

**NURSES' KNOWLEDGE, ATTITUDE AND
PRACTICE TOWARDS
ETHICAL DECISION MAKING
IN NEONATAL INTENSIVE CARE UNIT AT
HOSPITAL UNIVERSITI SAINS MALAYSIA**

by

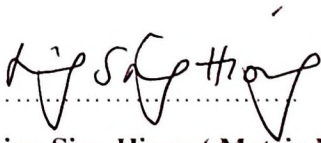
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**Dissertation submitted in partial fulfillment of the
requirements for the degree of
Bachelor of Health Sciences (Nursing)**

June 2013

DECLARATION

I certify that this dissertation does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.



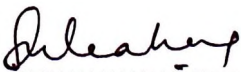
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CERTIFICATION

This is to certify that the dissertation entitled 'Nurses' Knowledge, Attitude And Practice Towards Ethical Decision Making In Neonatal Intensive Care Unit, Hospital Universiti Sains Malaysia' is the bona fide record of research work done by Ling Sing Hiong, Matric Number: 105129 during the period of January 2012 to April 2013 under my supervision. This dissertation submitted in partial fulfillment for the degree of Bachelor of Science (Health) in Nursing. Research work and collection of data belong to Universiti Sains Malaysia.

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LIST OF ABBREVIATIONS

Hospital USM	- Hospital Universiti Sains Malaysia
NICU	- Neonatal Intensive Care Unit
RN	- Registered nurse
DNR	- Do not resuscitation

ABSTRACT

NURSES' KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS ETHICAL DECISION MAKING IN NEONATAL INTENSIVE CARE UNIT AT HOSPITAL UNIVERSITI SAINS MALAYSIA

Ethical decision making helps people to make difficult choices when faced with an ethical dilemma, a situation in which there is no clear right or wrong answer. It is inherent in nursing practice. Nurses working in neonatal intensive care unit (NICU) are often confronted dilemmas concerning issues of patient care management and ethical issues with life sustaining treatment decisions. Therefore, the aim of this study was to investigate nurses' knowledge, attitude and practice of ethical decision making in NICU, Hospital Universiti Sains Malaysia (Hospital USM). A cross-sectional survey on nursing staff (n=56) in NICU, HUSM was conducted using a self-administered structured questionnaire. Data was analyzed using the Statistical Package Social Science (SPSS) version 20.0. Nurses in the study had high knowledge to the principle ethics (M= 11.50, SD= 1.31), high attitude (M= 26.73, SD= 3.15) and satisfactory practice (M= 5.64, SD= 1.14). Chi square test revealed that there was no association between age, marital status, highest education nursing level, years of working experience and current position with knowledge and attitude. The finding also showed that age of nurses ($p=0.041$) and years of working experience ($p=0.041$) were significantly associated with practice of the nurses. However the other socio-demographic factors were no significant association with practice. The results of this study can serve as the basic to facilitate continuous education and research on ethical decision making among nurses. In conclusion, the study highlights the need to identify professionals in the workforce who appear to be indifferent to ethical and

legal issues, to devise means to sensitize them to these issues and appropriately training them.

ABSTRAK

PENGETAHUAN, SIKAP DAN PRAKTIS JURURAWAT TENTANG MEMBUAT KEPUTUSAN BERETIKA DI UNIT RAWATAN INTENSIF NEONATAL DI HOSPITAL UNIVERSITI SAINS MALAYSIA (HUSM)

Membuat keputusan etika membantu orang ramai untuk membuat pilihan yang sukar semasa berhadapan dengan dilema etika, keadaan di mana tidak ada jawapan yang betul atau salah yang jelas. Jururawat yang bekerja di unit rawatan intensif neonatal sering berhadapan dengan dilema mengenai isu-isu pengurusan penjagaan pesakit dan isu-isu untuk membuat keputusan beretika dalam mengekalkan kehidupan pesakit. Oleh itu, tujuan kajian ini adalah untuk menyiasat pengetahuan, sikap dan praktis jururawat tentang membuat keputusan yang beretika di NICU, Hospital Universiti Sains Malaysia (Hospital USM). Satu tinjauan pada jururawat ($n = 56$) di NICU telah dilakukan dengan menggunakan soal selidik. Data telah dianalisis dengan menggunakan SPSS versi 20.0. Jururawat dalam kajian mempunyai pengetahuan yang tinggi terhadap terhadap prinsip-prinsip etika ($M = 11.50$, $SD = 1.31$), sikap yang tinggi ($M = 26.73$, $SD = 3.15$) dan amalan yang memuaskan ($M = 5.64$, $SD = 1.14$) sederhana. Ujian Chi Square menunjukkan bahawa tidak ada kaitan antara skor pengetahuan dan sikap dengan usia, status perkahwinan, tahap tertinggi pendidikan jururawat, tahun pengalaman bekerja dan kedudukan pekerjaan semasa. Hasil kajian juga menunjukkan bahawa hubungan antara umur jururawat ($p=0.041$) dan pengalaman bekerja jururawat ($p= 0.041$) dengan praktikal jururawat adalah signifikan. Faktor-faktor sosio-demografi yang lain tidak mempunyai hubungan yang signifikan dengan sikap. Kajian ini menunjukkan bahawa kebanyakan sosio-demografi tidak mempengaruhi tahap pengetahuan, sikap dan amalan jururawat. Hasil kajian ini boleh dijadikan sebagai asas untuk memudahkan pendidikan dan penyelidikan yang seterusnya terhadap membuat keputusan yang etika dalam kalangan jururawat.

Kesimpulannya, kajian ini menekankan keperluan untuk mengenalpasti sama ada professional dalam tempat kerja tersebut mengabaikan isu-isu etika dan undang-undang, merangka cara untuk menyedarkan mereka terhadap isu-isu ini dan melatih mereka dengan sewajarnya.

CHAPTER 1 INTRODUCTION

1.1 Background of the Study

In the western world, and in Malaysia, there has been an increasing emphasis placed on the need for health care professionals to account for the ethical decision making they make for, with, and on behalf of, their patients. Driving this culture is a societal concern for greater transparency in the decisions taken on its behalf by professional nurses charged with interpreting and delivering policies of ministry of health. Professional nurse play an important role in order to meet requirement of a patient, family member and medical team. Thus, professional nurse who delivered nursing care and represent the first contact person with patient must be able to make immediate decision based on moral and ethics.

Nurses working in the Neonatal Intensive Care Unit (NICU) are often confronted with dilemmas concerning issues of patient care management and ethical issues with life sustaining treatment decisions (Nuffield Council on Bioethics, 2012). Critical care nurses, confronted with these ethical issues, are trying to make a decision in order to determine what action they should take. While these nurses believe that they should actively participate in ethical decision making, researchers have found that nurses' actual participant in ethical deliberation is limited (Erlen and Sereika, 1997). Two essential environmental limitations that affect decisions are limited resources and limited knowledge. These limitations and others ensure an element of uncertainty for many nursing actions (Allmark, 2006). It is important that nurses examine their own knowledge, attitude and practice regarding such ethical issues and not impose their own values on the patient or on the caregiver; including to protect clients from harm.

In the delivery of patient care in institutional settings, nurses are often in constant contact with their patients over a 24-hour period. Any changes of the patient, physical and or mental, observed in a patient's condition are first seen by the nurse. Therefore, clinical decision making is a key application of the nursing role. Mallik, Hall and Howard (2009) stated that clinical decision making will be affected by the patients' view and right. Registered nurse need to be able to describe how and the reason they make a particular decision (Mallik *et al.*, 2009). According to Kriariksh and Anthony (2001), there is an association between quality of patient outcomes and nurses' decision making. Quality of patient outcomes can be enhanced by nurses' involvement in decision making.

Besides, clinical decision making, nurses also participate in decision about ethical problems. It is important for a nurse to have special knowledge and skills; and ethical decision making is on of the skill that a nurse must do daily (Gilliland, 2010). Ethical decision making is not as a clear cut as decisions made in other areas of life. Moral problems are complex. They may include intricate human relationships among disparate participants who have opposing opinions and power imbalance. They incorporate a mix of values, risks, benefits and harms. The best solution is often obscure and its ultimate outcome is unknown until the process unfolds (Burkhardt and Nathaniel, 2008).

Nurses, as professionals, should have the ability and power to work autonomously and take responsibility for their own standards of practice. Everyday health care professionals, such as the physicians and nurses, in the health care system make ethical decisions affecting life and death. It is important that nurses should learn the language of ethics and have the courage to participate fully in ethical decision making (Burkhardt and Nathaniel, 2008). This proposal is about the

knowledge, attitudes and practices, towards ethical clinical decision making in neonatal intensive care unit in a tertiary teaching hospital in Kelantan.

1.2 Problem Statement

Despite the survival of an increasing number of extremely preterm infants, long term neurodevelopmental, sensorial and cognitive impairments remain as an important challenge for neonatal healthcare professionals (Wilson, Friedman, Minich, 2005; Cooke, 2006). Nurses are being cast in the role of active decision makers in healthcare by policy makers and other members of the healthcare team. The United Kingdom's Nursing and Midwifery Council's Code of professional conduct (UK Nursing and Midwifery Council 2008, Nursing and Midwifery Council, 2008) for example, states that nurses are responsible for the moral quality of their care when they observe the guidelines of the code (e.g. respecting the patient, obtaining consent, protecting confidential information, co-operating with other professionals, maintaining professional competence, minimizing risks to patients in their professional conduct). As stipulated by the Code of Professional Conduct Nurses (refer Appendix 1), registered nurses (RNs) in Malaysia should strive to protect the interests, promote and restore the health of the society; the prevention of illness, and the alleviation of suffering in the care of individuals, families and communities.

In healthcare organization, nurses are regularly confronted with ethical conflicts in the workplace. Further, ethical conflicts emerge at all levels of patient care, from nurse-patient staffing ratios and the cost containment strategies for inappropriate treatment plans, and there are not restricted to issues about bioethics, such as end of life care or organ donation. A study by Raines (2000), involving 229

oncology nurses found that nurses experienced an average of 32 different types of ethical dilemmas on a daily basis. The ethical dilemmas which identified by the nurses in Raines' study included issues like pain management; cost containment; truthful disclosure to patients regarding diagnosis and/or treatment; allocation of resources; hospital policies that are inconsistent with practice; and patient-physician-nurse relationships.

The views and rights of patients/clients and the context of care are also key factors in clinical decision making in healthcare delivery (Banning, 2008). Nurses need to be able to describe how and why they came to particular decisions in the delivery of nursing care in NICU. This requires nurses at all levels and areas of practice to experience a range of ethical issues during the course of their day-to-day work. The degree to which nurses are involved in ethical issues in decision making in the work place, how effectively they have been able to deal with them, and the extent to which their formal education has prepared them to deal effectively with ethical, moral and legal issues encountered during the course of their work has not, however, been systematically explored or enumerated in Malaysia. Johnstone, Costa and Turale's (2004) survey on nurses in Australia reported that although 88% of nurses were moderately to extremely knowledgeable about ethics/human rights in nursing practice, almost 74% believed they had a need for more education on ethical issues.

Conceptual framework in this study was adapted from the Theory of Reasoned Action (TRA) developed by Ajzen and Fishbein (1980). The theory of reasoned action provides a model that has potential benefits for predicting the intention to perform a behaviour based on an individual's attitudinal and normative beliefs. As for this study, the knowledge of principle of ethics of nurses will influence their attitudes

and practice in clinical reasoning that includes application of ethical principles in healthcare setting.

1.3 Research Objectives

1.3.1 General Objective

To determine nurses' knowledge, attitude and practice of ethical decision making in Neonatal Intensive Care Unit, Hospital Universiti Sains Malaysia (Hospital USM).

1.3.2 Specific Objectives

- a) To determine the knowledge score of the nurses about principles of ethics in NICU, Hospital USM.
- b) To determine the attitude of the nurses about ethical decision making in NICU, Hospital USM.
- c) To determine the practice of the nurses about ethical decision making in NICU, Hospital USM.
- d) To determine the association between socio-demographic data (age, clinical working experience, marital status, highest nursing education level and current position) with knowledge, attitude and practice among nurses towards ethical decision making in NICU, Hospital USM.
- e) To determine the association between knowledge, attitude and practice among nurses towards ethical decision making in NICU, Hospital USM.

1.4 Research Questions

- a) What is the knowledge of nurses toward principle of ethics in NICU, Hospital USM?
- b) What are the attitude and practice of nurses toward ethical decision-making in NICU, Hospital USM?
- c) Is there any association between demography factors (age, clinical working experience, marital status, highest nursing education level and current position) and knowledge score, attitudes and practice toward ethical decision making among these nurses in NICU, Hospital USM?
- d) Is there any association between knowledge, attitude and practice toward ethical decision making among these nurses in NICU, Hospital USM?

1.5 Research Hypotheses

Hypothesis 1

Null Hypothesis (H₀) - There is no significant association between socio-demographic data (age, clinical working experience, marital status, highest nursing education level and current position) and knowledge score toward ethical decision making among nurses in NICU, Hospital USM.

Alternative Hypothesis (H_A) - There is a significant association between socio-demographic data (age, clinical working experience, marital status, highest nursing education level and current position) and knowledge score toward ethical decision making among nurses in NICU, Hospital USM.

Hypothesis 2

Null Hypothesis (H₀) - There is no significant association between socio-demographic data (age, clinical working experience, marital status, highest nursing education level and current position) and attitudes toward ethical decision making among nurses in NICU, Hospital USM.

Alternative Hypothesis (H_A) - There is a significant association between socio-demographic data (age, clinical working experience, marital status, highest nursing education level and current position) and attitudes toward ethical decision making among nurses in NICU, Hospital USM.

Hypothesis 3

Null Hypothesis (H₀) - There is no significant association between socio-demographic data (age, clinical working experience, marital status, highest nursing education level and current position) and practice toward ethical decision making among nurses in NICU, Hospital USM.

Alternative Hypothesis (H_A) - There is a significant association between socio-demographic data (age, clinical working experience, marital status, highest nursing education level and current position) and practice toward ethical decision making among nurses in NICU, Hospital USM.

Hypothesis 4

Null Hypothesis (H₀) - There is no significant association between knowledge, attitude and practice toward ethical decision making among nurses in NICU, Hospital USM.

Alternative Hypothesis (H_A) - There is a significant association between knowledge, attitude and practice toward ethical decision making among nurses in NICU, Hospital USM.

1.6 Operational Definition of the Study

Autonomy - Autonomy is defined as self-governance or self-determination (Mappes and DeGrazia, 2006).

Attitudes - Attitude is mental positions or feelings with regard to a fact or statement (Lopper, 2006). In this research, the attitude is related to nurses' attitude towards ethical decision making.

Beneficence - Beneficence connotes acts of mercy, kindness and charity. People should act in a manner that will benefit others (Beauchamp and Chilress, 2008).

Ethics - A method, procedure, or perspective for deciding how to act and for analyzing complex problems and issue (Resnik, 2011).

- Dilemma - A dilemma is a problem that requires a choice between two options that are equally unfavorable and mutually exclusive. A dilemma seems to defy a satisfactory solution (Burkhardt and Nathaniel, 2008) .
- Justice - The equitable distribution of risks and benefits. Equals ought to be treated equally and unequals may be treated unequally (New York State Nurses Association, 2004).
- Knowledge - Knowledge defined as the level or degree of information acquired in a particular field. It is a basic requirement so that the positive changes in behavior can be developed. Knowledge can further bring into awareness and in turn leads to action. In nursing, besides knowledge, clinical skills are also needed for application of ethical analysis and clinical reasoning. To develop nursing knowledge, it comes from both theoretical and practice perspectives. By gaining knowledge, it raises awareness of personal and professional accountability and the dilemmas of practice (Ndikom and Onibokun, 2007). In this research, the knowledge is related to nurses' knowledge about principle of ethics and decision making.
- Moral - The personal beliefs and cultural values that are the basis for human conduct (New York State Nurses Association, 2004).

- Nurse - Nursing is the art of utilizing the environment of the patient to assist him in his recovery (Nightingale, 1860-1969) while a nurse is the person who nursing people. Besides as a caregiver, nurse communicates with the patient/client to identify the problem and helps them in learning about their health. Nurses also help in assisting client to make modifications in their behavior and promote personal growth (Berman, Snyder, Kozier and Erb, 2008).
- Nonmaleficence - Nonmaleficence is based on the principle that people have an obligation to act in a manner so as not to inflict harm on others (Gilliland, 2010).
- NICU Nurse - The term neonatal intensive care unit (NICU) nurse usually refers to a registered diploma or degree educated nurse, working in a NICU setting.
- Practices - Practices are defined as the actual application or use of an idea, belief, or method, as opposed to theories relating to it (Oxford Dictionaries, 2012). In this study, it is the competency and application of decision making to assess, intervene, and evaluate advanced nursing care delivery; and promote policies that incorporate ethical principles and standards for use of health and information technology.

Value - The set of personal beliefs and attitudes that one hold in high regard (New York State Nurses Association, 2004).

1.7 Significance of the Study

Nurses must acquire the knowledge of the ethics when making an ethical decision. The ability to make ethical decision is essential to moral excellence in professional nursing practice (Fry, 2004). Review of the literature found that no studies on ethics knowledge, attitude and practice about decision making were found concerning nurses. The dynamic and uncertain nature of health care environment requires nurses to be competent decision-makers in order to respond to clients' needs.

Recently, the public and the government have mandated that nurses to provide quality of patient care. However nurses' ethics knowledge, attitude and practice that affect their clinical decision-making have rarely been studied. Therefore, undertaking this study will explore nurses' requisite ethics knowledge, attitude and practice regarding decision making among nurses. Although ethics knowledge was not measured and findings specific to advanced practicing nurses were not known, Grady, Soeken and Danis (2008) found that ethics education had a positive influence on nurses' moral confidence, moral actions, and use of ethics resources. Registered nurses who are recognized as professionals in their profession are expected to apply clinical reasoning in the practice and promote the ethical principles. Decision making regarding ethical dilemmas should be based not only ethical principles but also ethical reasoning. Nurses felt that their role to make decisions when ethical problems occur may influence their degree of self-efficacy. It is therefore imperative to know what exactly such ethics education should entail regarding decision making. Undertaking

this study is needed to establish nurses' knowledge, attitudes and practices regarding ethical decision making.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This study aimed to explore knowledge, attitude and practice of neonatal intensive care unit nurses in a tertiary teaching hospital of northern peninsular Malaysia. Related literatures were reviewed and grouped under five aspects as follows: Ethical dilemmas, ethical dilemma in nursing; ethical decision making and outcome of ethical decision making, theoretical foundations of ethical decision making, in today health care practice environment.

2.2 Nature of Ethics and Ethical Decision Making

Ethics is concerned with the norms of right and wrong, of what is thought good or bad, of ought and ought not, in respect to values and behaviours between persons. Values are at the heart of ethics; they govern how we treat each other and the systems we create to bring about the care of one another. Ethical decision making involves ethical reasoning and behaviour about best action, based on the conviction that some actions are better than others. Moral and ethical thinking explores relations between people about how to live well as a human community. For health care, and nursing specifically, the questions of ethics and healthcare ethics, of how one should act and what one should do, arise from everyday practice. Ethical issues pervade all health care and nursing practice, from the manner in which we greet each other to the decision of removing a client's feeding tube, or from the way research is conducted to the way we relate to other health professionals in providing care.

2.3 Ethical Principles

The ethical principles of autonomy, beneficence, nonmaleficence and justice should guide home-health nurses as they face ethical dilemma (Johnstone, 2004).

2.3.1 Autonomy

The ethical principle of autonomy claims that individuals ought to be permitted personal liberty to determine their own actions according to plan that they have chosen. This means to respect individuals as self-determine choosers (Johnstone, 2004). To respect persons as autonomous individuals is to acknowledge their choices which stem from personal values and beliefs (Fry and Johnstone, 2008).

One of the problems that arises in applying a principle of autonomy in nursing care is that patient often have varying capacities to be autonomous , depending on internal and external constraints. Internal constraints on patient autonomy, level of consciousness, age and disease status. External constraints on patient autonomy often include the hospital environment, availability of nursing resources , the amount of information provided for making informed choices and the availability of financial resources.

The principle of autonomy may also be difficult to apply when nurses and the other healthcare members believe that respecting the patient's choice is not the best interests of the patients. Burkhardt and Nathaniel (2008) indicated that nurses and other health care workers often fail to recognize subtle violations of patient autonomy. This especially occurs when nurses perceive choices to be self-evident. Nurses may falsely assume that patients have the same values and goals as themselves. This state of mind cause some nurses to take the action which is consistent with their own values (Burkhardt and Nathaniel, 2008).

2.3.2 Justice

The principle of formal justice states that equals should be treated equally and that those who are unequal should be treated differently according to their needs.

Justice is concerned with distribution of benefits and burdens to individuals in social institutions equally , and how the rights of various individuals are realized , including neonate (Jonsen, Siegler and Winslade, 2002). The utilitarian theory of justice is committed to the maximization of the common good. During the limited resources, health care professionals meet the problems such as how to fairly provide the health care.

2.3.3 Beneficence

Health care professionals have a duty to avoid harm and to promote well being of the patient. This principle includes: one ought not to cause harm; one ought to prevent harm; one ought to remove harm and one ought to promote good. The harms to be minimized are pain, suffering, disability and death due to injury or disease. The good to be promoted is health. According to this principle , the benefits and harms of a decision should be weigh and balance (Lorenz, 2005).

2.3.4 Nonmaleficence

Nonmaleficence is based on the principle that people have an obligation to act in a manner so as not to inflict harm on others. This obligation includes unintentional as well as intentional harm and acts of omission as well as acts of commission. Put simply, a rule derived from the principle of nonmaleficence would be to do no harm intentionally or unintentionally by acting or by failing to act (Gilliland, 2010).

2.4 Ethical Dilemmas in Nursing

In daily life and in the context of nursing, ethical issues present significant challenges there are several dilemmas. Phenomena of dilemmas happen daily in

nursing. Nurses, regardless of their practice setting, face inherent ethical situations. In Thailand, studies on ethical dilemmas have focused on issues/dilemmas in patient care experienced by nursing staffs and nursing students. Ethical issues in nursing practice includes balancing professional obligations versus protecting self from harm, prolonging life versus dying, maintaining patient's confidentiality versus warning others, intradisciplinary versus interdisciplinary conflicts, truth telling versus benevolent lying and withholding information, end of life issues, and discrimination versus obligation to provide care (Chaowalit, Hatthakit, Nasae, Suttharansee and Parker, 2002).

In Wipamat's (2001) study regarding ethical dilemma and ethical decision making, it was found that all 110 registered nurses had encountered ethical dilemmas. Ethical issues present significant challenges in today's practice environment. As technology changes practice and makes possible what was once impossible, building the nursing expertise to anticipate and manage the ethical questions that result is often overlooked.

2.5 Role of Nurses in Ethical Decision Making

Nurses, like all healthcare professionals, use reasoning and judgment to make decisions. As the scope of nursing expands, so do the ethical responsibilities. Laabs (2012) study regarding confidence and knowledge regarding ethics among advanced practice nurses found a fairly high level of confidence but a fairly low level of knowledge. Laabs noted that to better prepare nurses for challenges of advance practice, ethics education is needed. Studies also show that ethics education can be effective in improving knowledge, confidence, and ethical behavior.

Ethical issues present significant challenges in today's practice environment. As technology changes practice and makes possible what was once impossible, building the nursing expertise to anticipate and manage the ethical questions that result is often overlooked (Browning, 2007).

Ketefian (1999) reported extreme variation in the outcome competencies of nursing students at the graduate level regarding ethics content. Studies have shown that some advanced nurses experience moral distress when managing ethical problems in clinical practice that lead to negative consequences for them and for their patients (Smith and Godfrey, 2002).

Nurses are in a profession requiring special knowledge, skill and preparation. Ethical decision making is one such skill that is called into nursing practice daily. Nurses are faced with daily ethical dilemmas in delivery of care for patients and their families. Empowered of nurses in understanding of the core principles guiding the nurses in making ethical decisions and an ethical decision making model easily implemented in the work setting, the professional nurse can provide a quality care to the patient based in science and caring. This provide a practical framework in to clarify the clinical problem, identify the ethical problem of the clinical situation, clarify the nursing role, clarify the values of nurse, patient and family, identify the benefits and harms that each course of action potentially produces, and which choices will lead to the best overall consequences. Nurse will be more confident by implementing the ethical decision making models in the work setting. The nurse who is guided by an ethical framework in her practice with each ethical decision she is involved in, rather than feeling burnt out at the end of the day (Ruzicka, 2007).

The relationship between knowledge and decision making has been a crucial element of nursing's attempt to increase its professional status. A number of commentators point to the requirement for professional occupations to possess and develop a relatively esoteric body of knowledge as the basis for practice (Thompson, Cullum, McCaughan, Sheldon & Raynor, 2004). Physicians and nurses often faced ethical dilemmas in daily life and in the context of delivering health services to patients (Hariharan, Jonnalagadda, Walrond and Moseley 2006). Those who make a decision may find that they should always defend themselves from the decision that they make (Ellis and Hartlev, 2004; Hariharan et al., 2006).

Ethical dilemmas usually have no perfect solution (Ellis and Hartlev, 2004). However, not all dilemmas are ethical in nature. There were engagement, equally unattractive alternatives, awareness of the alternatives, the need for a choice, and uncertainty of actions demand ethical knowledge. Hariharan and his colleagues (2006) point out that in the medical and nursing profession, physician and nursing staffs are constantly experiencing ethical dilemmas in health care. They found that sound ethical knowledge is important. It has been suggested that ethics education may increase nurses' confidence (Grady *et al.*, 2008; Wocial, 2008) and serve as an antidote to the professional ill of moral distress (Lang, 2008).

To foster development of the ability to make ethical decision, the majority nursing education programmes offer some course content in ethics. Knowledge of ethics through education efforts could help nurses to make the ethical decision. Ethics teaching is aimed to produce a knowledgeable, sensitive and accountable nurse who can make ethical decision in practice (Fry, 2004). Besides that, ethics teaching aim to prepare the future practitioners of nursing who are able to identify and respond effectively to ethical issues in nursing and healthcare contexts (Johnstone, 2004).

2.6 Malaysian Nurses' Code of Ethics and The Patient's Rights

Decision making in ethical dilemmas requires systematic consideration of the conflicting ethical principles and ethical theory. In the nursing profession in Malaysia, the Malaysian Nurses' Code of Ethics and the Patient's Rights has a professional code of ethics. Provisions in the code of ethics for nurses address acceptance of accountability and responsibility for nursing judgment and action and most importantly, duties to self (Appendix 1). Ethical competencies for registered nurses (RNs) address the ethical conducts which related to nursing practices is important for education. The competency and essential are: application of ethical analysis and clinical reasoning to assess, intervene, and evaluate advanced nursing care delivery; and promote policies that incorporate ethical principles and standards for use of health (Johnstone, 2004).

2.7 Theory of Reasoned Action as the Conceptual framework

The Theory of Reasoned Action (TRA) (Figure 2.1) developed by Ajzen and Fishbein (1980) was used in this study. The TRA formulated in an attempt to provide consistency in studies of the relationship between behavior and attitudes (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980). The main assumption of TRA is that individuals are rational in considering their actions and the implications of their actions (decision making). Rational decision making implies that either optimum results were expected or the decision making unit was aware of all the impacts and consequences. In this case for this study, the TRA help in explaining the issue on knowledge, attitudes and practice of the nurses in NICU, Hospital USM regarding ethical decision making. The TRA study on behaviors which is perceived as having

control on attitudes used to measure knowledge, behaviors and attitudes (Posner, Learman, Gates, Washington, Kuppermann, 2004). The Theory of Reasoned Action developed also provides an improvement over Information Integration theory (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980).

This theory explicitly is concerned with behavior rather than attempt to predict attitudes. This theory also recognizes that there are situations or factors that limit the influence of attitudes on behavior. It predicts behavioral intention, a compromise between stopping at attitudes predictions and actually predicting behavior. To be specific, the Theory of Reasoned Action predicts that behavioral intent is created or caused by two factors which are attitudes and subjective norms. The theory of reasoned action (Ajzen & Fishbein, 1980) provides a model that has potential benefits for predicting the intention to perform a behaviour based on an individual's attitudinal and normative beliefs. As for this study, the knowledge of principle of ethics of nurses will influence their attitudes and practice in clinical reasoning that include application of ethical principles in healthcare setting (Figure 2.2).

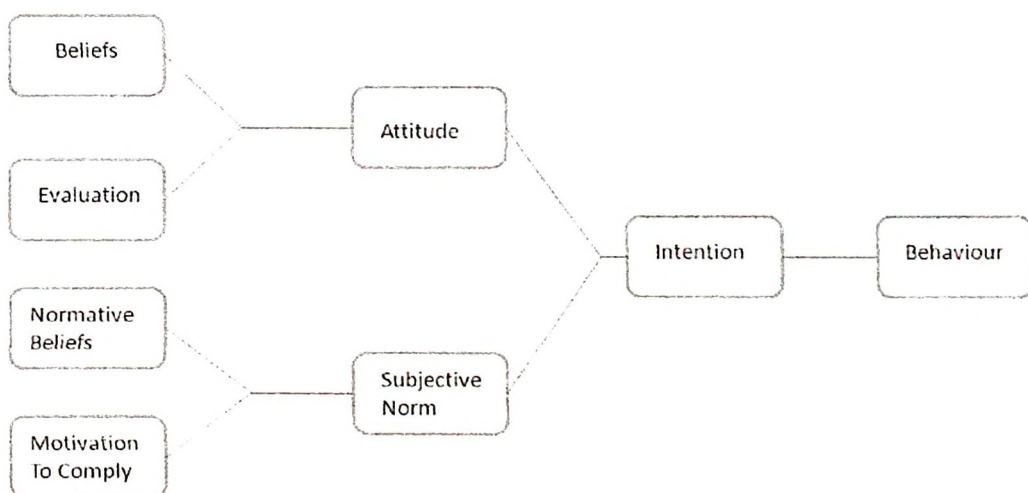


Figure 2.1 Theory of Reasoned Action
(Source: Ajzen and Fishbein, 1980)

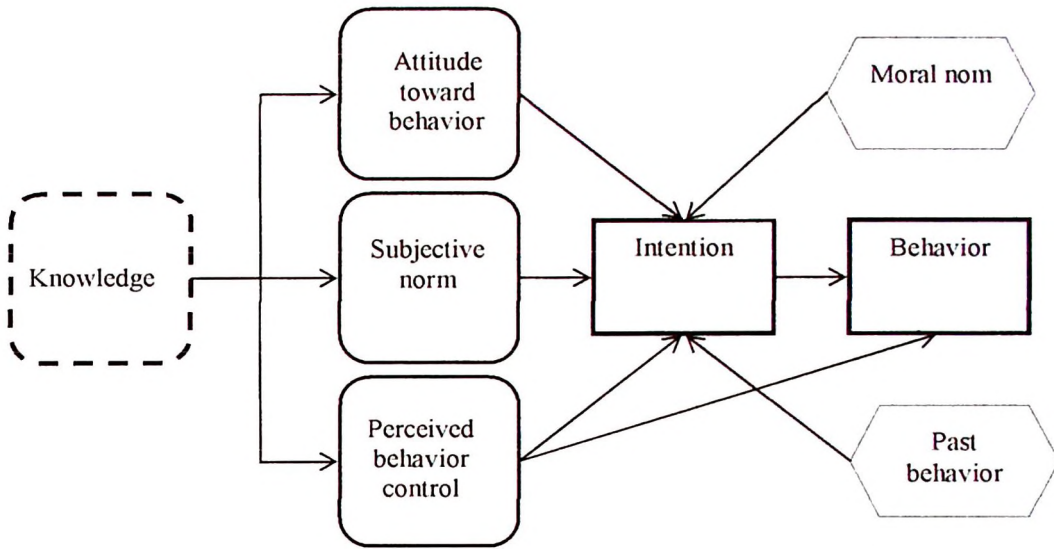


Figure 2.2 Adopted Theory of Reasoned Action framework for the study of nurses' knowledge, attitude and practice of ethical decision making in Neonatal Intensive Care Unit, Hospital USM

CHAPTER 3 METHODOLOGY & METHODS

3.1 Research Design

This study utilized a non-experimental, descriptive, cross-sectional survey design to determine the knowledge and attitudes, related to ethical decision making, held by nurses working in the Neonatal Intensive Care Units (NICU) in a tertiary, teaching hospital in Kelantan. The survey was also designed to determine what influences the ethical decision making practices of nurses in the areas surveyed. Research into nurses' knowledge, attitudes and practice involves human, and therefore fits best into this social science method of research (Polit and Beck, 2006).

3.2 Population and Setting

This study focused on nurses working in the NICUs in Hospital Universiti Sains Malaysia (Hospital USM). The choice of approach was based on the number of staffs and areas.

3.3 Sampling Plan

A major feature of any survey was that information is obtained from a sample of subjects, who were selected from a study population and then, on the basis of the information gained, assumptions about the whole study population may be described. A system of selection was needed to ensure that the researcher and factors extraneous to the research have no influence on the selection process (Naing 2003).

3.3.1 *Sample – inclusive and exclusive criteria*

Inclusion criteria for a sample refers to those that are eligible for participation and the exclusion criteria consists of those characteristics that rule out certain people (Moule and Goodman, 2009).

3.3.1.1 Inclusion Criteria:

- a) Nurses who work in NICU, Hospital USM
- b) Nurses who have more than 1 year working experience

3.3.1.2 Exclusion Criteria:

- a) Nurses who have less than 1 year working experience in NICU
- b) Nurses who work in clinical area other than NICU, Hospital USM
- c) Nurses who refuse to participate

3.3.2 *Sampling Design Method*

This study used probability sampling. Probability involves the use of random samples to eliminate subjectivity in choosing a sample used in this study. The most common approach was to use random sampling. In a random sample the nature of the population is defined and all members have an equal chance of selection (Moule & Goodman 2009).

For this study, to take a representative sample of the population and draw conclusion from this, simple random sampling was used. In the course of sampling size, the sample was those nurses working at the NICU, Hospital USM. In generating random numbers, a random number generator, such as the Microsoft Excel 2010 software was used. The reason for using this software was that excel has the ability to generate a random numbers from zero to one from previous selected numbers range.

To draw a simple random sample in this study, first, the researcher obtained the list of name of the nurses working at NICUs. Second, the researcher then gave

each of the nurses in the population a number. Following, the software program will give the researcher a list of randomly selected numbers within the range the researcher give it. Finally, after getting the random numbers, the researcher then identify the nurses with those randomly selected numbers and locate the nurses to participate in the research study.

By using this feature, the researcher can assigned a random number to each row in a set of data and sort them randomly. Hence, each participant remaining in the population has the same probability of being included in the sample. Simple random sampling also reduces the chance of bias occurring in the sample (Moule & Goodman 2009).

One of the best things about simple random sampling was the ease of assembling the sample. Therefore, it was also considered as a fair way of selecting a sample from a given population since every nurse from 1 NILAM (NICU) is given equal opportunities of being selected. In addition, this sampling technique was useful in documenting that a particular quality of a substance or phenomenon occurs within a given sample and was very useful for detecting relationships among different phenomena (Castillo and Joseph, 2009). In addition, in a simple random sample of a given size, all such subsets of the frame were given an equal probability.

3.3.3 *Sample Size*

A common practice in most situations in statistical analysis was to determine the sample size. In general, the larger the sample size, the smaller sampling error tends to be while too small, even a well conducted study may fail to answer its