached, 79 (96 %) completed and returned questionnaires. There were no nurses, however, who requested questionnaires from the hospital delegates if they had not been able to attend a scheduled data collection session. The proportion of the population who participated is thus 79 of 128 or approximately 62 percent.

Study participants ranged in age from 25 to 55 years, with a mean age of 37.1 years. Most respondents (86.1 %) were educated at the diploma level; fourteen percent held baccalaureate degrees. Certificates in Nursing specialties were held by 21.8 percent of the sample. These were primarily certificates in Neonatal/Pediatric ICU with some nurses holding certificates in adult ICU nursing. Forty-four percent of the subjects reported having had some type of ethics education, in the form of either courses taken, or workshops or seminars attended.

Married nurses comprised 70.5 percent of the sample; 29.5 percent identified themselves as either single, separated, widowed or divorced. The majority of respondents, 59.5 percent, were parents. Ninety-three percent of respondents were staff nurses; the remaining 6.4

percent were head nurses, assistant head nurses, team leaders or nurse educators.

The mean length of employment in the current unit was 7.4 years. Total number of years of nursing experience ranged from one to 34 years, with a mean of 13.4 years.

TABLE 1

The Sample: Demographic Variables

Variable	Range	Mean	Standard Deviation
Age	25 - 55	37.1	7.1
Unit Employment (years)	1 - 26	7.4	4.9
Total nsg. experience	1 - 34	13.4	7.3

Almost eight percent of respondents (n = 6) reported having left a previous nursing position "primarily because institutional constraints made it nearly impossible to pursue the right course of action". Approximately one-fifth (20.8 %) of the group described personal involvement in an ethically-charged situation, not related to their work as a nurse, which subsequently had an impact on the degree of moral distress experienced at work. Almost half of the sample (45.6 %) identified clinical situations, not previously described on the Moral Distress Scale, which caused them to feel moral distress.

TABLE 2

Demographics: Frequency distributions

Variable	Frequency	Percent
Highest level nursing education		
Diploma	68	86.1
Baccalaureate	11	13.9
Certificate in Nursing		
Yes	17	21.8
No	61	78.2
Ethics Education		
Yes	35	44.3
No	44	55.7
Identified other clinical situations which caused moral distress		
Yes	36	45.6
No	43	54.4
Left previous position due to internal constraints which made it nearly impossible to pursue the right action		
Yes	6	7.8
No	71	92.2
Have made personal ethical decision, not related to work, which had an impact on the degree of moral distress experienced at work		
Yes	15	20.8
No	57	79.2

Research Question #1:

To what extent do NICU nurses experience moral distress in carrying out their day-to-day patient care responsibilities?

Nurses were presented with 27 clinical situations, and for those situations they had experienced, subjects were instructed to rate the degree of moral distress experienced, together with the frequency with which they encountered the situation (Appendix C). Of the 27 situations described, nurses had encountered a mean of 16 items, with one nurse reporting having experienced only four situations, and one having experienced 26 of the 27.

In this study, NICU nurses report experiencing a moderately high degree of moral distress when carrying out their day-to-day patient care responsibilities. The mean moral distress level for an individual in this sample is 5.48 on the seven point scale, with a range of 2.0 to 6.73 and standard deviation of 1.0. The 27 ethically-charged situations were ranked in terms of the mean moral distress score each invoked (Tables 3 and 4). Table 3 depicts the eight most distressing situations for nurses, and Table 4 lists the eight least-distressing situations as evaluated by nurses in this sample.

TABLE 3

The Eight Most Distressing Situations

Situation	Range	Mean	S.D.
Continue to participate in care for a hopelessly injured patient who is being sustained on a respirator when no one will make a decision to "pull the plug".	3 - 7	6.38	1.05
Assist the physician who in your opinion is providing incompetent care.	2 - 7	6.29	1.08
Let medical students and/or residents perform painful procedures on patients solely to increase their skill.	2 - 7	6.26	1.13
Follow the physician's order not to tell the parent(s) the truth when they ask for it.	2 - 7	6.14	1.29
Initiate dramatic life-saving actions when I think it only prolongs death.	3 - 7	6.12	1.09
Observe without intervening when health care personnel do not respect the patient's dignity.	2 - 7	6.05	1.09
Follow the physician's order not to discuss death with parents who ask about the death of their dying infant.	2 - 7	6.00	1.48
Work with "unsafe" levels of nurse staffing.	2 - 7	5.91	1.13

Items were rated on a scale of 1 to 7, with 1 = no moral distress and 7 = a lot of moral distress.

TABLE 4

The Eight Least Distressing Situations

Situation	Range	Mean	S.D.
Carry out orders or institutional policies to discontinue treatment.	1 - 7	3.89	1.88
Follow the family's wishes for the patient's care when I do not agree with them.	1 - 7	4.13	1.59
Prepare a terminally ill patient who is a "No 99" for surgery to have a feeding tube put in.	1 - 7	4.48	1.66
Give only hemodynamic stabilizing medication intravenously during a 99 with no compressions or intubation.	2 - 7	4.67	1.73
Follow the parent's request not to discuss death with a child who asks about their dying newborn sibling.	1 - 7	4.83	2.12
Carry out the physician's orders for unnecessary tests and treatments.	1 - 7	5.12	1.66
Avoid taking any action when I learn that a nurse colleague has made a medication error and does not report it.	2 - 7	5.26	1.58
Perform a procedure when the parents are not adequately informed about what their child is about to undergo.	2 - 7	5.34	1.47

Items were rated on a scale of 1 to 7, with 1 = no moral distress and 7 = a lot of moral distress.

Research Question #2:

What is the relationship between frequency of exposure to ethically charged situations and the degree of moral distress experienced?

Frequency of Exposure:

The mean frequency of exposure, based on all nurse respondents' experiences with the 27 situations, was 2.41 on a scale of 1 to 7, where 1 = Never and 7 = Frequently. The 27 situations in the Moral Distress Scale were ranked according to the frequency with which NICU nurses encountered them (Tables 5 and 6). Table 5 reports the eight most frequently-encountered clinical situations, and Table 6 lists the eight least frequently-encountered situations as reported by nurses.

TABLE 5

The Eight Most Frequently-Encountered Situations

Situation	Range	Mean	S.D.
Carry out the physician's orders for unnecessary tests and treatments.	1 - 7	4.34	1.59
Let medical students and/or residents perform painful procedures on patients solely to increase their skill.	1 - 7	3.46	1.89
Assist the physician who in your opinion is providing incompetent care.	1 - 6	3.42	1.41
Initiate dramatic life-saving actions when I think it only prolongs death.	1 - 7	3.36	1.57
Continue to participate in care for a hopelessly injured patient who is being sustained on a respirator, when no one will make a decision to "pull the plug."	1 - 7	3.29	1.64
Work with "unsafe" levels of nurse staffing.	1 - 7	3.26	1.62
Carry out orders or institutional policies to discontinue treatment.	1 - 7	2.99	1.65
Perform a procedure when the parents are not adequately informed about what their child is about to undergo.	1 - 6	2.91	1.49

Items were rated on a scale of 1 to 7, with 1 = Never and 7 = Frequently.

Of the top eight situations in terms of frequency of exposure, five of these items are also ranked in the top eight situations from the Moral Distress hierarchy. These are:

- (i) Initiate dramatic life-saving actions when I think it only prolongs death;
- (ii) Let medical students and/or residents perform painful procedures on patients solely to increase their skill;
- (iii) Work with "unsafe" levels of nurse staffing;
- (iv) Continue to participate in care for hopelessly injured patient who is being sustained on a respirator, when no one will make a decision to "pull the plug"; and,
- (v) Assist the physician who in your opinion is providing incompetent care.

TABLE 6

The Eight Least Frequently-Encountered Situations

Situation	Range	Mean	S.D.
Give only hemodynamically stabilizing medication intravenously during a 99 with no compressions or intubation.	1 - 7	1.19	0.76
Follow the parent's request not to discuss death with a child who asks about their dying newborn sibling.	1 - 7	1.27	0.83
Follow the physician's request not to discuss a 99 status with the family.	1 - 7	1.39	1.08
Assist physicians who are practicing procedures on a patient after CPR has been unsuccessful.	1 - 6	1.49	0.94
Follow the physician's order not to discuss death with parents who ask about the death of their dying infant.	1 - 7	1.49	1.06
Prepare a terminally ill patient who is a "No 99" for surgery to have a feeding tube put in.	1 - 7	1.49	1.00
Ignore situations of suspected patient abuse by caretakers.	1 - 5	1.69	1.14
Avoid taking any action when I learn that a nurse colleague has made a medication error and does not report it.	1 - 6	1.69	1.01

Items were rated on a scale of 1 to 7, with 1 = Never and 7 = Frequently.

Of the eight least-frequently-encountered situations, three of these were also identified in the list of the least morally-distressing situations encountered by NICU nurses.

The three items are:

- (i) Avoid taking any action when I learn that a nurse colleague has made a medication error and does not report it.
- (ii) Prepare a terminally ill patient who is a "No 99" for surgery to have a feeding tube put in; and
- (iii) Give only hemodynamically stabilizing medication intravenously during a 99 with no compressions or intubation.

Correlation between moral distress level and frequency of exposure:

The most common method of describing a relationship between two variables is through correlation procedures. A correlation coefficient is an index with values ranging from -1.0 to +1.0. The higher the absolute value of the coefficient, the stronger the relationship. Spearman's rho is a measure of association specifically designed for rank-ordered (ordinal level) data (Lutz, 1983). With this statistic, a correlation of .7 indicate a significant relationship between variables (Polit & Hungler, 1987).

Mean moral distress level for the sample was significantly positively correlated with mean frequency of exposure to the 27 situations in the Scale ($r = 0.29568$, $p = 0.0082$).

Additional Variables

Respondents rated the stress level in the NICU on the day they completed the Moral Distress Scale, using a scale of one to seven, where one represented "very low" and seven represented "very high". The stress level ratings ranged from one to seven, with a mean of 3.40, standard deviation 1.73.

The amount of input NICU nurses have in ethical decision-making in the clinical area was rated, again using a scale of one to seven with definitions as described above. The mean score for input into decision-making was 3.14, with a range of 1 to 6, standard deviation 1.63. For this item, no respondents selected 7, which was labelled "very high" input into ethical decision-making.

Correlations

To determine whether an individual's mean moral distress level correlated with stress level in the NICU the day they completed the questionnaire, the amount of input nurses felt they had in ethical decision-making in the unit, years of nursing experience, age, or number of hours worked

per week, Spearman's rho correlation coefficients were calculated. None of these variables were found to correlate with the degree of moral distress experienced by an individual. The r value for the correlations ranged from $-.19$ to $+.07$ (Table 7).

TABLE 7

Correlations between Individual Mean Moral Distress Level and Several Variables: Spearman's Rho

	Spearman's Rho
Years of nursing experience	-0.19334
Age	0.07512
Hours of work per week	0.04983
Stress level in the Unit on day questionnaire completed	0.07224
Nursing input into ethical decision-making	-0.05503

To examine relationships between ordinal and nominal level data (the variables answered with categorical or "Yes/No"-type responses), the Wilcoxon test was done. Again, because of the level of data involved, a non-parametric test statistic is appropriate.

In an attempt to discover possible relationships between mean moral distress level for an individual and

variables such as possession of a Certificate in Nursing, ethics education, nursing position, parental status, having made a personal decision (not related to work) that involved an ethically-charged situation, and having left a previous position because institutional constraints made it nearly impossible to pursue the right course of action, the Wilcoxon test was performed. None of the above variables were found to be significantly related to the degree of moral distress experienced by an individual.

Neither nursing education of an individual, nor the length of time they had been employed in the unit was correlated with the amount of input they reported having in ethical decision-making. This conclusion was drawn based on the Wilcoxon test statistic computed for these variables. There was, however, a significant correlation ($p = 0.0227$) between mean frequency of exposure to ethically-charged situations and length of time worked in the current unit of employment. Spearman correlation coefficient for this was 0.25777.

According to the Wilcoxon test statistic, there were no significant relationships between average frequency of exposure to ethically-charged situations and having Ethics education, being a parent, having previously left a nursing position because institutional constraints made it nearly impossible to pursue the right course of action, and

personal experience, not related to work as a nurse, in making an ethical decision which subsequently had an impact on the degree of moral distress experienced at work.

The Sample: Differences between Subsets

Data for this study were collected from nurses employed at one of two NICUs located in different tertiary care institutions within the same large city. Data were examined to determine whether there were differences between the two groups of nurses who completed the questionnaire, based on where they were employed.

Four variables were found to have statistically significant differences when the two groups of nurses were compared using the Wilcoxon 2-sample test. These were:

- 1) mean moral distress level: group B nurses had a mean moral distress level of 5.60 versus group A nurses who had a mean moral distress level of 5.34 ($p = .0241$), using a scale of one to seven;
- 2) the stress level in the nursing unit on the day nurses completed the Moral Distress Scale: group B nurses had a mean stress level of 3.77 versus 2.94 for group A ($p = .0482$), using a scale of one to seven;
- 3) nurses' ratings of input they perceived they had into ethical decision-making in the unit. Group A

- nurses reported a mean level of 3.66 as compared with group B nurses who rated their input level 2.72 ($p = 0.0138$), using a scale of one to seven;
- 4) hours of work per week: group B nurses were much more likely to be working close to fulltime hours, as compared with group A nurses who predominantly worked fewer than 32 hours per week ($p = .001$).

There were no statistically significant differences in the following variables when the two groups of nurses were compared:

- i) mean frequency of exposure to morally distressing situations as listed on the Moral Distress Scale;
- ii) mean number of distressing situations an individual had experienced;
- iii) age;
- iv) length of time employed within the current unit of employment;
- v) length of time the individual has been a nurse;
- vi) identification of a morally-distressing clinical situation not described on the Moral Distress Scale;
- vii) having previously left a nursing position primarily because institutional constraints made

it nearly impossible to pursue the right course of action;

- viii) Ethics education;
- ix) level of nursing education;
- x) year of Graduation from Nursing program;
- xi) graduation from a certificate program in Nursing, for example an ICU course; and
- xii) being a parent.

Qualitative Data

Clinical Situations which cause Moral Distress

Of the 79 respondents, 36 or 45.6 percent identified other clinical situations, not described in the 27 items on the Moral Distress Scale (Appendix C), which caused them to feel moral distress . These responses were reviewed by the investigator and classified into one of six categories (Appendix G) .

Issues related to paternalism or pulling rank were mentioned most frequently by nurses. An example of this category includes an incident when a decision reached at a team meeting was rescinded by the physician, who neither informed nor discussed the matter with staff, but simply altered the treatment plan to conform to the newly-arrived-at and independently-made decision.

Nurses noted many instances when incomplete information was given to parents. Examples cited included comments such as "parents are given information that is distorted or biased", "doctors are not open and honest to parents about future outcome of their infant", and "results of tests are back and everyone in the unit including the residents know the results, but no one (physician) wants to be the one to tell the parents...The parents ask, and you have to lie, 'the results aren't back yet'".

Issues related to unnecessary treatments and prolonging life support were common when nurses described situations which caused them moral distress. A poignant example of this was described as follows: "prolonging life support on a badly damaged baby with various anomalies even after the parents had stated they wanted nothing more done to the baby and wanted treatment discontinued. Medical staff could not come to terms with parents' wishes and allowed the baby to suffer for three to four days longer than necessary--the parents never came in to see the baby after the first day of life--the day they made their decision".

Experimental treatment and incompetence on the part of health care team members were each mentioned six times. Experimental treatment options described included resuscitation of extremely preterm infants and "making this baby and family suffer...so that we can see the effect this

particular drug or treatment has on this particular condition". Issues related to incompetence were mainly directed at physician incompetence, but also included concerns regarding incompetence of other health care team members. A graphic example involved a description of a limb which required amputation as a result of an improperly placed intravenous line. The nurse respondent states she "wanted to tell (parents) it was negligent not to remove the line when the nurse kept insisting there was a problem. (I) wanted to tell parents to sue (the) doctor and (the) hospital".

In the "other" category, inequity of treatment among different families and different ethnic groups was mentioned twice. One respondent described "favoritism among certain patients and families, thus allowing sometimes better care and visiting, compared to less favorite patients and families--a lack of consistency and professionalism". One nurse respondent noted that managerial non-support, non-objective and judgmental attitudes, and "incommunicative" and coercive innuendoes were a source of much moral distress for her.

TABLE 8

Categories of situations inducing moral distress in nurses

	Frequency
1. Paternalism/pulling rank	22
2. Incomplete information given to parents	13
3. Unnecessary treatment/prolonging support	11
4. Others--includes inequity in treatment of patients/families; non-supportive management	11
5. Incompetence of health care team members	6
6. "Experimental" treatment	6

Experience with leaving a nursing position primarily because institutional constraints made it nearly impossible to pursue the right course of action:

Six respondents described situations in which they had left nursing positions primarily as a result of institutional constraints which made it nearly impossible to pursue the right course of action. Reasons cited paralleled the categories described above, in that incompetence and paternalism were described. Paternalism was apparent on the part of physicians' actions toward nurses and patients, as well as paternalism of nursing administration toward nurses. Two respondents noted difficulties related to physicians and decision-making, such as "too many levels of doctors making

decisions i.e. interns, residents, fellows, staff men", and "medical personnel countermanding each other's orders and then blaming nursing staff for following the other's orders". Incomplete communication played a part in several situations, including comments that nursing input was not included in decisions regarding patient management. Interestingly, poor staffing patterns and "unsafe" decisions on the part of nursing administrators were mentioned by three respondents. One profound example of a questionable decision by a nursing administrator was the following:

One shift the head nurse assigned each of us to unfamiliar areas i.e. antepartum high risk, post-partum and triage nursery. All 3 areas were high-risk i.e. premature labour, post-partum bleeds--high numbers of babies in the nursery--supervisor refused to let us go back to areas we were most familiar with. Her reason was that head nurse must have had a reason for the way assignment was made, and (she) was willing to compromise patient safety. We had to keep the original assignment, all the while consulting with fellow nurses who knew how to handle the situation better, but who were busy handling other unfamiliar situations. I believe admin's reasoning was that the more areas we were familiar with, the more we could be used as floats. I had no objections to learning new areas but not when these areas were critical. I applied for a transfer to NICU the next day and have been much happier.

Personal involvement in an ethically-charged situation, not related to work as a nurse, which had an impact on the degree of moral distress subsequently experienced at work:

All of the 12 nurse respondents who reported having been personally involved in an ethically-charged situation, not related to work as a nurse, which had an impact on the degree of moral distress subsequently experienced at work, had made decisions related to illness and deaths of family members. Several had acted as leaders for the family, or as spokesperson or liaison between family and the health care team. One nurse stated, "I have greater compassion, and empathy, for families having to make similar decisions". Another nurse reported, "I still haven't come to terms with it i.e. could I have done more? Did I make the right decisions? I always "flash back" to this if I have a terminal patient." Clearly, the effects of such experiences are long-lasting and influential.

Chapter V will discuss implications of the findings reported from the data analysis.

CHAPTER V:
DISCUSSION

This study was designed to explore the day-to-day experience of moral distress among NICU nurses, and to look at the relationship between the degree of moral distress experienced and the frequency of exposure to ethically-charged situations in the clinical area. The conceptual framework utilized to direct the study was Wilkinson's Moral Distress Model (Appendix A). The model notes that nurses frequently encounter patient care situations in which they are aware of a moral issue, and their cognitive moral framework, in addition to feelings of empathy and desire to help the patient, influence the decision about which action they are comfortable in taking. The model suggests that "the more frequently a nurse is exposed to cases of moral distress, the less likely the coping behaviors are to be successful" (Wilkinson, 1987/88, p. 27).

In this study, NICU nurses completed the Moral Distress Scale and a Biographical Data Sheet (Appendices B and C). Several open-ended questions were included in the Moral Distress Scale, allowing a combined quantitative and qualitative approach to the study of the research questions.

Seventy-nine registered nurses whose daily assignment includes care of neonates in the NICU comprised the research sample. Nurses were employed in one of two NICUs, both

located in a large midwestern Canadian city. All NICU nurses were invited to participate, and a response rate of 62 percent was attained.

Data analysis suggests several possible interpretations and conclusions about the sample and the concepts studied. These will be reviewed, followed by a discussion of limitations of the study, implications for nursing practice, and recommendations for future nursing research.

Discussion

The first research question explored the extent to which NICU nurses experience moral distress in carrying out their day-to-day patient care responsibilities. On a scale of one (no moral distress) to seven (a lot of moral distress), the mean moral distress level for the sample was 5.48. This represents a moderately high level of moral distress, and is supportive of findings of Berger, Severson and Chvatal (1991), who found that the mean "level of disturbance" experienced by nurses who were faced with various ethical issues in their daily practice was 2.53 on a scale of 0 (not at all disturbed) to 4 (a great deal of disturbance). It should be noted that Berger et al. did not label the "disturbance" moral distress per se, but asked nurses "how disturbed they felt" by specific ethical issues which arose in their practice.

Study findings that NICU nurses experience a fairly high degree of moral distress support earlier reports of qualitative research by Jacobson (1978), and Hutchinson (1984). In studying NICU nurses, Jacobson found that the most prevalent theme reported as stressful by nurses was "nurses' philosophical/emotional problems", which resulted in "inner turmoil". Hutchinson (1984), who also studied NICU nurses, noted a theme of inner turmoil as well. The concept of inner turmoil, as described by these two researchers, is similar to descriptions of moral distress provided by more recent researchers (Fenton, 1987 and Wilkinson, 1987/88). As well, Rosenthal, Schmid and Black (1989) found that ethical issues in the NICU were significantly more stressful than concerns in other areas such as self-competence and concerns about the family's provision of adequate care. Again, this group did not use the term "moral distress", but rather looked at "stress" as a result of "ethical issues" in the clinical area.

Of interest is the fact that previously published research, though confirming the experience of "stress" or "disturbance" among nurses faced with "ethical issues", have generally not utilized the more clearly-defined concept of moral distress. This is likely because the concept was not well-known in the nursing literature until 1987/88, when Wilkinson published her landmark study results. Of the few

studies exploring the issue, most were conducted before that date.

Study findings that NICU nurses experience a moderately high degree of moral distress in their day-to-day work may have important clinical implications, particularly if Wilkinson's (1987/88) assertion that moral distress among nurses may result in sub-optimal patient care is correct. Based on the relatively high mean moral distress level for nurses in this sample, one might surmise that there is potential for such an outcome among this group of nurses. Since this study did not explore the effects of moral distress nor the coping mechanisms of the nurses, it is impossible to predict the outcome of these nurse respondents' moral distress experience. Wilkinson's theory concerning damage to a nurse's self-esteem and "wholeness" as a result of experiencing moral distress are of concern as well, since these characteristics impact on nurses' mental health. Again, however, it is impossible to predict the outcome of moral distress on these nurses based on study results.

The fact that mean level of moral distress among nurses is so high in this study suggests that they may not be coping as well as they could be. For instance, if nurses were able to somehow resolve their feelings of moral distress, ratings of the degree to which they experience

this entity would presumably be lower. Thus, a moderately high level of moral distress suggests unresolved feelings of psychological disequilibrium, hence a higher likelihood of unsuccessful coping mechanisms.

There is, what at first sight, appears to be an inconsistency in the Moral Distress Model as proposed by Wilkinson (1987/88) which must be addressed. While at one point asserting that "the more frequently the nurse is exposed to (situations invoking moral distress), the less likely the coping behaviors will be effective" (p. 25), in further discussion of the moral distress experience, she states that "the amount of experience and the knowledge of available options affect the degree to which the nurse can circumvent constraints and implement the moral decision" (p. 25). Both suggestions are plausible--for some individuals, repeated exposure to stressful situations will stimulate a desire to find an effective solution; for others, the challenge will be too great and the result may be damage to the individual's wholeness and a decreasing ability to function effectively in the clinical area.

This study found no correlation between age, nursing experience, experience working in an NICU, educational preparation, parental status, or stress level in the NICU the day they completed the questionnaire, and the mean moral distress level for an individual. Nurses who have made

personal decisions (not related to work), that involved an ethically-charged situation, and those who left a previous position because institutional constraints made it nearly impossible to pursue the right course of action were not found to have significantly different levels of moral distress than nurses without these experiences. These findings are congruent with Berger et al.'s (1991) study results which indicated no significant relationship between education, age or experience and the level of "disturbance" reported by nurses as a result of being confronted with various "ethical issues" in their practice.

The level of input nurses felt they had in ethical decision-making in the unit was not related to the degree of moral distress they experience. This is surprising in view of many published articles (Berg & Isler, 1977; Davis, 1977; Harris, C., 1973; Jameton, 1984; Lo, 1984; Muyskens, 1982; and Rodney, 1989) which advocate a multi-disciplinary shared decision-making process as a means of "integrity-preserving compromise" (Benjamin & Curtis, 1986, p. 106) for nurses. These authors suggest that by involving nurses and soliciting their input at the outset of the decision-making process, it is possible to avoid nurses' discomfort in implementing a medically-ordered plan of care. The majority of publications supporting this position are editorial articles, however, and not empirical research. This may

explain the incongruence between this study's findings and the general tone of the literature in this regard: perhaps the amount of input nurses have into ethical decision-making is not as important as it was thought to be with regard to the degree of moral distress they subsequently experience. It may be, however, that the nurses in this sample are atypical of nurses in general, thus this relationship was not significant in this sample.

It is likely that other personal attributes and variables, not identified or measured in this study, are influencing the manner in which nurses react or respond to ethically-charged situations in the clinical area. Further research is clearly needed to uncover these characteristics.

The second question explored in this study looked for correlation between the frequency of exposure to ethically-charged situations and the degree of moral distress experienced. The group mean frequency of exposure to ethically-charged situations was relatively low: 2.41 on a scale of one (never having experienced the situation) to seven (experience the situation frequently). This finding is similar to that of Berger et al. (1991), who found that when 32 items were presented to a group of nurses drawn from various different clinical specialty areas as well as nursing administration, there was a relatively low overall

frequency of exposure score, indicating that in general, nurses encountered ethical issues relatively infrequently.

There was a significant positive correlation between frequency of exposure to ethically-charged situations and the extent to which an individual experiences moral distress, based on group means. This finding concurs with Wilkinson's diagrammatic Moral Distress Model (Appendix A), which suggests that increasing frequency of exposure to ethically-charged situations contributes to feeling overwhelmed and powerless. As well, this result supports the finding of Berger et al., who note that "on average, the nurse's level of disturbance increases with the frequency that issues are encountered" (Berger et al, 1991, p. 520). It would appear that, in general, repeated exposure to ethically-charged situations is associated with increased moral distress. This finding is important in that it provides direction and support for the premise that prevention of exposure to morally distressing situations is likely the best strategy to assist nurses. Focus on coping will be necessary, but knowledge that increased frequency of exposure to ethically-charged situations results in increased moral distress assists in prioritizing future strategies for nursing education, research, and administration in their efforts to assist practicing nurses to work effectively despite having to contend with

potentially morally distressing situations. In other words, concerted effort directed at altering conditions in the clinical area, with a goal of reducing the number of morally-distressing situations encountered, is perhaps potentially the most effective strategy available to ultimately decrease the level of moral distress experienced by nurses.

There is a significant relationship between length of time employed in the current NICU and the frequency with which one encounters ethically-charged situations. The most logical explanation for this finding is that as nurses acquire more experience and expertise in this specialty area, they are exposed to more critically-ill and unstable patients. That is, the most senior nurses are the ones to care for the most challenging patients, thus they are more likely to confront ethically-charged situations due to the acuity of the clinical case and general lack of experience of most health care team members in dealing with these "new" situations. These more senior nurses did not, however, experience a different level of moral distress when compared with other more junior staff members.

Wilkinson (1987/1988) found that more experienced nurses report a lower incidence of moral distress than younger, less experienced nurses. Although more experienced nurses in the present study were more frequently exposed to

ethically-challenging situations, there was no difference in the level of moral distress they experienced as compared with less experienced nurses. An explanation for both of these findings may be that more experienced nurses are better able to present their perspective and to persuade others of its merit, for example, to influence ethical decision-making, thus they are less likely to feel they are implementing a care plan with which they disagree. It may also be that more experienced nurses, who are generally older, have been socialized into a more passive role, where they feel their prime responsibility is to follow doctors' orders. If this is the case, they would be better able to reassure themselves that their actions were not their own responsibility, thus they would be less likely to report feeling a high degree of moral distress.

Situations from the Moral Distress Scale were ranked according to mean level of moral distress experienced by the study sample, and again according to the frequency with which nurses encountered them (Tables 3, 4, 5, and 6, pgs 55, 56, 58, and 60). Of the top eight-ranked items in the moral distress hierarchy, five refer to direct actions or inactions of physicians which are incongruent with nurses' ideas of how situations should be handled. This finding is supportive of Rosenthal et al.'s (1989) report of NICU nurses' mean stress score: conflict with physicians was

ranked second of eight groups of stressors presented in that study.

Working with "unsafe" levels of nurse staffing was ranked eighth in terms of the degree of moral distress precipitated in the study sample. This finding is somewhat supportive of Berger and colleagues' (1991) report that "the most disturbing ethical issue reported...was inadequate staffing, with 90 percent indicating that they were disturbed a great deal or quite a bit when this occurred" (p. 518). The issue of inadequate or unsafe nurse staffing may be a relatively new phenomenon, with current economic concerns reaching such a high level in health care settings. Certainly in Canada, it is only recently that nurse staffing has been reduced in an attempt to become more fiscally responsible. In the United States, the issue may be related more to availability of nurses than the economy.

In the hierarchy of situations ranked according to frequency of exposure, five of the top eight situations refer to situations in which physician control impinges on nursing autonomy. This is again supportive of Rosenthal and group's (1989) finding, where when stressful situations were examined according to frequency of occurrence, the top ranked item was impact of the NICU environment (space, light, etc.), the next most frequently encountered was ethical issues related to prolonging a baby's life, and the

third was conflicts with physicians. Berger et al. (1991) found that inadequate staffing was encountered most frequently of items explored in their study, with heroic measures used to sustain life another frequently encountered stressor. The current study supports these findings, in that working with "unsafe" levels of nurse staffing was encountered frequently, and two of the eight top ranked items could be seen as employing heroic measures to sustain life i.e. "initiate dramatic life-saving actions when I think it only prolongs death" , and "continue to participate in care for a hopelessly injured patient who is being sustained on a respirator, when no one will make a decision to 'pull the plug'".

Of the top eight ranked situations in each list, five situations are common to both hierarchies. These are:

- (i) Initiate dramatic life-saving actions when I think it only prolongs death.
- (ii) Let medical students and/or residents perform painful procedures on patients solely to increase their skill.
- (iii) Work with "unsafe" levels of nurse staffing.
- (iv) Continue to participate in care for hopelessly injured patient who is being sustained on a respirator, when no one will make a decision to "pull the plug".
- (v) Assist the physician who in your opinion is providing incompetent care.

Central to all of these situations is an underlying sense that the patient is not receiving optimal care. The patient is clearly at the mercy of the health care team, particularly the medical professionals, who, according to study findings, at times appear more concerned with increasing their skill than providing quality, individualized patient care. Although learning new skills is necessary for all health care professionals, there are many different strategies available to assist in accomplishing this goal. Having junior physicians perform painful procedures on babies solely to increase their skill is morally distressing. With the advent of computer simulations and complex mannikins which can be intubated and cannulated in a variety of different invasive ways, there is little justification to "practice" on babies.

When no one will make a decision to discontinue heroic life support measures in the case of hopelessly injured patients, the stress to patient, family and nursing staff is great. Though such decisions must indeed be difficult, and should never be rushed, there is nothing to be gained in delaying the discussion or the decision-making.

Assisting "incompetent" physicians and working with "unsafe" levels of nurse staffing represent inadequate support from other health care team members, and both situations place nurses in an uncomfortable situation which

is not easily reconciled. To decrease and ultimately eliminate the moral distress evoked by these situations, work with nursing administration and medicine is essential to ensure their understanding of the problem, and to encourage a commitment to work together to rectify it.

The initiation of "dramatic" life-saving actions by nurses who feel such actions only prolong death is understandably difficult. The very nature of NICU nursing suggests that it is a situation which is not likely to decrease in frequency, since there are still many unknowns in the field. For instance, it remains unclear just what the lower limit of viability for preterm infants is. Just a decade ago, the limit was felt to be 28 weeks gestation: in 1994, there are reports of infants who survive after birth at just 22 weeks. Facts such as this render many nurses to feel helpless--doubtless there are infants who are "saved", only to later learn that there were just too many problems, or problems too acute to manage effectively, that will prevent an acceptable quality of life, if life is indeed a possibility.

Frequently encountered morally-distressing situations are extremely difficult for nurses. Sharing the nature of these with nursing administrators, nursing educators, and physicians may begin the monumental task of resolving the problems--first by assisting others to see how such

situations affect front-line nurses, and secondly by creating incentives to decrease the frequency with which they occur in the NICU.

Even the least-distressing situations invoked a fair degree of moral distress among study participants. The lowest ranked situation had a mean moral distress level of 3.89 (on a scale of one to seven, where one = no distress, and seven = a great deal of distress). This finding may be partially explained by the action of the social desirability response set. In this case, some individuals tend to "misrepresent their attitudes by giving answers that are consistent with prevailing social mores" (Polit & Hungler, 1987, p. 256). It may be that nurses felt somewhat compelled to answer questions from a vantage point of patient advocacy, based on heightened awareness of ethically-charged situations when learning about the focus of the research study. In other words, nurses who may not normally consider the many ramifications of their actions suddenly became aware of an underlying societal expectation that nurses act in a manner so as to preserve the autonomy and dignity of patients and their families, protecting them from individuals and actions whose intent may be at odds with the best interest of the patient.

Considering that all items on the Moral Distress Scale were selected because they have been found to be morally

distressing, it makes sense that moral distress ratings are relatively high. Despite this, the nurses' ratings must be accepted as valid--the scale allowed them to rate items on a scale from one to seven, yet the lowest average moral distress rating was above the midpoint of the scale.

The least-distressing situation for nurses in this study was to "carry out orders or institutional policies to discontinue treatment". Interestingly, this is a situation which is encountered fairly frequently; it was ranked number seven of 27 items in terms of frequency of exposure. Perhaps discontinuing treatment is viewed by nurses as a means of stopping the suffering of terminally ill patients, thus it is less stressful than might be expected.

Of the "least-distressing" list, two situations are directly related to the family's needs, specifically meeting them when they are incongruent with the nurse's convictions about what is right for the patient. These are "Follow the family's wishes for the patient's care when I do not agree with them" and "Follow the parent's request not to discuss death with a child who asks about their dying newborn sibling". This finding is in keeping with that of Rosenthal et al. (1989), who noted that concerns of families ranked sixth out of eight stressors in terms of the stress they caused for nurses. It is apparent from these results that nurses clearly care for parents and family as well as

patients, at times (comfortably) compromising their own convictions to satisfy the families'. That is, nurses are not overly distressed when their actions are contrary to their own beliefs, as long as they are those desired by the family.

One component of the Baby Doe legislation in the U.S. states that infants, even those who are terminally ill, be provided with nutritional support. Nurses in this sample would likely support the Baby Doe legislation which states that feeding of terminally ill infants is required; they ranked "prepare a terminally ill patient who is a "no 99" for surgery to have a feeding tube put in" the third least distressing situation of the 27 presented in the Moral Distress Scale.

The eight least-frequently-encountered situations included three items whose central theme was a restriction on information the nurse was allowed to share. These were:

- i) Follow the parent's request not to discuss death with a child who asks about their dying newborn sibling;
- ii) Follow the physician's request not to discuss a 99 status with the family; and

- iii) Follow the physician's order not to discuss death with parents who ask about the death of their dying infant.

It is reassuring that these undesirable restrictions to open communication do not occur very frequently. Neither Berger et al. (1991) nor Rosenthal et al. (1989) discuss restrictions to information-sharing per se. Also, it was not mentioned by respondents in the open-ended questions in this study. Perhaps this is an issue of less importance in terms of causing moral distress for nurses than it was when the Moral Distress Scale was created. It could also be that this issue of restricted communications is more prevalent in other settings in which the Moral Distress Scale has been used.

The open-ended questions asked in this study allowed nurses to identify other situations, not described in the Moral Distress Scale, which invoke moral distress for them. The situations they described were classified into six categories: incomplete information given to parents, paternalism/pulling rank, unnecessary treatment/prolonging support, incompetence of health care team members, "experimental" treatment, and others, including inequity in treatment of patients/families and non-supportive management. The issue of information-giving has been

explored by other researchers, and this study supports the overall finding that when there is interprofessional disagreement regarding how much information a patient or family should be given, nurses experience stress (Dewe 1989). Issues of paternalism/pulling rank, unnecessary treatment/prolonging support, and incompetence of health care team members are consistently identified in the literature as stress-inducing for nurses. A less-well-identified situation involves the use of "experimental" treatment as a source of stress. Perhaps it is the nature of ICU nursing in general and NICU nursing in particular that since there are still so many "unknowns", any new treatment modality may initially be perceived as "experimental". Also, there may be more research occurring in the NICU than previously. Depending on the degree of invasiveness or inherent risk involved, such regimes may be met with more skepticism than acceptance.

Issues related to inequitable treatment of families and non-support of nursing administration, while of concern, are perhaps less disconcerting than the other identified stressors, since they may be more easily dealt with. Though it could not occur without considerable planning and effort on the part of many individuals, the causes of these two problems are presumably within the control of the nursing profession. While it would be a considerable task, the

problem-solving would need to be focused within a group of professionals, without the need to cross inter-disciplinary lines. In theory at least, some problems inherent in inter-disciplinary issues would be circumvented, thus presenting a problem whose resolution may be less difficult than those which involve other professional groups.

Based on the input from respondents in the open-ended questions, it appears that there may be reason to add items to the Moral Distress Scale. One instance where this may be warranted involves the issue of experimental treatment. There is no situation in the tool at present which address this issue specifically, yet it was identified by six nurses who took the time to write out lengthy descriptions of such situations.

In this study, one nurse stated that as a result of her previous experience with ethical decision-making, in a role other than that as a nurse, she developed "greater compassion, and empathy, for families having to make similar decisions". Another nurse reported, "I still haven't come to terms with it i.e. could I have done more? Did I make the right decisions? I always "flash back" to this if I have a terminal patient." The last remark, regarding the flash-back, is supportive of findings of Fenton (1987), who noted in her qualitative study, that nurses' feelings of distress may remain unresolved for many years.

The Sample: Differences between subsets

The two groups of nurses, divided based on which nursing unit they were employed in, differed significantly with respect to four variables. Group B nurses had a greater degree of moral distress, reported a higher general stress level in the nursing unit the day they completed the questionnaire, felt they had less input into ethical decision-making than group A, and were much more likely to be working close to full time hours, as compared with group A nurses who generally worked less than 32 hours per week.

Reasons for these differences are impossible to determine with certainty, however several explanations are plausible. It seems logical that with a perceived lower level of input into ethical decision-making, one might feel more stressed, both generally and in particular, with regards to morally-distressing events. The literature, which consists primarily of editorial and anecdotal writing rather than research per se, contends that a major cause of moral distress among nurses is the lack of input they have into ethical decision-making in the clinical area (Beauchamp & Childress, 1983; Davis et al., 1983; Penticuff, 1987; and Thompson & Thompson, 1981). The authors suggest that when the nurse's own moral judgment runs counter to the plan of care he or she must implement, the nurse experiences stress. Data for the Group B subset support assertions made in the

literature with regard to the issue of nurses' input into ethical decision-making.

It is possible that nurses who work full time are more fatigued with less time for other (non-work) interests than those nurses who work fewer hours. It would not be surprising for those full time nurses to be more apt to perceive the workplace as generally stressful (as reflected by the data), as well as to respond to morally distressing events with less energy for coping, resulting in increased moral distress.

The relationship between increased moral distress and higher ratings of stress at the time of data collection is intriguing. The clinical environment at institution B may in fact be more stressful (in a general way) than that encountered by nurses in Group A. If this is so, it would not be surprising that those nurses who must endure a generally stressful environment might respond to morally distressing events with fewer personal resources such as problem-solving skills and assertiveness in clinical decision-making, resulting in a higher degree of moral distress. Conversely, with a higher level of moral distress among nurses in institution B, it is not surprising that the disequilibrium felt by nurses would be carried over into areas outside morally-distressing situations, so that nurses

begin to perceive the entire work environment as generally stressful.

The issues of nurses working full time versus part time hours, as well as usual stress level in the clinical area, are not addressed in the literature in terms of their relationship to the experience of moral distress. More research is needed to determine explanations for findings such as those described above. This is particularly true, since for the large sample (group A and group B) combined, there was no statistically significant correlation between mean moral distress level and the general stress level in the unit, input into ethical decision-making, or number of hours worked per week.

Part of the explanation for the differences noted between groups A and B may be related to differing expectations on the part of nurses. For instance, heightened awareness of ethical issues and bioethics in general may result in a higher likelihood of noticing and reacting to ethically-charged situations, and an expectation for greater involvement in ethical decision-making. If this is so, and if one institution provided markedly different opportunities for continuing education related to nursing ethics, one might expect to see differences such as were noted between the two groups of nurses. Personal communication with nurses in the two units revealed that

each institution endeavored to provide nursing staff with educational and supportive measures to assist in understanding and coping with ethical issues in the clinical area. It was impossible, however, to quantify this education and support in a meaningful way, thus this premise of differing expectations must remain speculative.

Limitations of the Study

The generalizability of the study findings is limited by the geographic distribution of the study sample. All respondents live in the same city, though the study did explore experiences of nurses in two different hospitals. Any conclusions drawn, therefore, may be generalized only to this select population, with limited applicability to other groups of NICU nurses. The relatively small sample size, 62 percent of 128 nurses or 79 respondents, is another limiting factor.

The use of convenience sampling is of concern, as there is no assurance that the sample derived is typical of the population it is drawn from with regard to critical variables being measured (Polit & Hungler, 1987). The advantage of convenience sampling in terms of assuring as large a sample as possible must be weighed against the possibility that the self-selected participants introduce a

bias which may affect the study results. To help determine the representativeness of the sample, several important extraneous variables were explored. Nursing education, Ethics education, and nursing experience are important variables which may influence results. These variables were explored and tested for correlation with the degree of moral distress experienced by an individual. Unfortunately, there are no published data regarding "typical" NICU nurse populations, rendering impossible a comparison between this study sample and NICU nurses in general.

The Moral Distress Scale, developed by Dr. Mary C. Corley, has been used several times, and achieved respectable psychometric parameters for a scale at its stage of development. Modifications to the scale, necessary to render it suitable for Canadian NICU nurses (versus American nurses who care for adult patients) may, however, have had an impact on the reliability and validity of the scale. The investigator, in an attempt to address this concern, worked closely with a nurse expert in instrument development and a statistician when modifying the instrument. Dr. Corley, after review of the changes made, approved the modified instrument for use in the study. As well, the modified instrument was pre-tested, in Phase I of the study, with a group of nurse experts in NICU nursing. This group assessed

the instrument for construct validity and internal consistency.

Social desirability must be considered when subjects complete their questionnaires. Despite assurance of confidentiality and anonymity, there may, for some nurses, be an awareness that certain situations induce moral distress for many. They may, even if they personally do not experience a high degree of moral distress, report that they do, in order not to be perceived as cold-hearted or insensitive.

Another limitation is that philosophical or religious perspectives that may have influenced the reported amount of moral distress were not explored in this study. It would have been useful to examine the relationship between these variables and the degree of moral distress experienced, as religious or philosophical background may be a confounding variable.

Implications for Practice

Study results suggest several implications for nursing practice. NICU nurses encounter ethically-charged situations in their day-to-day work, and these situations may result in a significant degree of moral distress for them. Nurses in this study report a moderately high degree

of moral distress encountered in carrying out their day-to-day activities in the NICU. The effect of the moral distress experienced was not explored in this study, though Wilkinson has theorized that its effects may be devastating. The nurse may feel powerless and overwhelmed, may avoid the patient and thus be unable to provide optimum nursing care, may experience lowered self-esteem, and may change jobs or leave nursing altogether (Wilkinson, 1987/88).

It is imperative, then, that practicing nurses be provided with continuing education and administrative and medical support that acknowledges the challenges they face in this regard. Regularly-scheduled "debriefing" sessions, coordinated by the unit's Clinical Nurse Educator, could provide a forum for discussion of stressful situations nurses have encountered. Acknowledgement of the existence of ethically-charged situations, which occur with relative frequency, could provide a starting point for discussion. Sharing of feelings about specific (or general) incidents could open communication so that nurses could resolve their moral distress, or be directed to appropriate sources of support if desired or required.

Nursing administration could provide better support to nurses who experience moral distress by allowing greater flexibility in patient assignments, and by representing nursing concerns about morally-distressing situations to

medicine and other powerful groups. Nurses should have the privilege of declining particularly distressing patient assignments, or trading with another nurse, who does not find the assignment incongruent with personal philosophies and convictions. Further, nursing administrators need to advocate for front-line nurses when situations arise such as the incident wherein a physician independently and arbitrarily changed a care plan after an interdisciplinary team meeting had reached a consensus regarding treatment plans for a patient.

A commitment toward a shared governance model of nursing management, with all levels of nursing contributing to decisions regarding staffing, protocol and procedures, would also contribute toward greater autonomy, and possibly less moral distress, for staff nurses. This latter strategy, whose focus is on prevention of morally distressing events, is of prime importance in assisting nurses who must contend with ethically-charged situations in their daily work.

The finding that staffing concerns are a significant source of moral distress for nurses is of note, and one which presumably is under the control of nursing administration to rectify. Nursing administration could direct, within the constraints of health care reform, a staffing system which might better meet the needs of

patients, families, and nursing staff. Exploring alternatives to the present system of cutbacks might help to prevent some of the moral distress nurses are beginning to experience as a result of staffing changes.

The finding that physicians' learning needs and the way they choose to meet these was a source of much moral distress for nurses suggests that clinical teaching for physicians should be addressed. As discussed, use of mannikins and simulated learning situations could decrease the number of invasive procedures which are currently being attempted first on patients. It is likely easier and more effective to prevent the experience of moral distress than to simply try to deal with its effects. This is one strategy which may meet this goal of prevention.

Ultimately, nurses must be assisted to work through the moral distress they experience in an effective and satisfying manner, so that the distress does not adversely affect either their own mental health or their ability to provide optimal quality care for the patients and families they serve.

Recommendations for Future Research

Several recommendations for future nursing research are suggested from this study. First, replication of this study with other groups of NICU nurses would strengthen the

premise that moral distress is an entity experienced to a moderate to high degree by this group of nurses.

From a broader perspective, it would be useful to replicate the study with nurses from other clinical areas. This would enhance understanding of the concept of moral distress, and would doubtless serve to exponentially increase the number of nurse researchers exploring this phenomenon. Areas such as Emergency rooms, Dialysis units, and long-term care units or institutions are examples of some clinical areas in which nurses likely encounter ethically-charged situations in their day-to-day work. It would be interesting to explore the phenomenon in these areas, and compare their experiences to the NICU.

The issue of measurement instruments is of paramount importance; the quality and accuracy of the study results are directly dependent upon the validity and reliability of the instrument. Respondents in this study affirmed the content validity and internal consistency of the modified Moral Distress Scale, however further research must be focussed on establishing further validity and reliability information for the modified Moral Distress Scale. Also, perhaps more items should be added to the Scale, to address issues such as "experimental" treatments, nurses' feelings with regards situations in which there is a decision not to treat, and nurses' concerns regarding legalities as they

apply to patient care when there is conflict between health care professionals.

The use of open-ended questions is valuable, in that it allows respondents to contribute to the knowledge base in a dynamic way. Nursing practice is constantly changing, with resultant "new" stressors presenting a challenge to nurses. Open-ended questions such as were included in the modified Moral Distress Scale afford an opportunity for front-line practitioners to inform researchers about the changes they are experiencing.

Findings from this study suggest a crucial next step which must be considered: if NICU nurses experience moral distress to a moderate degree, what can be done to help them cope with this experience? Research exploring coping mechanisms for this problems is lacking and is sorely needed. Perhaps more importantly, what can be done to prevent the experience of moral distress in the first place? In this study, several findings suggest that enhanced communication, both inter and intra-professionally, would be helpful to nurses in ethically-charged situations. This finding is supportive of similar assertions made by other researchers. Thus, research exploring how to better communicate, and perhaps negotiate, would be of benefit to nursing.

Conclusion

This study utilized Wilkinson's (1987/88) Moral Distress Model to explore the experience of moral distress among NICU nurses. The Moral Distress Scale was used to assist in quantifying the degree of moral distress experienced by NICU nurses, as well as to ascertain the frequency with which various clinical situations are encountered in day-to-day NICU nursing duties. This methodology was selected to expand upon previously reported data from mainly qualitative studies which suggested that moral distress is an entity of considerable importance in NICU nursing.

The study found that NICU nurses do experience a moderately high degree of moral distress in their day-to-day work. There was a significant positive correlation between mean moral distress level and mean frequency of exposure to ethically-charged situations. This finding is supportive of Wilkinson's (1987/88) Moral Distress Model prediction that increasing frequency of exposure is related to ineffective coping behaviors (Appendix A).

Of interest is the fact that neither age, nursing experience, nursing education, parental status, previous experience with ethical decision-making of a personal nature nor having left a previous position due to institutional constraints which prevented the nurse from doing what they

considered to be the "right" thing, were related to the extent to which nurses experienced moral distress. These results generally support the findings of Berger et al. (1991) who reported that there were no statistically significant relationships between education, age or experience and either the frequency of exposure or the level of "disturbance" as a result of "ethical issues" in the workplace.

Qualitative data from this study generally supports previously findings, including categories of stressors which include incomplete information-giving, paternalism/pulling rank, unnecessary treatment/prolonging support, incompetence of health care team members, "experimental" treatment, and others, including inequity in treatment of patients and families and non-support of nursing administration.

Several suggestions have been made in regard to nursing practice, education, and future nursing research. Further refinement of the Moral Distress Scale, together with exploration regarding coping mechanisms of nurses and the ultimate effect of moral distress on nurses and patients will assist in the ability of nursing to both support the front-line caregivers who are at risk for this affliction, and enhance our ability to provide optimal quality care for patients and their families.

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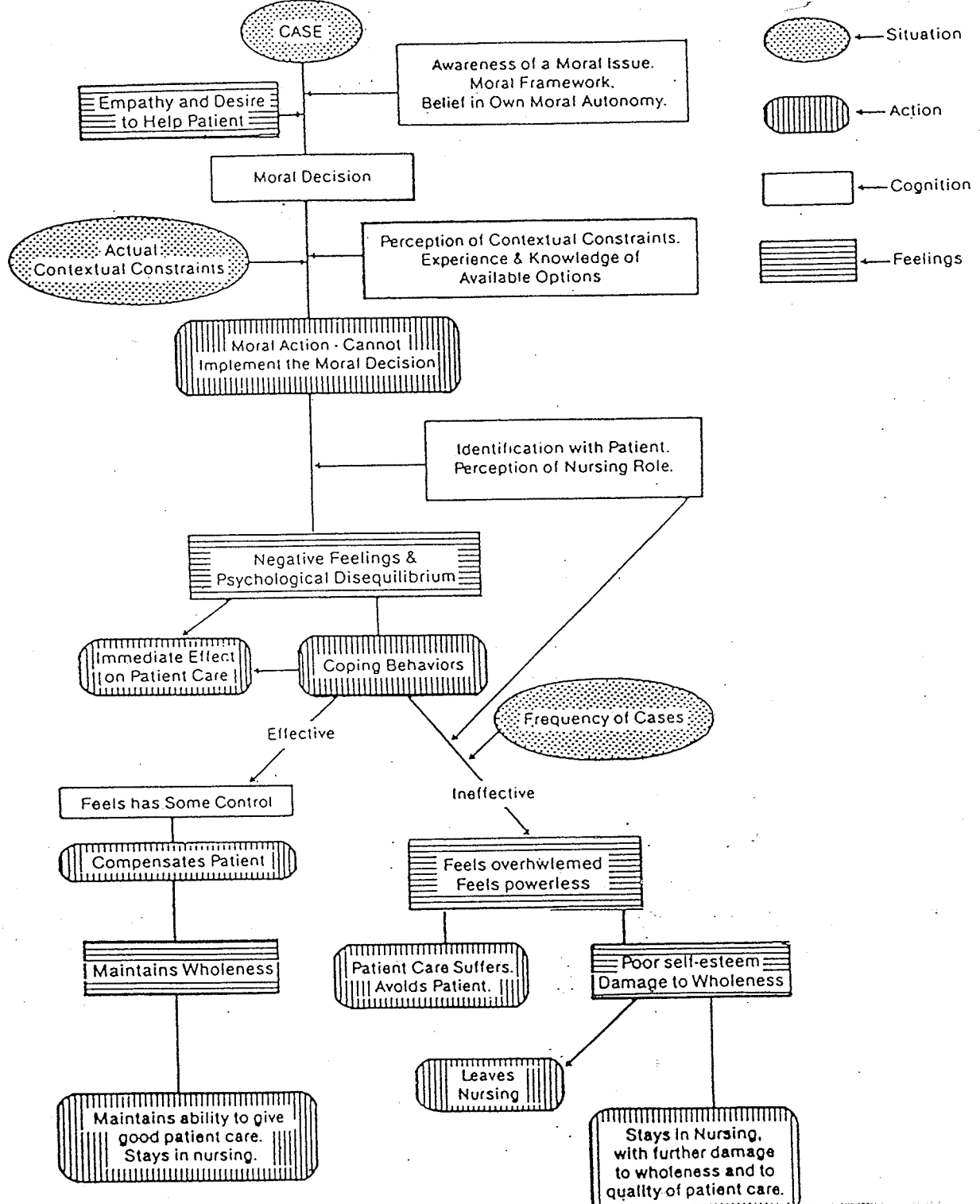
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APPENDICES

APPENDIX A

WILKINSON'S MORAL DISTRESS MODEL



From: Wilkinson, J. (1987/88). Moral distress in nursing practice: experience and effect. Nursing Forum 23(1), p. 26.

APPENDIX B
MORAL DISTRESS SCALE

MORAL DISTRESS is defined as painful feelings and/or psychological disequilibrium caused by a situation where

(1) you believe you know the ethically ideal action to take, and

(2) you believe you cannot carry out that action because of

institutionalized obstacles, such as lack of time, supervisory disinterest, medical power, institution policy or legal limits

This scale measures your perceptions on two dimensions:

- (a) whether a situation causes moral distress and
- (b) how frequently these situations occur.

For your current position, please indicate for each of the following situations, the extent to which you experience MORAL DISTRESS. Please answer on a scale for 1 to 7, where

1 = Not at all
(No moral distress)

to

7 = To a great extent
(a lot of moral distress)

***IF YOU HAVE NEVER ENCOUNTERED THE SITUATION, PLEASE MARK THE MORAL DISTRESS RATING "X".

Next, please indicate for each situation how often you encounter the situation, using a scale of 1 to 7, where

1 = Never

to

7 = Frequently

	<u>MORAL DISTRESS</u>							<u>FREQUENCY</u>						
1. Follow the family's wishes for the patient's care when I do not agree with them.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. Follow the family's wishes to continue life support even though it is not in the best interest of the patient.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. Carry out the physician's orders for unnecessary tests and treatments.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. Assist the physician who performs a test or treatment without informed consent.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. Initiate dramatic life-saving actions when I think it only prolongs death.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

For the MORAL DISTRESS scale, **1 = Not at all** **7 = To a great extent.**
 IF YOU HAVE NEVER ENCOUNTERED THE SITUATION, MARK THE MORAL DISTRESS RATING "X".
 For the FREQUENCY scale, **1 = Never** **7 = Frequently**

	<u>MORAL DISTRESS</u>	<u>FREQUENCY</u>
6. Ignore situations of suspected patient abuse by caretakers.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. Ignore situations in which I suspect that the parents have not given adequately informed consent.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. Perform a procedure when the parents are not adequately informed about what their child is about to undergo.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. Carry out a work assignment in which I do not feel professionally competent.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. Avoid taking any action when I learn that a nurse colleague has made a medication error and does not report it.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11. Let medical students and/or residents perform painful procedures on patients solely to increase their skill.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12. Follow the parent's request not to discuss death with a child who asks about their dying newborn sibling.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

For the MORAL DISTRESS scale, **1 = Not at all** **7 = To a great extent.**
 IF YOU HAVE NEVER ENCOUNTERED THE SITUATION, MARK THE MORAL DISTRESS RATING "X".
 For the FREQUENCY scale, **1 = Never** **7 = Frequently**

	<u>MORAL DISTRESS</u>	<u>FREQUENCY</u>
13. Follow the physician's order not to discuss death with parents who ask about the death of their dying infant.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
14. Assist physicians who are practicing procedures on a patient after CPR has been unsuccessful.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
15. Carry out the physician's orders for unnecessary tests and treatments for terminally ill patients.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
16. Work with "unsafe" levels of nurse staffing.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
17. Carry out orders or institutional policies to discontinue treatment.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
18. Continue to participate in care for a hopelessly injured patient who is being sustained on a respirator, when no one will make a decision to "pull the plug."	1 2 3 4 5 6 7	1 2 3 4 5 6 7
19. Observe without intervening when health care personnel do not respect the patient's dignity.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
20. Follow the physician's order not to tell the parent(s) the truth when they ask for it.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

For the MORAL DISTRESS scale, **1 = Not at all** **7 = To a great extent.**
 IF YOU HAVE NEVER ENCOUNTERED THE SITUATION, MARK THE MORAL DISTRESS RATING "X".
 For the FREQUENCY scale, **1 = Never** **7 = Frequently**

	<u>MORAL DISTRESS</u>							<u>FREQUENCY</u>						
21. Assist the physician who in your opinion is providing incompetent care.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
22. Prepare a neonate with a fatal anomaly for surgery.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
23. Prepare a terminally ill patient who is a "No 99" for surgery to have a feeding tube put in.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
24. Discharge a patient who is medically stable, although the family has many teaching needs.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
25. Work in a situation where the number of staff is so low that care is inadequate.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
26. Give only hemodynamic stabilizing medication intravenously during a 99 with no compressions or intubation.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
27. Follow the physician's request not to discuss a 99 status with the family.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

30. Have you personally been involved in an ethically--charged situation, not related to your work as a nurse which had an impact on the degree of moral distress you experience at work? For example, have you had to make treatment decisions for a family member who could not do so for him or herself?

1. [] Yes
2. [] No

If you have been involved in such a situation, and are comfortable doing so, please briefly describe the situation.

For the following two questions, please answer using a scale of 1 to 7, where:

- | | |
|--------------------|---------------------|
| 1 = very low | 5 = slightly high |
| 2 = moderately low | 6 = moderately high |
| 3 = slightly low | 7 = very high |
| 4 = average | |

31. In my experience, the stress level in the NICU today (ie. February 1994), compared to most of the time, is: (Circle one)

1 2 3 4 5 6 7

32. In my experience, the amount of input NICU nurses have in ethical decision-making in the clinical area is: (Circle one)

1 2 3 4 5 6 7

PLEASE NOTE: This instrument is a modified version of that created by M.C. Corley (Copyright 1990). See Appendix I.

APPENDIX C

BIOGRAPHICAL DATA SHEET

33. Please indicate the highest level of education you have acquired in nursing.

1. Diploma
2. Baccalaureate
3. Master's

34. Please indicate the highest degree you have obtained regardless of major.

1. Diploma
2. Baccalaureate
3. Master's

35. Please indicate the Basic Nursing education which prepared you to become a nurse.

1. Diploma
2. Baccalaureate

36. What year did you graduate from your basic nursing program?

19_____

37. Are you a graduate of a certificate program in nursing e.g. an ICU course?

1. Yes
2. No

If so, which one?

38. Have you had any form of Ethics education?

1. [] Yes
2. [] No

If so, please list courses or workshops you have participated in.

39. What is your marital status?

1. [] Single, never married
2. [] Married
3. [] Separated
4. [] Divorced
5. [] Widowed

40. What year were you born?

19_____

41. Are you a parent?

1. [] Yes
2. [] No

If you are a parent, how old are your children?

42. How long have you been employed on your current unit?

_____years_____months

43. How long have you been employed since you became a nurse?

1. [] Less than 1 year
2. [] 1 year to 3 years
3. [] 4 years to 10 years
4. [] 11 years to 20 years

44. How many hours are you employed to work each week?

1. [] Less than 20
2. [] 20 to 32
3. [] 33 to 37.5

45. How long have you worked under your current immediate supervisor?

46. What is your position?

1. [] Staff nurse
2. [] Other

APPENDIX D

ETHICAL APPROVAL FOR STUDY

The University of Manitoba

FACULTY OF NURSING
ETHICAL REVIEW COMMITTEE

APPROVAL FORM

Proposal Number N#93/31

Proposal Title: "NEONATAL INTENSIVE CARE NURSES AND THE EXPERIENCE OF MORAL DISTRESS."

Name and Title of
Researcher(s):

BARBARA J. WHEELER, R.N., B.N.
MASTER OF NURSING GRADUATE STUDENT
FACULTY OF NURSING UNIVERSITY OF MANITOBA

Date of Review: NOVEMBER 01, 1993.

APPROVED BY THE COMMITTEE: NOVEMBER 01, 1993.

Comments: APPROVED WITH SUBMITTED REVISIONS/CLARIFICATIONS RECEIVED
NOVEMBER 09, 1993.

Date: Nov. 10, 1993

Linda J. Kristjanson, PhD, RN Chairperson 0
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.

APPENDIX E

INTRODUCTION TO THE STUDY

Hello, my name is Barbara Wheeler and I am a graduate student in the Faculty of Nursing at the University of Manitoba. In partial fulfillment of the program, I am conducting a study on the experience of moral distress among Neonatal Intensive Care nurses.

Moral distress occurs when one is prevented from doing what they believe to be the "right" thing, or when one feels an action is wrong, but because of the situation is forced to do it anyway. Your opinions and experiences are important to this study, because as practicing nurses you are familiar with situations which cause you to experience moral distress in your role as an NICU nurse. While there are no immediate benefits to your participating in this study, the information you provide may help nurses to better understand, and to better cope with, the effects of moral distress.

If you decide to participate, it will involve filling out two questionnaires, which will take approximately 15-20 minutes.

You are not obligated to participate in the study. If, after seeing the questionnaires, you decide not to complete them, that is perfectly all right--you may decide to discontinue your participation in the study at any time. Your participation will remain completely confidential. Your name will not appear on any questionnaires.

Do you have any questions?

If you are interested in participating, please plan to attend one of the scheduled data collection sessions. If it is impossible for you to attend one of these, but you would like to participate, I can leave a questionnaire with you, together with an envelope in which you can return your completed forms to me.

If you have any questions, you may contact me or my Faculty Advisor at any time.

Thank you for your interest in my study.

Barbara J. Wheeler, R.N., B.N.
Phone: 237 2053 or 253 1706

Professor Annette Gupton
Phone: 474 6220

APPENDIX F

INFORMATIONAL POSTER

NURSING RESEARCH

I am conducting a nursing research study exploring the experience of moral distress among NICU nurses as part of my Master's degree.

YOUR OPINIONS AND EXPERIENCES ARE IMPORTANT TO THIS STUDY, BECAUSE AS PRACTICING NURSES YOU ARE FAMILIAR WITH SITUATIONS WHICH CAUSE YOU TO EXPERIENCE MORAL DISTRESS IN YOUR ROLE AS AN NICU NURSE.

If you decide to participate, you will be asked to complete two questionnaires, which will take approximately 20 minutes.

You are not obligated to participate in the study. If, after seeing the questionnaires, you decide not to complete them, that is perfectly all right--you may decide to discontinue your participation at any time. While there are no immediate benefits to your participating in this study, the information you provide may help nurses to better understand, and to better cope with, the effects of moral distress.

I will be in the unit at the following times to conduct my study:

Tuesday,	Feb. 1	Evenings
Wednesday,	Feb. 2	Nights
Friday,	Feb. 4	Evenings
Saturday,	Feb. 5	Nights
Sunday,	Feb. 6	Days
Wednesday,	Feb. 9	Nights
Wednesday,	Feb. 9	Days
Sunday,	Feb. 13	Evenings

If you are interested in participating, but are not available at one of these times, I can leave the questionnaires with you, together with an envelope in which you can return them.

I will be collecting data during break times. Coffee and muffins will be provided in the A3 Conference room at this time.

If you have any questions about the study, please call me. My home number is available at the desk.

I hope to see you at one of my data collection sessions!

Barbara Wheeler, RN, BN

APPENDIX GLETTER TO NURSE EXPERTS RE PRE-TEST

November 26, 1993

Dear

I am planning a study on the experience of moral distress among Neonatal Intensive Care nurses. Moral distress occurs when one is prevented from doing what they believe to be the "right" thing, or when one feels an action is wrong, but because of the situation is forced to do it anyway.

As part of my planned research, I would like to pilot test the measurement instrument I will be using with a small group of nurse experts such as yourself. I would very much appreciate your assistance in this matter--specifically, by your reviewing and critiquing the instrument.

The moral distress scale is a copyrighted instrument developed by Mary C. Corley at the University of Virginia. She has used it several times, and has established psychometric data which are acceptable for scales at this stage of development. I have modified the scale to some degree, to accommodate for:

1. differences in Canadian (versus American) nursing practice;
2. differences in neonatal (versus adult) nursing practice; and
3. an interest in exploring the relationship (if any) between frequency of exposure to ethically-charged situations and intensity of moral distress experienced.

A pilot test will be of value in identifying problems which may have been created when the scale was modified. Please review the Moral Distress Scale considering the following:

1. how appropriate is the question? Is the question clear?
2. does the question reflect typical Canadian neonatal intensive care nursing practice?
3. do the questions generally seem to belong together?
4. are there any questions which bother you as a nurse/respondent?

My hope is that my thesis study will contribute in some small way to the understanding of a pervasive problem which is potentially disastrous for nurses both personally and professionally. I hope you can help me with the first stage of my research.

The questionnaire may be returned to me by placing it back in the inter-hospital mail, directed to Room D2045, St. Boniface Hospital. Thanks for your consideration of my request.

Sincerely,

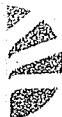
Barbara J. Wheeler

APPENDIX HCONTENT ANALYSIS CATEGORIESCategories of situations inducing moral distress in nurses

1. Paternalism/pulling rank
2. Incomplete information given to parents
3. Unnecessary treatment/prolonging support
4. Others--includes inequity in treatment of patients/families; non-supportive management
5. Incompetence of health care team members
6. "Experimental" treatment

APPENDIX I

PERMISSION TO USE INSTRUMENT



Medical College of Virginia
Virginia Commonwealth University

September 17, 1993

Barbara Wheeler, RN
140 Cassin Crescent
Winnipeg, Manitoba R3X1R3

Dear Ms. Wheeler:

This letter confirms the permission I gave you over the phone to alter the Moral Distress Scale for your research, making it more appropriate for neonatal intensive care unit nurses. In addition, you have my permission to publish your findings.

Sincerely,

Mary C. Corley, PhD, RN
Associate Professor