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AN EXPLORATION OF NURSES' EMOTIONS:
A STUDY OF JORDANIAN NURSES IN INTENSIVE THERAPY

MOHAMMED ALMAHROUK

A thesis submitted in partial fulfilment of the
requirements of
The Robert Gordon University
for the degree of Doctor of Philosophy

May 2009

Declaration

I declare that this thesis has been written by me, and that the work is entirely my own.

MOHAMMED ALMAHROUK

Almahrouk

May 2009

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Dedication

To the soul of my mother

Safiya, who gave me a lot without return,

To the soul of my son

Abdulrahman, who died during the study,

To the soul of my father

Abdulaziz, who did a lot for my education,

To the soul of my mother in-law

Khadeeja, who gave me the best gift in the world,

To the endless support person, my wife

Wejdan, who gave and suffered a lot during my study,

To my sons and daughter

Abdulaziz, Akram, Malik, Abdulrahman, Dana and Obadah

who suffered a lot during my study.

I always believe in the following wisdom

“...And whosoever fears Allah and keeps his duty to Him, He will make a way for him to get out (from every difficulty) (3). And He will provide him from (sources) he never could imagine. And whosoever puts his trust in Allah, then He will suffice. Verily, Allah will accomplish his purpose. Indeed Allah has set a measure for all things.” (The Noble Quran. 28: 2-3)

An Exploration of Nurses' Emotions: A Study of Jordanian Nurses in Intensive Therapy

Abstract

Emotions within the Intensive Therapy Nurses (ITNs) are the phenomena under investigation. Emotions of ITNs are exposed to stressors that may lead to emotional changes. This study aimed to explore the emotional changes experienced by Jordanian ITNs. Multiple triangulation was employed in three interrelated phases. Each phase is a pre-requisite for the next. All phases complete each other to form the whole study. The first phase used observations and interviews to collect data from three ITNs working in three different Intensive Therapy Units (ITUs), the adult intensive therapy, the paediatric intensive therapy and the post-cardiac surgery units. The first phase revealed the range of emotions experienced by ITNs.

The second phase involved a construction of self-reporting questionnaire based on the first phase findings. The aim of the questionnaire phase was to identify the nurses' highly meaningful emotions within the ITUs. A total of 73 ITNs responded from three different hospitals. The second phase revealed 50 out of 172 emotional items as highly meaningful emotions. The highly meaningful emotions were categorised into five emotional groups: mutual, professional, disparagement, self-worth and physical emotions. The situations (in which the emotions were revealed) of the second phase were categorised into five themes: technology, advanced nursing procedures, nurse-patient relationship, nurse-human relationship, and working conditions.

It was necessary to conduct a third phase in order to allow in-depth understanding of the phenomenon of emotional changes within ITNs. The third phase employed interviews with nine participants using an interview guide. The third phase analysis showed that the emotional groups had different patterns of emotional transformations. Mutual disparagement emotions showed an increase in emotionality followed by a decrease until they reached a balanced stage. Professional and self-worth emotions were increasing over time for ITNs.

The study proposed a model of expertism within ITNs. Expertism according to the current study is a process of emotional transformations. Knowledge, experience and culture training would help ITNs to transform their emotions to reach a level of expertism. Culture and gender differences may also influence ITNs' emotional transformations. ITNs become balanced in their mutuality and disparagement, and having high professionalism and self-worth. These expert ITNs would attain advanced nursing qualities such as: being organised, autonomous, critical thinker, and educators.

Emotional transformation is a process that could be taught to ITNs. Nurse educators could use the model to develop courses and programmes which could foster the emotional transformations within ITNs in order to reach the expertism. Such courses and programmes are expected to reduce turnover and burnout among ITNs and foster nursing professionalism.

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Definitions

The following concepts were constructed throughout the investigation process. They are conceptually defined in order to clarify their use in the current study:

Balanced mutuality is related to nurse-patient relationship, it means the presence of mutual emotions in a certain range that enable ITNs to provide quality emotional care to patients that were characterised by balanced mutual emotions.

Contextual stressors originated from nurses' interactions with the intensive therapy environment in terms of technological machines and advanced nursing procedures.

Critically ill patient is a human being admitted to the intensive therapy unit.

Cultural context refers to the contextual values, beliefs, and way of life for nurses within an Islamic perspective.

Disparagement is related to the impact of negative feelings (disparaged feelings) on nurses. It is related to nurses' knowledge and experience in nursing.

Disparagement feelings are those types of feelings related to the nurses' tension within intensive therapy context, such as feeling of anger and feeling of guilt.

Emotions (feelings) are inherent qualities of human beings in which they experience feelings that are related to the living context. These feelings are amenable to changes due to knowledge, experience and cultural training.

Emotion in this study is seen as a result of evaluative perception of relationship between the intensive therapy nurses and the working context.

Emotional care is the intensive therapy nurses' ability to meet the critically ill patient emotional demands.

Emotional stressors originated from nurses' emotional care within the intensive therapy context. These are the results of contextual and interactional stressors.

Experience in the current study is the theoretical and the technical information of skills obtained through the course of working in the intensive therapy unit.

Experience is the refinement of preconceived notions and theory through encounters with many actual practical situations that add nuances or shades of differences to theory (Gadamer, 1970; Benner & Wrubel 1982))Cited in Benner, 1984).

Expertism is an emotional transformation process within ITNs, in which they reached through knowledge, experience and cultural training to a state of balanced mutuality & disparagement and high professionalism & high self-worth, that enable ITNs to carry out advanced nursing roles.

First-line professional feelings are those feelings related to nurses' competency level, obtained through knowledge and experience in intensive therapy unit. Such as feelings of

self-competence and self-confidence. They are a prerequisite for second-line professional feelings.

High professionalism is the nurses' ability to provide quality technical care in terms of high proficiency.

Human being is a creature of bio-psycho-social and spiritual needs.

Intensive therapy nurse is a human being who provides an advanced care (technical and emotional) to critically ill patients in intensive therapy unit.

Intensive therapy nursing is a speciality within nursing profession, which includes taking care of critically ill patient who required mechanical ventilation and/or closed monitoring.

Intensive therapy unit is a place within a health institution designed to accommodate critically ill patients who require mechanical ventilation and/or closed monitoring.

Interactional stressors are the stressors originated from nurses' interactions with human beings in the intensive therapy context mainly the patients.

Knowledge is the theoretical information obtained through the course of education and/or working in intensive therapy unit

Mutuality is the impact of close and empathetic relationships with patients on intensive therapy nurses

Mutual emotions are those types of feelings related to nurses' empathetic relationship with patients, such as feeling of closeness and feeling of empathy.

Perceived experience of emotions refer to the nurses' verbally stated feelings, as they perceived them within intensive therapy context.

Physical emotions are the intensive therapy nurses' feelings related to the ability to perform the nursing care.

Professionalism is related to the impact of technology and advanced nursing procedures on nurses' care.

Professional emotions are those feelings related to nurses' competency level in working within intensive therapy context. There are two levels of professional feelings: first-line professional feelings and second-line professional feelings.

Quality care is the nurses' ability to provide advanced nursing emotional and technical care within the intensive therapy context. Such nurses possess balanced mutuality & disparagement and high professionalism & self-worth. They possess the expertise quality such as being organised, autonomous, critical thinker, and educator.

Second-line professional feelings are those feelings related to nurses' competency level, which are preceded by first-line of professional feelings, such as feeling of responsibility and feeling courage.

Self-worth is related to the increased impact of positive feelings (self-worth feelings) on nurses. It is also a direct result of high knowledge and experience in nursing.

Self-worth emotions are those types of feelings related to internal satisfaction and self-fulfillment of nurses within intensive therapy context, such as feeling of happiness and feeling of self-pride.

Stressors are contextual, interactional and emotional factors, which affect nurses' emotional status in the process of caring to critically ill patients within the intensive therapy context.

Working context refers to the various situations within intensive therapy units, which have crucial influence on ITNs' job performance.

Abbreviations

The following abbreviations are used in this study:

- 21B : Participant number 21 in the public hospital name list
- AACN : American Association of Critical Care Nursing
- ABP : Arterial Blood Pressure
- AITU : Adult Intensive Therapy Unit
- AGC : Arab Gulf Countries
- ANOVA: Analysis of Variance
- BSc : Bachelor Degree
- BSN : Bachelor in Nursing Science
- CPR : Cardio-Pulmonary Resuscitation
- CVP : Central Venous Pressure
- Dip. : Diploma
- ETT : Endo-Tracheal Tube
- HKJ : Hashimate Kingdom of Jordan
- ITN : Intensive Therapy Nurse
- ITU : Intensive Therapy Unit
- JUH : Jordan University Hospital
- MOH : Ministry of Health
- MSNDS: Master of Science programme in Nursing Degree Student
- P. : Page
- PBUH : Peace Be Upon Him
- PITU : Paediatric Intensive Therapy Unit
- PCSU : Post-Cardiac Surgery Unit
- QITNE: Questionnaire of Intensive Therapy Nurses' Emotions
- Sig. : Significant
- SWT : Subhanahu Wa Taala (Glory to Him)
- UNRWA: United Nations Relief and Work Agency

Preface

My relationship with nursing began in 1986, when I finished my third-year secondary schooling with a very good score. I had to decide which college to choose. I do remember the big dilemma in choosing nursing, because very little information was available on nursing, moreover, nursing had a low social image in Jordan. This was a challenge for me at the beginning. I opted for nursing, keeping in mind the job opportunities, good salary and the possibility to do higher studies.

The challenge of studying nursing was tougher than what I had expected. However, the real challenge came when I started my career in nursing as an Intensive Therapy Nurse (ITN). I had prepared myself mentally to be an ITN. So, it was my first selection in clinical setting. I was given a permanent position as ITN because of the heavy workload in the unit and the acute shortage of ITNs.

During the twelve years of working in Intensive Therapy Units (ITUs), I lived the life of an ITN with all its benefits and problems. In the last five years of my clinical work, I had great interest in a special phenomenon (related to emotional changes) in an ITN. This phenomenon was more obvious to ordinary people who visited ITU than the ITNs themselves. Many visitors used to praise ITNs for their patience and ability to do work in such stressful environments. We used to take such praise for granted because we were simply doing our job and in reality we did not feel as stressed as outside people thought. However, I used to think about this phenomenon frequently. I related the phenomenon to some type of internal changes which occurred within ITNs that let them be more tolerant to stressors. Initially, I was reluctant to investigate such phenomenon because I realised

the difficulties of studying it. It was through the encouragement and support I got that I came to accept the challenge of studying this phenomenon. After many difficult exercises in conceptualising it, this thesis has been divided into ten chapters which aim at explaining the connections between emotions of ITNs, nursing care and expertise in nursing practice as follows:

Chapter one is a concise introduction to the phenomenon of emotional changes within ITNs, including the background and the context of the investigation.

Chapter two presents the underlying concepts related to the phenomenon of emotional changes within ITNs. The impact of the cultural context and the working context on ITNs' emotions and nursing care are considered.

Chapter three presents an outline of the methods used to investigate the phenomenon. A three-phase research design is presented in order to investigate emotions in depth within the context of ITU nursing in Jordan.

Chapter four presents the findings and analysis of the initial exploratory phase with a small number of participants (n= 3). This chapter focuses on identifying the research context in terms of stressful situations within ITU and ITNs' emotional responses to these situations.

Chapter five presents the findings and the analysis of the second survey phase with a larger group of participants (n= 73). This chapter focuses on scrutinising the emotions of ITNs within the ITU context.

Chapter six presents a discussion of context and the emotions of ITNs. This chapter correlates the findings of the first and second phase findings with some related nursing literature. This chapter presents the need for further exploration of emotions of ITNs in order to determine the direction of emotional changes and their effects on nurses and nursing care.

Chapter seven presents the findings and the analysis of the third phase of the investigation. The analysis shows the change of ITNs' emotions with regard to each emotional group. The analysis shows the relationships between the emotional groups' changes with the five themes affecting ITNs in ITUs: technology, advanced nursing procedures, nurse-patient relationship, nurse-human relationship and work conditions.

Chapter eight presents the discussion of the third phase. It shows the emergence of four themes: Balanced Mutuality, High Professionalism, Balanced Disparagement and High Self Worth. This chapter also presents the synergistic relationship of these themes and the expertise in nursing practice.

Chapter nine presents a model of expertise in clinical nursing practice which is articulated through emotional transformation of ITNs. This chapter integrates the situations affecting the emotions of ITNs, the expertise and the quality of nursing care through a diagrammatic representation.

Chapter ten presents the conclusions, recommendations, implications and limitations of this study. The recommendations suggests possible necessary means to foster a positive emotional transformation within ITNs working in ITUs.

CHAPTER ONE

INTRODUCTION TO THE STUDY

This chapter presents the context of the current study. It provides some relevant information about Jordan's geography, demography, health system, hospitals and manpower. This is followed by an analysis of intensive therapy nursing in Jordan in terms of working conditions, training opportunities, salaries and the image of the nursing profession in Jordanian society. The chapter lays out the background to the investigation from the researcher's point of view, based on his own personal experience. It also elaborates the importance of and the focus on the phenomenon under investigation, along with the main purpose and objectives of the research.

Jordan: Cultural Background

1.1. Geography

This study was conducted in Jordan officially called the Hashemite Kingdom of Jordan (HKJ) (*al-Mamlakah al-Urdunniyah al-Hashimiyah*), an Arab state in Southwest Asia. It is a young nation that occupies an ancient land. It is surrounded by four countries, Syria to the north, Iraq to the east, Saudi Arabia to the south and southeast, and the occupied Palestine to the west. The total area is 88,802 square kilometres (Appendix I).

Jordan has three geographical regions (from east to west): the desert, the highlands east of the Jordan River, and the Jordan Valley (a branch of the Great East African Rift System).

The desert in the eastern and southern parts of the country occupies more than (80%) of its territory.

1.2. Demography

Rural residents in the desert and Jordan Valley include a small number of nomads, representing about (25%) of the population. The average village is a cluster of houses and other buildings, including an elementary school and a mosque. A medical dispensary and a post office may be found in large villages, together with a general store and small café. Kinship relationships are patriarchal, while family ties govern social relationships and tribal organizations.

Nearly (75%) of the population live in the urban areas in the eastern highlands of the Jordan River. The main population centres are Amman, Azzarqa and Irbid (Appendix I).

The population structure in Jordan is predominantly young. People under the age of 15 constitute the largest component of the population (37.8%). People over 65 years of age represent only (3.5%). The crude birth rate of 29 per 1000 is high when compared to the crude death rate of 5 per 1000, producing a natural increase of birth rate of (2.4%) that is approximately double the world average (Department of Statistics, Government of Jordan, 2003). This puts a burden on the primary and secondary health care services. There is a high need of Maternal and Child care centres for pre and postnatal care, and more need of hospitals for secondary care. Internal migration from rural to urban centres has put a greater burden on the economy and health system. A large number of Jordanians also live and work abroad.

Jordan has a good health system in terms of health care facilities. In 2003, Jordan had a total of 97 hospitals: 29 under the Ministry of Health (MOH), 10 for the Royal Military services, 2 university hospitals, and 56 privately administered hospitals. The country had a total of 9743 hospital beds: 3,587 with the MOH, 1,801 with the Military Services; 823 with University Hospitals; and 3,532 with private sector institutions (Information Directorate, MOH, 2003). The United Nations Relief and Work Agency (UNRWA) has a positive effect on health care in Jordan as it provides health care facilities to Palestinian refugees in their camps.

Many Jordanians work in the health care system. In 2003 there were 12,375 physicians, 3,472 dentists, 6,333 pharmacists, 1,500 midwives, 5,041 practical and aid nurses, and 8,720 staff nurses (Information Directorate, MOH, 2003). Staff nurses include BSc graduates from universities and three year diploma graduate from MOH colleges. Practical nurses attend an 18-month course after the third secondary school and aid nurses practice their work without any previous education and usually acquire some skills by working in hospitals. Appendix II presents the data which is related to nursing education and the different levels of nurses in Jordan.

Amman is the capital of Jordan and has the largest population. It had 2.085 million out of 5.48 million in the year 2003, which represented (38%) of the total population (Department of Statistics, Government of Jordan, 2003). Amman is a modern city with a western type of living. Most of the people here wear western style clothes. It has all modern facilities such as roads, hospitals, health centres, communications facilities, internet cafes, universities and malls. Amman enjoys the latest advances in medical and

nursing care and has the best and busiest ITUs in the country. The current study therefore is focused on ITNs working in Amman hospitals.

1.3. Intensive Therapy Nursing in Jordan

The researcher has noticed through personal experience and discussions with colleagues that Jordanian ITNs view the ITU as a speciality in which they can practise their professional autonomy. Because of the lack of specialised nursing courses, Jordanian ITNs are motivated to attend lectures, seminars and workshops to promote their knowledge and skills.

Working in ITUs has two advantages for nurses: 1) they guarantee job security for a longer time, due to the acute shortage of nurses in general and in ITNs in particular. 2) they may have better employment opportunities in the neighbouring Arab Gulf Countries (AGC) due to the high demand for Jordanian ITNs.

Although, there were no specialised training courses for ITNs in Jordan until 1997, the demand for ITNs was high. The demand was for self-motivated nurses who would accept the challenge of working in an intensive therapy setting until they acquire knowledge and skills necessary to provide advanced care to critically ill patients.

In Jordan, ITNs lack many privileges such as bonuses and other benefits. They have a heavy workload. These adverse conditions motivate them to seek better job opportunities in the AGC, which in turn leads to an acute shortage of ITNs within Jordan. The

neighbouring AGC attract expert nurses, but this is not all bad as these expert nurses can potentially enrich Jordan's health sector when they return with better experience.

The majority of nurses in Jordan are females (55%), and (45%) are males (Jordan Nurses and Midwives Association, 2001). Salaries are relatively higher than those of school teachers. There have been many attempts to promote higher salaries for nurses as they work two extra hours per day in the public sector. For these two extra hours nurses receive one free meal per working shift. Nurses in the public sector work 48 hours a week and earn around 350 Jordan Dinar per month (One Jordan Dinar is equivalent to 0.77 Sterling Pound).

The social image of the nursing profession in Jordan is changing rapidly and gaining more respect. The profession had a low social image, as being a nurse was like being a health assistant with no authority or autonomy. Nurses strive to improve their social and professional image. The problem of image was highlighted and discussed in an international nursing conference conducted in Jordan in 1990. The increasing acceptance of nursing as a profession is evidenced by the increase in the number of nursing students as well as in the number of high-grade students who enrol in nursing programmes. The availability of job opportunities also play a role in the improving the image of nursing. Nursing is given Royal recognition and is considered a highly reputed profession for both men and women.

1.4. Context of the Research

This part of the chapter sets out the context of the investigation. The study was conducted

in three large hospitals in Amman. One was a university hospital, another a public hospital and the third one a private hospital.

The Jordan University Hospital (JUH) is located in the north of Amman. It has achieved national reputation for its health care programmes including patient care, medical/nursing education and research facilities. It serves more than 250,000 people yearly and provides a good academic environment for students of medicine, dentistry, pharmacy and nursing. It has 16 intensive therapy beds: eight beds for medical intensive therapy and eight for surgical intensive therapy. According to the 2003 statistics, the number of admissions to the medical-ITU was 170 patients and 87 to the surgical-ITU. The majority of its ITNs are bachelor degree graduates (Jordan University Hospital (JUH) overview, 2003). They are well-qualified nurses providing a high standard of intensive therapy nursing.

The public hospital is a large hospital in Jordan. It is a training hospital for the Ministry of Health (MOH) medical doctors (interns and specialty programmes) and for those Diploma courses in nursing at MOH schools of nursing. The majority of ITNs in this hospital are diploma holders.

The private hospital is located in the west of Amman, and it is a medium-sized modern hospital. Many patients prefer this hospital because of its high quality medical and nursing care. Its ITNs are a mix of bachelor and diploma level nurses.

Jordan is a centre for open-heart surgery for many Arab countries. For example, JUH performs 2,357 different cardiac catheterisation procedures per year. ITUs in Jordan use the latest medical equipments. Many advanced procedures like endotracheal intubation (ETT), insertion of invasive lines such as arterial monitoring lines and central venous pressure monitoring (CVP) are commonly conducted here. The number of ITNs has escalated dramatically in response to the increase in the public demand for intensive therapy nursing. The number of hospitals increased from 74 in 1996 to 97 in 2003. Hospital beds increased from 7891 in 1996 to 9743 in 2003. With the rapid advancement of intensive therapy nursing in Jordan over the recent years with absence of proper educational provision, it is expected that such advances may have created more stressors for nurses working in intensive therapy. This research supposes that stressors may affect the emotions of ITNs, and that over time may lead to some emotional changes capable of having a negative impact on nursing care. The research thus seeks to explore these issues.

1.5. Emotional Changes (Researcher's experience)

During my first year as a student of nursing, I became tense and anxious about giving intra-muscular injections. I always wondered how a big needle could penetrate a human body without pain or complications. It spent eight months of mental preparation before giving my first intra-muscular injection. It was a difficult experience, but this was the commencement of an emotional journey into intensive therapy nursing. The stress of giving intra-muscular injections reduced dramatically after I had administered five to six injections. It soon became a routine procedure with less inherent anxiety. The feelings of competence and confidence lead to a feeling of pride when I was able to give painless injections to the patients.

The reality of nursing encompasses a nurse's own feelings of humanness. Being a nurse means taking up so many responsibilities, because as professionals, they have to deal with real patients' lives. I faced these realities when my clinical instructor assigned me to an elderly terminally ill patient in the late stages of hepatic cancer. The patient was isolated, and the ward staff rarely checked on him. "My" patient was very yellow in colour, with dark urine. I was afraid that this person could die at any moment; I felt helpless. Luckily, when my shift ended, the patient was still alive. I felt very happy and relaxed. The same patient was assigned to me the following week. I asked my instructor if it was possible to change patients, but my request was denied. This was to be an experience in continuity of care. The stress and fear returned, and on the second day of clinical work, the patient died, something that all the other nurses and doctors simply accepted this, softly saying, "Allah's mercy be upon him". I felt that this religious statement for the deceased patient was more applicable to me than the patient and I was in need of emotional support from someone. It was a very stressful moment when I realized that 'my' patient had died'. No support or advice on how to deal with such emotional losses was available.

As I look back on that incident after 12 years as ITN, I realize that there is a big difference in the feelings of anxiety, sadness and anger I experienced at the onset of the nursing career, and those after a few years of experience. Nurses in ITU face many changes in their emotions. As I tried to investigate what happen to my emotions and how I changed to be less sensitive to a patient's pain and suffering I wondered if my emotions moved from a humane to inhumane level. These questions generated two main questions of research about the nature of emotions (1): How do emotions change within ITNs? And, (2): What is the impact of the emotional change on nursing care?

1.6. Introduction to the Phenomenon under Investigation

Nursing is a profession of caring. It is the responsibility of nurses to provide comprehensive, bio-psycho-social and spiritual care to the patients. Intensive therapy nursing deals with life-threatening health problems and subsequent responses in the intensive therapy units (AACN Management Series, 1994). ITNs are in continuous interaction with the patients in ITUs and this interaction may be the main source of stressors for ITNs. In this study, the stressful situations between ITNs and ITU-patients were identified and documented for those interested in understanding the phenomenon under investigation.

ITNs are exposed to multiple stressors which may originate from a variety of sources. They may typically come from providing direct nursing care to critically ill patients, from interactions with others in the working context, or from the working environment. These proposed stressors characterise the environments of intensive therapy nursing. This study will investigate such stressful environment on ITNs who are the primarily emotional care-providers. This in turn may have some implications for nursing care and ITNs' performance.

This study proposes that technical and emotional stressors are the main factors which affect nurses in ITUs. Physical signs and symptoms such as fatigue, muscle pain, headache, and stomach ache may characterise the technical stressors while sadness, anger and frustration may characterise the emotional stressors. Continuous exposure to stressors

may have an impact on the emotions of nurses. This study seeks to explore the impact of stressors on nurses' emotions in ITU.

Emotions could be seen as an essential aspect of nursing care and have an effect on the health of critically ill patients. The current study proposes that most relatives and patients expect the nurse not to feel depressed, frustrated or fearful. A depressed, frustrated or fearful nurse may not be able to provide quality nursing care, because such care providers are more prone to error, low self esteem and lack of professionalism. Furthermore, such feelings render the care-provider in need of emotional support. On the other hand, the nurses who feel comfortable or relaxed can provide better nursing care to patients and their relatives. Nurses with the feelings of high self confidence and competence may be expected to provide better nursing care.

A decade of experience in ITU has produced a remarkable change in my own feelings. I have noticed a change in the feelings of kindness, empathy, involvement, attachment and sensitivity to patient needs. I have become less emotionally involved and less empathetic. Simultaneously, I have overcome the feelings of incompetence, low self esteem and low self confidence and have gained feelings of high self competence, professional self esteem and greater self confidence.

The current researcher observed that it is not uncommon to hear nurses laughing in ITU while there is a life-or-death crisis in the next room. Conversations and discussions with colleagues suggest that many colleagues have experienced similar emotional changes over time.

Intensive therapy nursing may be seen as a type of nursing where sophisticated and advanced medical and nursing procedures are performed. Being a nurse for more than 12 years, the current researcher has experienced most of stressors mentioned in the nursing literature: heavy workload; staff shortages; noisy environments; complex relationships with other health care professionals; death; caring for patients with persistent pain; and many other factors (Foxall et. al. 1990; White & Tonkin, 1991; Stechmiller & Cheek. 2002). Thus, as an experienced nurse, I am in an optimal position to carry out such a study.

1.7. Research Premises

The following are the premises upon which the phenomenon of emotional changes within ITNs are based:

- 1- ITNs are human beings.
- 2- Emotions are inherent qualities of human beings.
- 3- ITNs do provide emotional care.
- 4- Emotions experienced by ITNs may be susceptible to changes over time.
- 5- ITUs are stressful environments.
- 6- Stressors may be the main influences that alter the emotions of nurses in ITUs.
- 7- ITNs may be prone to emotional changes due to a stressful working environment.
- 8- Cultural background plays a role in shaping the emotions of nurses as they meet stressful situations.

Based on the above premises, the current research aimed to explore the emotional experiences of ITNs and the impact of these on their functions.

1.8. Purpose and Objectives of the Investigation

The purpose of this study is to explore the emotional changes experienced by Jordanian ITNs and the impact of these changes on their role and provision of nursing care. It is expected that emotional changes may affect the work performance of ITNs. Depending on the situation they encounter, nurses may perceive feelings that may augment or lower their performance and quality of care. In order to better understand the phenomenon of emotional changes within ITNs, the following research objectives were identified.

At the end of this investigation, the study will be able to:

- 1- Explore the emotional situations encountered by Jordanian ITNs.
- 2- Describe the range of emotions experienced by Jordanian nurses working in ITUs.
- 3- Identify a range of emotions that are highly meaningful to Jordanian ITNs.
- 4- Explore emotional changes as perceived by Jordanian ITNs.
- 5- Explore the impact of emotional changes on the provision of nursing care.
- 6- Analyse the implications of the findings for intensive therapy nursing practice, education and research.
- 7- Construct a model of expertise in clinical practice based on emotional transformation.

1.9. Conclusion

This chapter has introduced the phenomenon under investigation and reviewed the background and the context to the study. The personal experience of the researcher and

the findings from literature support the presence of stressful environment within the ITUs. The current study proposes to explore the internal changes which may occur within Jordanian-ITNs in ITUs. Nevertheless, an in-depth understanding of these changes mandates a further review of many concepts that are related to emotional changes. The next chapter focuses on the underlying concepts that influence emotional reactions to stressors.

CHAPTER TWO

UNDERLYING CONCEPTS RELATED TO EMOTIONAL CHANGES IN NURSING PROFESSION

2.1 Introduction

This review of pertinent literature is selective in the material included for detailed review. However, considerable background literature under the following major themes has been consulted:

- 1) Critical care nursing
- 2) Roles of nurses and caring
- 3) Emotional responses and coping with stress
- 4) Research methodologies
- 5) Clinical nursing practices
- 6) Competency in nursing practice

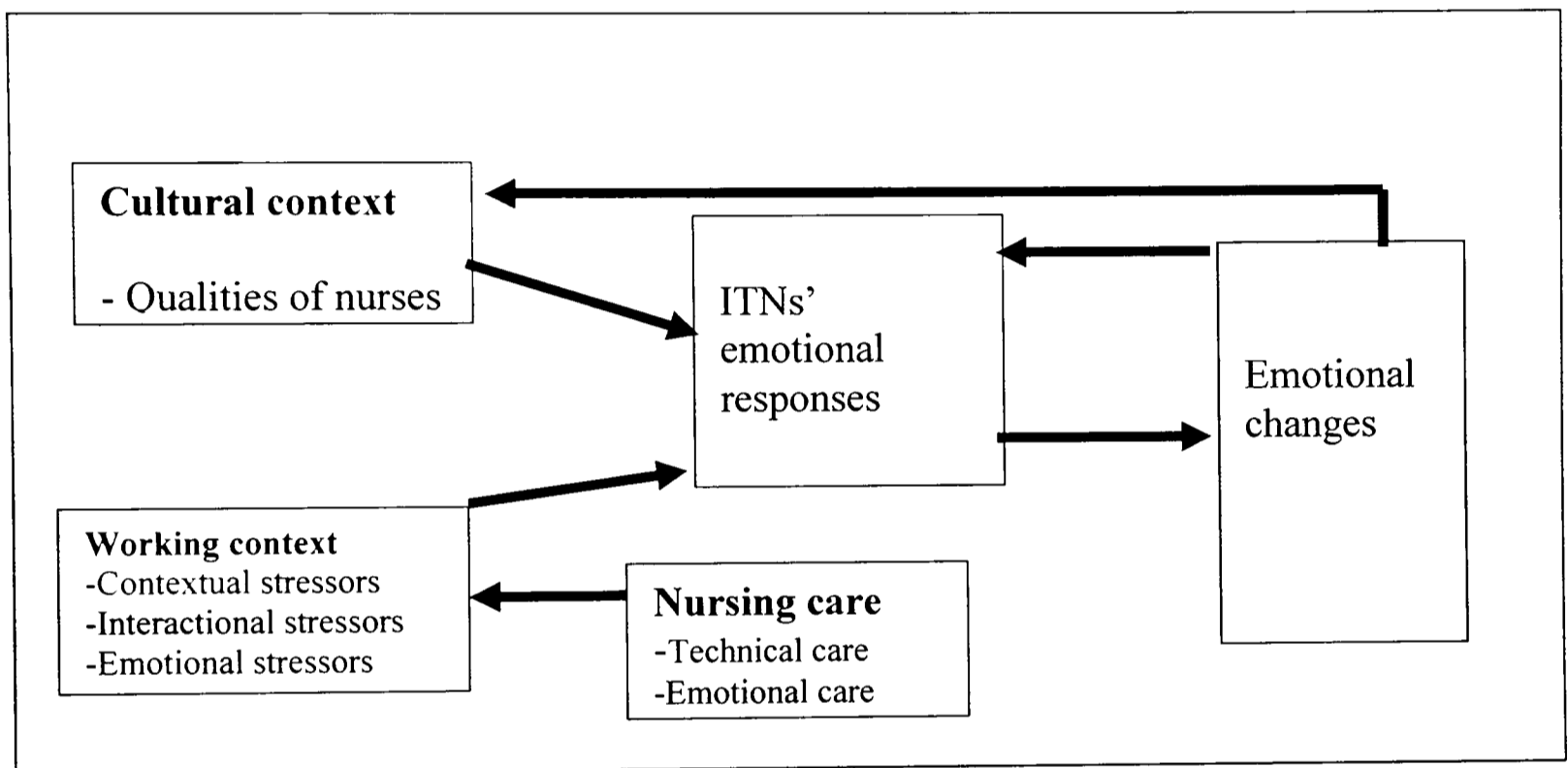
Details are given in a separate section on further reading at the end of this dissertation.

This chapter focuses on the selected underlying concepts related to the phenomenon of emotional change. The focus will be on three main themes that affect the emotions of ITNs: (a) the emotional aspect of nursing care, (b) the cultural principles that may affect ITNs' interactions with stressful situations, and (c) the understanding of emotional responses within stressful situations.

An understanding of the context of emotions, the importance of stressors and the relevance

of culture has led the researcher to develop a framework (Diagram 2.1) to guide the analysis of the underlying concepts, which are considered to be related to the emotional changes in ITNs. The aim is to connect the three main concepts together as they are used in the current study.

Diagram 2.1 the conceptual framework for the underlying concepts related to ITNs' emotions.



2.2 Emotions and Nursing

Emotions are internal factors that energise, direct and sustain behaviour (Rubin & McNeil, 1983). The six primary emotions-- surprise, fear, disgust, anger, happiness and sadness can be expressed facially, while many other emotions (the terms 'emotions' and 'feelings' are used interchangeably in this study) cannot be expressed facially e.g. the feeling of competence, confidence or guilt.

Emotion in this study is seen as the result of evaluative perceptions (Lazarus, 1982)

between the ITNs and the ITU environment. The perceived emotion is usually preceded by a cognitive appraisal of the situation (Lazarus, 1982). The ITNs' cognitive perception of the stressors in the intensive therapy environment results in their emotions. In the current study, each emotion is examined in conjunction with one perceived experience at a time. This entails feelings such as happiness, sadness, or competence. Emotion is defined by the current study as a perceived human experience that shapes the essence of our experience. In the current investigation, the perceived experience of emotion refers to the verbally stated feeling of ITNs, as they perceived it while working within the intensive therapy context. The current study proposes that emotions of nurses are context-related. It is not possible to separate certain emotions from their context, otherwise the emotion will be meaningless and, for example, some nurses may feel anxious during a cardiac arrest. The situation of a patient's cardiac arrest is an inseparable part of the nurses' feeling of anxiety. The feeling of anxiety is usually preceded by cognitions of the situation and its consequences.

Patients in ITUs encounter plenty of situations that have high emotionality such as feeling of sadness due to pain. ITNs are in the front-line to respond to the emotions of patients. These situations are important for emotional responses of ITNs during nurse-patient relationship. The second part of this chapter will discuss the situations facing nurses in ITUs.

Emotional care in this study refers to the ability of ITNs to meet critically ill patients' emotional needs. ITNs intervene and interact with critically ill patients who may be suffering from fear of death, or anxiety due to severe pain, or sadness due to loss of body image or loss of hope due to terminal illness. Alternatively, when patients feel happy after

a successful operation or advanced procedure, the emotions of nurses will also be affected. Emotional care aims at alleviating the effects of disruptive feelings (fear, sadness, hopelessness) and in promoting supportive feelings (courage, happiness, trustfulness) through relationships and a mutual understanding of the emotional stressors encountered by both patients and nurses.

In caring for a patient, emotions such as love (Graham, 1983), empathy and closeness are essential aspects of the emotional care of nursing. In the current study, emotional care, which is related to ITNs' ability to meet the emotional demand of critically-ill is the foundation of emotional labour (emotional work) as presented by James (1992) and Smith (1992) as the impact of the emotional care provided by nurses while taking care of patients. However, the main difference between emotional labour (James 1992) and emotional care in this study is that emotional labour is the result of emotional care provided to patients. James (1992) focused on the negative effects of emotional labour on nurses, while the current study aims at a deeper understanding of nurses' emotions during nursing care, such as finding out the emotions as perceived by ITNs during work. This study attempts to do this by identifying the most important emotions of the ITNs, categorising them, analysing their fluctuation over time, and studying the possible impact of such fluctuation on nursing care.

Two main factors play a crucial role on the emotions of ITNs: stressors within the ITUs and the nurses' cultural background. Literature pertaining to stressors will be considered before moving on to a brief examination of specific cultural principles affecting nurses working in ITU settings in Jordan.

2.3. Stressors and Nursing

Stress is a well-known concept in the nursing profession, especially in ITUs. There are many studies that have attempted, with some success, to demonstrate how stressful the environment can (Clarke, 1984a; Vachon & Pakes, 1985). An analysis of 23 studies considering stress in intensive therapy settings and non-intensive therapy settings showed that the level of stress experienced by ITNs was higher than that experienced by non-ITNs (Stechmiller & Cheek 2002). The eight situations that were identified as contributing to stress were high technological care; high mortality; high morbidity; frequent ethical dilemmas; discord with nursing administrators; fellow staff; physicians; and a lack of positive mentoring experiences. These findings are expected to be related to the current study because a part of this study is designed to identify the ITU situations that evoke nurses' emotions.

ITNs are supposed to care for the critically ill, the dying and those in life-threatening situations, in an environment characterised by heavy workload, complexity of relationships, sophistication of technological equipments, and invasive procedures. In such situations, stressors affecting nurses are often accompanied by emotions. So, what are stressors? What are the causes of stressors? What is the impact of stressors on nurses' emotions?

ITNs face stressors from all directions. To simplify this, stressors in this study have been classified into three categories: contextual stressors, interactional stressors and emotional stressors (details below). Stressful situations provoke more intense emotions and have more impact on nurses' capability to provide nursing care.

2.4. Working Context

Working context includes the various stressors within the ITUs. In working context, the current study discusses the contextual, interactional, and emotional stressors that may affect the nurses' emotions.

2.5. Contextual Stressors

Contextual stressors come from nurses' interactions with the working environment. Nurses are surrounded by a number of innovations in machines and instruments such as ventilators and monitors, which are concurrently accompanied with many advanced procedures. Over the last fifteen years in intensive therapy nursing, tremendous changes have taken place in Advanced Cardiac Life Support (ACLS) and in medication regimens. For example, medication therapy for cardiac patients has changed from Digoxin to Amiodarone and technology from monophasic to biphasic defibrillators (Bartley, 2002). The method of calibrating arterial monitoring line, which is changed over time for better and more accurate ways, is another example. Each new advance in nursing procedures requires nurses to learn new skills and gain new knowledge.

In the current study, contextual stressors originate from the working situations within the intensive therapy context. Stressors such as heavy workload, night duty, caring for patients with multiple invasive lines (central venous lines; arterial pressure lines; epidural lines), giving a variety of medications, and dealing with advanced machines contribute to the stressful context of intensive therapy nursing.

Nursing literature also identifies many stressors such as: crowded and noisy settings, sophisticated machines and equipment; heavy workloads; frequent admissions; lack of privacy; constant increasing severity of patient's illnesses which needs to intensify the quality of care; little opportunity to see the good result of work; and the need for advanced competence skills (Clarke, 1984a; Vachon & Pakes, 1985; Foxall et al, 1990; White & Tonkin, 1991; Stechmiller & Cheek 2002).

In the intensive therapy context, nurses assist in endotracheal intubation, extubation, insertion of invasive lines such as central venous pressure monitoring and arterial pressure monitoring, intercostal drainage, peritoneal aspiration, and dealing with cardiac resuscitations. The current study proposes that these procedures, which have high risk on a patient's life and demand high mental concentration and physical coordination, are sources of stress for nurses. These stressful situations may influence nurses' emotions and their ability to work under stress.

2.6. Interactional Stressors.

Interactional stressors are stressors, which come from nurses' interactions with human beings in the intensive therapy context. Nurses interact with critically ill patients, colleagues, physicians, other health workers and patients' relatives.

Emotions are essential for effective communication and relationships in the field of intensive therapy. Nurses not only attain, maintain and promote relationships but they also convey honest and warm feelings to patients using both verbal and nonverbal

communication. This allow them to develop strong relationship with patients. Through communication, nurses share (Maeve, 1998) and understand patients' experiences and emotions through a caring relationship.

In the current study, interactional stressors are related to the nurse-patient relationship because nurses care for patients in very difficult situations such as pain and terminal illness. They also interact with many health professionals from various disciplines such as physicians of all levels (from general practitioners to senior consultants); blood bank technicians; x-ray technicians; laboratory technicians and physiotherapists; and also with social workers; patient's relatives; security men; porters; cleaners and others. It is quite evident, therefore, that nurses are the core coordinators of patient care through a process of interactions with many human beings within ITU. The current study proposes that this process creates stress on nurses because of the diversity of the interactions.

In the nurse-patient relationship, the introduction of nursing processes and total patient care concepts create new stressors for ITNs. The nursing process may increase ITNs' perception of stressors because it shifts nursing from task-oriented care to person-oriented care. In task-oriented care, nursing care is directed toward performing certain nursing tasks for all patients. A particular nursing function is assigned to each nurse, one nurse is responsible for administering medications, another for treatments, and yet another for managing intravenous administration. In such situations, a nurse does not develop a strong relationship with a specific patient (Swansburg & Swansburg, 1999). This view that considers caring to be the carrying out certain tasks at certain times, may lead to weak emotional relationships with patients. In contrast, person-oriented care promotes stronger emotional relationships as the same nurse applies the nursing process of assessment,

planning intervention, and evaluation in provision of nursing care. This is because the nurse provides an individual nursing care, according to patient's needs. ITNs also apply the total-patient-care concept, in which the nurse cares for the patient as a whole (comprehensive care). The nurse is responsible and accountable for the care provided to the patient. He/she thus in a better position to develop strong relationships with patients. Both the nursing process and total patient care may increase the strength of the caring relationship between ITNs and patients, and this may also affect nurses' emotions.

Empathy, emotional closeness and involvement may characterise many such relationships in which a nurse may share a patient's experiences and the feelings of pain, suffering, as well as joy (Maeve, 1998). Such a relationship puts a greater burden on the nurses' emotional tolerance, causing alteration of emotional reactions in order to continue their role as care-providers in providing optimal care to patients. Nurses, more than other health professionals, are exposed to patients with severe pain for extended periods of time (Nagy, 1998). Such exposure creates 'emotional stressors' that may interfere with nurses' ability to manage pain effectively (Nagy, 1998). The emotional stressors on nurses may affect the quality of nursing care which is why in this study a new concept of stressors that has impact on nurses' emotions has been formulated. Emotional stressors are a third type of stressors affecting nurses, besides contextual and interactional stressors.

2.7. Emotional Stressors

In this study, emotional stressors are described as the stressors which originate in the process of providing the emotional care by nurses in the intensive therapy context. Nurses cannot separate their care from their emotions, as emotions are important components in

the caring for patients. James (1989, 1992) and Smith (1992) apply the concept of emotional labour to the nursing context, which includes the management of both the nurse's own and other people's feelings. Emotional labour is seen as sorrowful and difficult (James 1989). However, the current study is concerned with emotional care that comes from stressors. Emotional care is the ground for the emotional labour which was presented by James(1989, 1992) and Smith (1992).

Nursing context involves emotional stress (Nagy, 1992). Maslach (1982) speaks about the extreme negative effects of emotional stressors on nurses which lead to emotional exhaustion. Emotional exhaustion was best described as burnout (Maslach, 1982) in which a nurse has depleted emotional resources due to excessive emotional stress (drain). Burnout may lead nurses to be impersonal (inhumane) while caring for patients and feeling low personal accomplishment (Maslach, 1982) in work situations. The current study proposes that in the ITU, nurses who are unable to progress through several emotional changes consistent with stressful environments may develop symptoms of burnout. The preliminary signs of high staff turnover and absenteeism can indicate burnout. ITNs who are able to strengthen themselves through these emotional changes may exhibit positive emotional changes. Burnout, turnover, absenteeism and adaptive work behaviour are the observable results of emotional changes within nurses. These emotional changes are the main phenomenon under investigation in the current study.

According to Hochschild (1983), emotional labour jobs share the following characteristics: (1) They include face-to-face contact with the public; (2) they require the worker to produce an emotional state in another person; and (3) they allow the employer,

through training and supervision, to exercise a degree of control over the emotional activities of the employee.

These characteristics of emotional care are applicable in the nursing context. Nursing involves face-to-face contact with the public, and the nurse is required to produce the desired emotional state in the patients (James, 1989, 1992; Smith 1992). The nurse, for example, has to reduce the feeling of sadness, increase the feeling of happiness (by understanding the reasons of sadness and happiness and working on these reasons). Through training and supervision, the nurse is expected to exercise a degree of control over emotions (Smith, 1988, 1992). This control of emotion is obvious to visitors of ITUs, and this is supported by the researcher's own experience as an ITN and by his observation of senior and junior nurses.

However, the fact that not all nurses are able to change their emotions, leads one to wonder why some nurses handle emotional stressors better. This seems to suggest that some internal changes occur within ITNs in response to prolonged effect of emotional stressors. These internal changes may affect an ITN's emotions, which may in turn, lead to a higher tolerance to stressful environments. This study explores the possible emotional changes experienced by ITNs and investigates the reason why some ITNs are able to control emotional stressors.

2.8. Nursing Care

Many authors have placed high emphasis on the emotional aspects of nursing (James, 1989, 1992; Smith, 1992; Phillips, 1996; Staden, 1998; Hunter, 2001). Nursing literature

presents the term 'emotional labour'. This labour is not easy and it demands substantial effort (James, 1989). This effort is mostly related to giving the patient something personal (Hochschild, 1983; James, 1989), something related to attention; concern; something to protect and save him; to keep him relaxed; comfortable and pain-free as much as possible. The current study emphasizes that the emotional labour (James, 1989, 1992; Smith 1992) is a result of the emotional care provided by nurses.

This study differentiates between two interrelated dimensions of nursing care. Technical care focuses on doing physical nursing interventions such as patient's feeding, bathing, positioning, dressing, ambulating, handling machines and equipments, etc. This type of care is visible, tangible, and easily measurable. The other dimension is emotional care which focuses on providing emotional care during nursing interventions such as keeping the patient comfortable, calm, relaxed and secured; being available to the patient whenever needed; and being sensitive to the patient's needs. In general, it is about being able to meet the patient's emotional needs. This type of care is invisible and not measurable (Hochschild, 1983). Patients best recognise emotional care when it is an honest and spontaneous quality of the nurse. Patients will value, appreciate and respect nurses more when they feel the effect of the emotional care.

Lawler (1991) sees nursing as a feminine profession, in which nurses acquire knowledge by experience and practice. Nurses cross social boundaries and break taboos throughout their careers. They are exposed to situations, which challenges them to change their socio-cultural attitudes in order to care for the patient's body including sensitive and intimate organs. Nurses are to care for naked patients of the opposite sex. Such challenges urge

them to learn ways that allow them to care for patients under extraordinary circumstances and conditions such as is the case in ITUs.

Lawler (1991) studied the effect of the first sponge bath on nursing students. It is obvious that sponge bath is a sensitive and routine nursing task. It is sensitive because the nurses are exposed to human bodies (sometimes of the opposite sex). This is compounded by the fact that they have never been exposed to before. Students are rarely taught how to handle the psycho-emotional aspect of such situations. It is a routine task because it is done at least once a day.

In Lawler's investigation, students expressed a variety of feelings, such as embarrassment, lack of social competence and fear. These feelings were described as traumatic for students exposed to them for long periods.

Lawler (1991) cite from Berry study, 'I remember feeling shamed and confused; my hands felt stiff, cold, awkward and useless. A bed bath can be embarrassing for the patient at the best of times--but far worse when the nurse herself [sic] is embarrassed' (Berry, 1986. p. 56 in Lawler, 1991).

The nursing students' feelings in Lawler's study are negative feelings of embarrassment, shame and fear. Lawler's students also showed strong feelings because they were disorganized in their work, they lacked knowledge and skills in dealing with new situations, and lacked of experience of such situations. The students in Lawler's study tried to present the nursing culture of a professional nurse, which recommends an absence of emotional signs. Experienced nurses are more commonly able to control their

emotions. A professional nurse is not expected to demonstrate feelings of sadness, grief or even happiness.

Lawler's study (1991) benefits the current study in two aspects: first, Lawler chose sponge bath--a sensitive and common procedure, which must be performed by all staff nurses. Nevertheless, there are many other situations, which are equally sensitive and frequent for nurses in their wards. Situations like cardiac arrest, patient death, and the admission of critically ill patients among others. Secondly, Lawler explored a variety of mostly negative feelings of nursing student and these feelings are realistic in such situations.

Lawler's (1991) study focused on the emotional responses of nursing students who lacked knowledge, experience and skills required of nurses for nursing procedures. The students would later practice nursing and encounter more difficulties and complicated nursing situations. Sponge bath would be a simple procedure compared to endotracheal intubation, cardio-pulmonary resuscitation, preparing a wide range of medications and so on. According to the current study, choosing any one of sensitive nursing procedure would not give an accurate account of the feelings of nurses. The more the procedures one chooses, the more accurate an account of feelings one will get.

A study by Smith (1992) emphasized that nursing care requires love, labour and emotion. Caring (emotionally) is also a sort of labour, which demands effort and energy. It is not just a part of woman's package of work; it requires specialist learning.

Nursing students reported in Smith's (1992) investigation that in demanding situations resulting from heavy workloads, low staffing levels and a high turnover of acutely-ill patients, nurses experienced stress, physical tiredness and depression because of the feeling of inability to finish the work. Some students felt stress and anxiety due to the fear that a patient may have cardiac arrest. Others reported feelings of inadequacy, unsureness and defensiveness due to lack of support from trained staff. Boredom, frustration and guilt were also felt following heavy workloads. Feelings of fear of aggressive patients, of failure to cope with offensive patients, and of guilt when persuading a family to take an abusive and uncooperative patient home were also reported by students.

Smith's (1992) students saw the ideal nurse as one who demonstrates calmness, competency, kindness, and understanding, and as one who can manage technical care as well as emotional support.

Smith's study benefits this study as it provides a comparison platform in two aspects: first, it presents diverse situations faced by nursing students in clinical settings: caring for aggressive patients, demanding patients, patients with high risk to cardiac arrest. Some of these situations are similar to that of the current study. Second, Smith (1992) explored a variety of nursing students' feelings such as frustration, fear, depression, failure and guilt. ITNs often share similar feelings.

Smith's study was conducted on nursing students. Nursing students generally lack experience, skills and knowledge to deal with emotionally demanding situations. Moreover, it was conducted in non-intensive therapy wards such as male surgical wards,

female medical wards, oncology wards and cardiology wards. There is a need to study nurses' feelings toward different situations in the intensive therapy context. The current study is aimed at exploring the nurses' emotional responses and changes to situations within the intensive therapy context, and analysing of the impact of these changes on nursing care.

Caring may generate uncomfortable emotions. Menzies (1970) proposed that coping mechanisms provided nurses with ways of reacting to stressful situations so as to distance themselves from uncomfortable emotions. The current study suggests that some types of emotional changes occur within ITNs to accommodate the emotional stressors which occur in the course of nursing care.

As nurses carry out nursing care (technical and emotional) they are exposed to multiple stressors such as sharing a patient's prolonged severe pain and suffering (Maeve, 1998); loss of body part; death; and dying (Nagy, 1998). Although Maeve and Nagy are speaking from different nursing backgrounds, both recognise the presence of emotional stressors that affect nurses lives.

Emotional stressors are also present in other nursing contexts. For example, in mental health nursing, the emotional stressor of a patient's suicide exerts a need for emotional support for nurses. Nurses are in need of training, formal assessment of patients at risk (Midence, et al. 1996) in order to prevent a patient from committing suicide. Suicide has a clear and visible impact on nursing staff and on feelings of failure, guilt, and shame (Flinn, et al., 1978). Nurses may feel less empathetic and less appreciative of a patient's experience when they feel that nobody cares about them (Reynolds, 2000).

In a review of many contemporary nursing textbooks such as Medical Surgical Nursing (Brunner & Suddarth, 2000), Critical Care Nursing (Hudak, et al. 1998), Fundamentals of Nursing (Potter & Perry, 1997), Community Health Nursing (Smith & Maurer, 2000), address the importance of the psycho-social aspect of nursing care. But, they do not explain the mechanism of application of such care. This study proposes to show that exposure to stressful situations (contextual, interactional and emotional) may have an impact on the emotions of nurses and on nursing care.

2.9. Culture

Culture is a core concept in nursing. Culture can be viewed as:

“The learned, shared, and transmitted values, beliefs, norms, and life ways of a particular group that guides their thinking, decisions, and actions in patterned ways” (Leininger, 2001. p.47).

Culture has an impact on how nurses think, decide and act. It provides nurses with an educational system to form values, facilitate norms and organise their thinking and decision-making abilities. Cultural beliefs are part of any culture. Culture sets the tone of responses to various life situations. Nurses working in ITUs may encounter many stressful situations, consequently it is suggested that their abilities to work and respond properly may be affected by their own cultural background, training and discipline.

The nurse theorist Leininger (2001) recognizes the importance of culture to contemporary nursing care. She has coined the concept of culture care, which she defines as:

“The subjectively or objectively learned and transmitted values, beliefs, and patterned life ways that assist, support, facilitate, or enable another individual or

group to maintain their well-being, health, to improve their human conditions and life ways, or to deal with illness, handicaps or death” (Leininger, 2001. p. 47)

Culture care as presented by Leininger is a very crucial construct in nursing care in many contexts but especially in ITUs. For in such a demanding context, it is necessary to provide patients with the nursing care that is compatible with their values, norms and beliefs especially when they cannot realise these for themselves. Leininger urges nurses to study the cultural background of their patients in terms of religion, kinship, education, economics and other cultural values that may influence the patient’s behaviour.

The current study acknowledges Leininger’s culture care theory (2001) that focuses on the importance of understanding the patient’s cultural background. It can be applied not only in studying cultural factors affecting patient-care, but also the cultural values and principles that may influence nurses working in ITUs in Jordan. The theory encompasses all types of cultures and peoples. Understanding the cultural values and principles is necessary to help to inform a study of nurses' emotions whilst working in ITUs in Jordan.

2.10. Jordan Cultural Context

According to Doob (2000), culture has two types of products: material and non-material. The material products consist of physical objects that people make and use e.g. skyscraper, clothes and other things ranging from wood stool and weapons to most sophisticated computers, while non-material products are intangible; they are the foundation of the culture. They include beliefs, technology, values, norms, symbols (Doob, 2000) and language. According to Gubser (1983), Jordan is predominantly a Muslim nation. According to Gubser (1983), Mannheim & Winter (1998), and Encyclopaedia Britannica

(2000) the majority religious affinity is Islam comprising Sunni Muslims that represent 90 percent of the total population with the remaining 10% being Shi'ite Muslims, Druze and Greek Orthodox/Greek Catholic Christians (the latter account for around 8% of the population) Mannheim & Winter (1998). According to Gubser (1983), the majority of the Jordanian population adhere to Islamic faith and Islam is recognized as the official religion of the country with the government facilitating and supervising over religious establishments. Formal teaching through the Ministry of Education (MOE) has a big role in shaping the culture of Jordanians. The first and the main aim of Jordanian teaching is to build a citizen who believes in his God, attached to his believes and Islamic values (MOE). Students in public and private schools take religious education as an essential subject from kindergarten to the twelfth grade. At university level, many Jordanian universities include Islamic teaching as an optional subject for all Muslim students as a supplementary course.

Jordan, in a broad sense, has an Arabic-Islamic culture. Most Jordanians share Arabic language, traditions, values and norms. Despite some religious variation, Jordanians live peacefully under what we may call the universal cultural principles of Jordan. They respect one another and other parties' beliefs. For example, Christians usually do not eat publicly during the Muslim fasting month of Ramadan, while many Muslims share happiness and joy with Christians in celebrating Christmas. Jordanian culture is a mix of cultures of all people living in Jordan, who share the same values, norms and respect each other's beliefs. Beliefs are part of culture (Leininger, 2001; Doob, 2000).

In this study of the effect of emotional changes on ITNs from Jordanian perspective, I do

not try to present Islam as the only and the exclusive reference to Jordanian culture but as a main source of influence on the culture.

According to Gade, (2008) Islam has both ritual and social transactional branches. The *Sunnah* (which is the expressive behaviour of the Prophet Muhammad in a form of his sayings, actions, and tacit approval and disapproval) is the second authoritative guide for normative conduct after the Quran for Muslims. Many Sunnah statements specify prophetic injunction related to emotional states such as traditions that promote kindness and gentleness toward the traditions of others thereby discouraging acting in anger. In Islam, actions are assessed based on different levels of acceptability. There are those that are required, recommended, permitted, tolerated and finally those that are forbidden (Gade, 2008).

Both the Quran and the Sunnah highlight emotions as an access to, and an expression of a moral order. Early traditions of piety preserve and transmit exemplary models of moral and affective guidance into Muslim traditions worldwide. Gade (2008) further suggests that emotions as expressive of ethical conduct and experiences have been further intellectualised in influential systems of thought and practice. These points are pertinent in the present study of changes in nurses' emotions as it is anticipated that culture education and experience will be relevant.

Culture at a general level it is acknowledged will have an influence on the intensive therapy context. From my experience and understanding of ITU nursing in Jordan the following cultural principles and values seems to be the most relevant and worthy of brief consideration here:

- 1) Patience
- 2) Hope
- 3) Repression of anger
- 4) Forgiveness
- 5) Empathy
- 6) Kindness
- 7) Brotherhood

2.11. Patience

The virtue of patience can be defined as 'forbearance'; it is a key weapon in one's arsenal against anger (Corrigan, 2008). Patience is a quality necessary for a Muslim's life. A Muslim is asked to tolerate difficulties without becoming bored, to wait patiently for results and to face all problems with a secure belief in Allah.

Muslims believe that the nature of life on Earth requires continuous patience until Judgement day, when there will be an appraisal of each individual's behaviour. Everyone is continually being tested with problems, pains, sufferings and fears during their worldly life.

Patience is seen as an indicator of religious maturity. Islam sees the level of patience-testing as equivalent to the level of maturity and religious faith. Therefore, Islam praises patient Muslims for their tolerance of pain and suffering which is an indicator of strong faith, which is recommended during the course of sickness. Similarly, nurses are recommended by Islamic values to have patience in all conditions and situations related to

nursing care.

2.12. Hope

A Muslim must always optimistic and never gives up hope.

2.13. Repression of Anger

Islam encourages repression of anger for the sake of Allah. This repression is an indication of strong faith. Abu Hurairah reported Prophet Mohammed (PBUH) saying: “The strong one is not he who knocks out his adversary; the strong one is he who keeps control over his temper (anger)” (Sahih Al Bukhari, 5649).

Islam strongly encourages self-control of anger, which is seen as a part of faith. When a Muslim asked the Prophet (PBUH) for advice, he was told, “Do not be over-powered by anger.” The man repeated his request three times, yet every time he was told: “Do not be over-powered by anger” (Sahih al-Bukhari, 5651).

2.14. Forgiveness

Islam asks Muslims to forgive each other if someone has committed a mistake and to be always positive in their thinking.

2.15. Empathy (mercy)

Islam encourages empathy among Muslims, viewing Muslims as one body; any hurt to any part of the body will affect the whole body. The Prophet (PBUH) said:

“Muslims in their mutual love, kindness and compassion are like the human body. When one of its parts is in agony the entire body feels the pain both in sleeplessness and fever” (Sahih al-Bukhari, 5552).

Islamic empathy reaches a state in which “none is a perfect Muslim until he/she desires for his Muslim brother/sister that he desires for him/herself” (Sahih al-Bukhari, 12). Islam emphasizes empathy, which is closely related to Allah’s mercy.

The Prophet (PBUH) excluded non-empathetic persons from Muslim fellowship, “A person who has no compassion for our children, and does not honour our elderly is not one of us” (Sonan al-Tirmizi, 1842).

2.16. Kindness

Another facet of Muslim consciousness is kindness. The Prophet (PBUH) explains, “Allah is kind and likes kindness in all things” (Sahih al-Bukhari, 5565). Furthermore, “Allah is kind and likes kindness, and bestows upon kindness which He does not bestow upon harshness or on anything else other than kindness and tenderness” (Sahih Muslim, 4697). In addition, “Where there is softness it beautifies that thing, and from which it is taken away, it snatches its glamour” (Sahih Muslim, 4698).

2.17. Modesty (Haya)

Modesty is a personal quality of honest Muslims. It reflects a high level of faith and discipline. A person who is reluctant to commit sin, shows a flushing face if conscious of

a mistake. If persons are insensitive in their feelings, apathetic in their behaviour, or do not show shyness, no power can stop them committing evil. The Prophet says, “Modesty (*haya*) results in good alone and nothing else” (Sahih al-Bukhari, 5652). Moreover, “Shyness and modesty are good all in all” (Sahih Muslim, 54).

2.18. Brotherhood

Brotherhood is a fundamental characteristic of relationship among Muslims. The Prophet (PBUH) exemplified the relationships among Muslims when he cautioned:

“Do not be envious of other Muslims; do not overbid at auctions (in business) against another Muslim; do not go against a Muslim and forsake him; do not make an offer during a pending transaction. O, servants of Allah! Be like brothers with each other; A Muslim is the brother of another Muslim; do not hurt him, or look down upon him or bring shame on him. Piety is a matter of the heart (the Prophet PBUH, repeated it thrice). It is enough evil for a person to look down upon his Muslim brother. The blood, property and honour of a Muslim are inviolable to a Muslim” (Sahih Muslim, 4650)

Cultural principles (from the researcher's perspective as a Jordanian and as a Muslim) may be affected to a great degree by Islamic faith, which in turn has a great impact on the behaviour of Jordanians; Jordanian culture encourages them to be patient to confront and manage difficulties, with the strong faith in Allah.

These cultural principles, in Jordan, oblige Jordanians to repress their anger, forgive other peoples wrongdoing and to show maximum empathy and kindness to others. These qualities of patience, hope, anger repression, forgiveness, empathy, kindness, brotherhood and modesty may be helpful for nurses in handling work in stressful environment such as intensive therapy. There is debate within the cultural literature about these qualities, but such debate is beyond the scope of this study.

In summary, culture plays a very important role in the life of Jordanian nurses. Their actions, reactions, behaviour, and attitudes are likely to be influenced by culture. Jordanian culture encourages nurses to attain good qualities such as patience, hope, forgiveness, empathy, kindness, modesty, and the repression of anger. This study proposes to show that these qualities may play an important role in nurses' ability to deal with the stressful ITU environment. At the same time, they also modify or mitigate the impact of stressors on their emotions. These qualities are highly supported by Jordanian culture. However, these qualities are not limited to Jordanian culture only; they may also be applicable to other cultures as determined by the moral system presented in those cultures. The main idea is that if the nurses adopt the qualities presented in the above section, they may become more capable of dealing with emotional stressors and this can have a positive impact on their emotional changes.

2.19. Conclusion

Jordanian culture encourages nurses to acquire many qualities, which could help them in dealing with stressors and reducing their destructive effects. As the ITNs are part of this Jordanian community, they adhere to these universal cultural principles and use these rules to regulate their lives including the working hours. These principles can be used as adaptive strategies for nurses to face the intolerable stressors prevalent in ITUs. These principles and qualities bear some resemblance to the feeling rules of Hochschild (1983) in shaping ITNs' emotional responses. However, the main focus of the current study is to understand honest and spontaneous emotions of ITNs.

Many authors have addressed various aspects of intensive therapy nursing such as stress in ITUs (Clarke, 1984a; Vachon & Pakes, 1985; Foxall et al., 1990; White & Tonkin, 1991; Stechmiller & Cheek, 2002), coping strategies of ITNs (Clarke, 1984b. Dewe, 1987), grief (Rashotte et al., 1997; Saunders & Valente 1994. Spencer 1994), burnout (Stephen, 1998; Liple, 1998), but none of them has addressed the impact of stressors on nurses' emotions within the intensive therapy context.

Nurses in an intensive therapy context face multiple stressors. These stressors are categorised into three types: contextual, interactional and emotional. Contextual stressors originate from the ITU environment, while interactional stressors originate from nurses' interpersonal relationships with patients, patient's relatives, colleagues and physicians. Emotional stressors are the result of both contextual and interactional stressors on nurses' emotions. The experience of stress is usually described in ways associated with emotions like anger, anxiety, depression, fear, grief, guilt, jealousy and shame. This study focuses on the emotional experience of stressors within Jordanian ITNs. 'Stress emotion' as termed by Lazarus (1982) is consistent with the term emotional stressor in the current study. Contextual, interactional and emotional stressors are the result of nurses' emotional and technical care. This study proposes a relationship between stressors and the emotional changes within nurses in the intensive therapy context.

This investigation intends to study the impact of stressful situations in ITUs on ITNs' emotions within Jordanian intensive therapy context. It is anticipated that some emotional changes may take place within nurses. These changes may take a form of alteration of feelings and this alteration may have an impact on the intensive therapy nursing care.

In the next chapter, the research methodology used throughout the process of investigation is presented. It explains the methodology used and the application of multiple triangulation in the current study, based on constructivism as a philosophical background.

CHAPTER THREE

RESEARCH PROCEDURES AND METHODOLOGY

3.1 Introduction

This chapter describes the methodology used in the current study. The description includes: research design, triangulation, research techniques and procedures in three phases of sampling and data collection, data analyses, research rigour, translation procedures and ethical considerations.

The aim of this study is to explore some stressful emotional situations as well as the nurses' perceived emotions in the ITUs. It is meant to identify highly meaningful emotions of nurses, to investigate emotional changes and the impact of emotions on nurses and nursing care.

The current study is divided into three interrelated phases. Each phase is a prerequisite to the next. Also, all phases complement each other to form the whole study.

The first phase involved observations and structured discussions with three ITNs working in different intensive therapy settings; Adult Intensive Therapy Unit (AITU), Paediatric Intensive Therapy Unit (PITU) and Post-Cardiac Surgery Unit (PCSU).

The three ITNs were Jordanians, with many years of experience in intensive therapy nursing. This period was intended to describe the range of emotions experienced by these nurses while working in intensive therapy contexts.

The second phase involved 73 ITNs from three different hospitals; a public hospital, a university hospital and a private hospital. This phase aimed to identify a range of “highly meaningful feelings”, as perceived by ITNs.

The final phase involved nine ITNs who were selected from the participants in the second phase. The nine nurses were chosen based on experience in their current post. This phase was intended to carry out an in-depth exploration of the emotional changes the ITNs had experienced and the impact of these changes on nursing care.

3.2. Research Design

In this study reality is seen as a subjective identity, multifaceted and ever changing. The possibility is there to study some aspects, views, or angles of reality-subjective methods. Truth as reality is context-related and ever changing. In each triangulation study, the findings should reveal a new understanding of the phenomenon. Although this understanding may change over time or commensurate with contexts, it illuminates a unique presentation of the phenomenon at the time. The current study is framed within a ‘constructivist paradigm’, in which knowledge and truth are the results of the perspective from which they are created by mind, they are not simply discovered (Schwandt, 1994).

Knowledge is an active operation in which the mind processes and forms understanding:

“Constructivism means that human beings do not find or discover knowledge so much as construct or make it. We invent concepts, models, and schemes to make sense of experience and, further, we continually test and modify these constructions in the light of new experience” (Schwandt, 1994. p. 126).

The ‘constructivist paradigm’ is a wide-ranging eclectic framework (Guba and Lincoln, 1989). It attempts to make sense of, or interpret people’s experience in a natural context.

As a result, it was concluded that at the end of the current study, that the nature of construction depends upon the different ranges of information available and on how this information is processed using statistics and mental processes. The study employs a large number of data collections, ranging from passive observation to frequent interviewing, self-reporting questionnaire, in-depth interviewing in order to build up constructive procedures based on nurses' perceived emotional experiences.

The multi-phase design was used in the current study in order to attempt an in-depth understanding and exploration of the phenomenon under investigation. The study particularly focuses on the existence of emotional changes within ITNs and the effects of these changes on nursing care. The current study's findings can potentially allow nursing managers, educators and researchers to help ITNs' develop their emotional changes and to foster the positive effects thereof.

3.3. Triangulation

This research builds up knowledge using a triangulation approach in order to accomplish objectives as stated in the first chapter. The following illustrates the multiple triangulation methods used.

A- Triangulation of Data Sources: Data source triangulation is the use of more than one source of data in a single study. There are three types of data source triangulation pertinent to the current research: 1) time, 2) space and 3) person (Denzin, 1970, 1989). Time triangulation is the collection of data at different points of time. Space triangulation

is the collection of data at more than one site and person triangulation is the collection of data from more than one personal level (person, family, and group).

In this study, the data collection was triangulated at the level of time; data was collected from all working shifts in all research phases. This included a variety of experienced nurses working during different working hours. Doing so enriched data with valuable information pertinent to ITNs in all working shifts (these shifts were bound to differences in the quantity of work, and the level of interactions with other workers). This is because each working shift had different duties and responsibilities. For example, most of the works done in the morning shifts included rounds, major procedures and health care plans, while evening and night shifts focused on the application of health care plans and on the preparation of patients for morning shift procedures, operations and rounds.

Data collection was also triangulated at the level of space. It was collected from three different intensive therapy contexts: adult ITU, paediatric ITU and post-cardiac surgery unit in the first phase. In the second and third phases, data was collected from three different sectors; public, private, and university sectors in order to present a wide range of ITNs from different levels of quality of care and various levels of technological advancement. It was anticipated that collecting data at different times and locations, would enable a clearer and more complete picture (Denzin & Lincoln, 1994) of emotional changes within ITNs to be obtained. This is because people in the low socioeconomic class tend to resort to the public sector of health care facilities, while people from intermediate and high socioeconomic classes prefer university or private sectors of health care facilities. Because of this, the current study included ITNs' care for patients of different socioeconomic classes. Data collection at different times and locations from

ITNs that care for patients from different socioeconomic classes may enhance the validation (Kimchi, et al. 1991) and confirmation (Denzin, 1970, 1989) of the findings of the current study. This demands careful planning of data-source triangulation (Streubert & Carpenter, 2003) of the current investigation.

B- Triangulation of Unit of Analysis: if data is collected from two or more sources, the analysis may need different units of analysis. The current research utilised both qualitative and quantitative techniques of analysis throughout the investigation. In the first and third phases, qualitative analysis was employed while in the second phase quantitative analysis was used. This is consistent with the data collection methods used in each phase. Passive observations were used in the first phase and interviews were conducted in the first and the third phases as these are better analysed using qualitative techniques. The questionnaire which was used in the second phase called for quantitative analyses. The use of more than one approach of data analysis may be seen as an important item for the purpose of validation (Kimchi, et al. 1990) over the three phases. Each phase was validated by the next. The appropriateness of the questionnaire items was a validation of the first phase data analysis, while the development and the suitability of the interview guide was a validation of the second phase data analysis.

The following example will illustrate the process of validation in the current study: in a situation of caring for critically ill patient, nurses reported a feeling of responsibility in the first phase. Therefore, the feeling of responsibility to care for critically ill patient was included in the questionnaire items of the second phase. The appropriateness of the questionnaire item allowed participating nurses to report their responses within the scope of low, moderate, or highly meaningful emotions. It validated the suitability of the

inclusion of the item in the questionnaire. However, if it was not an appropriate item, the participating nurses would have reported it as not applicable. Also, the suitability of the interview guide items in the third phase, in which the participating nurses were able to answer the questions of the third phase that related to changes in their feelings supported the second phase findings and analysis.

C- Triangulation of Methods: Multiple triangulation (Mitchell, 1986) was used in the current study. It employed between-methods triangulation with sequential implementation (Denzin, 1989) in which the study is planned in three interrelated phases. (Refer to Diagram 3.1 p. 53 and Table 3.1 on p. 55.)

Sequential implementation is one in which one method is completed and then the second method is planned and applied upon the findings of the previous method and so on. The first phase employed a passive observation approach. It was followed by interviews. The second method was a self-reporting questionnaire applied on the results of the first method. After that, the third method of in-depth interviews was planned and applied on the results of the second method's findings.

There are many examples in the nursing literature of the use of between-methods triangulation in sequential implementation. For example, Morrison (1997) intended to identify nursing management diagnosis via two sequential phases of qualitative and quantitative methods. In the first phase, Morrison (1997) used qualitative focus group interviews with 35 nursing managers in order to identify the problems encountered and judgements made by nursing managers. In interviews, the nursing managers described the problems and their judgement, which allowed a list of potential management diagnoses to

be formulated. Then, in the second phase, Morrison (1997) employed a three-round Delphi survey of nursing managers using the questionnaire developed from the first phase to address management problems and judgements. The first round was aimed at the validation of problems and judgements of the first phase. The second round was meant to generate a nursing management diagnosis and the last round was meant to validate the second round nursing management diagnosis. At the end of the study, Morrison (1997) was able to validate 66 nursing management diagnoses out of 72 formulated in the second round. The 72 diagnoses were derived from 147 nursing problems and judgements, which were established in the findings of the first phase. The current research employed the same approach of between-methods triangulation with sequential implementation.

Fontana (1996) also employed triangulation to explore a patient's perception of vigor in heart failure and the role of planned exercise in these perceptions. Fontana's analyses showed the importance of the person-environment interaction to the heart failure patient's perception of vigor, which has some implications for nursing research and practice in considering the effects of this interaction on chronic patient health. Another example, Shih, et al. (2001) used triangulation in developing and evaluating a Master of Science program in Nursing Degree Students (MSNDS) of spiritual care in Taiwan. The course was developed over two years and had four stages: developmental stage, lecture stage, clinical stage, and a presentation-appraisal stage. The participants (n=22) provided spiritual care for patients in medical-surgical, obstetrics/gynaecology, paediatrics and elderly. The findings showed that all participants considered that the programme was helpful in assisting them to provide spiritual care for their patients in the hospital or the community.

Morrison (1997), Fontana (1996) and Shih, et.al (2001) employed between-methods triangulation using sequential implementation, however each of the previous studies employed different research techniques that suited their purposes. The current study also uses multiple triangulation using sequential implementation. The first phase aimed to explore some emotional situations which nurses encounter in ITU. The emphasis of the second phase was to identify the range of emotions that were highly meaningful to ITNs. The third phase was intended to explore the emotional changes as perceived by ITNs.

It is crucial to justify the purpose of using triangulation, which would empower the research design:

“When researchers combine methods at design level, they should consider the purpose of the research and make a cogent argument for using each method. They should decide whether the question calls for simultaneous or sequential implementation of the two methods” (Morse, 1991).

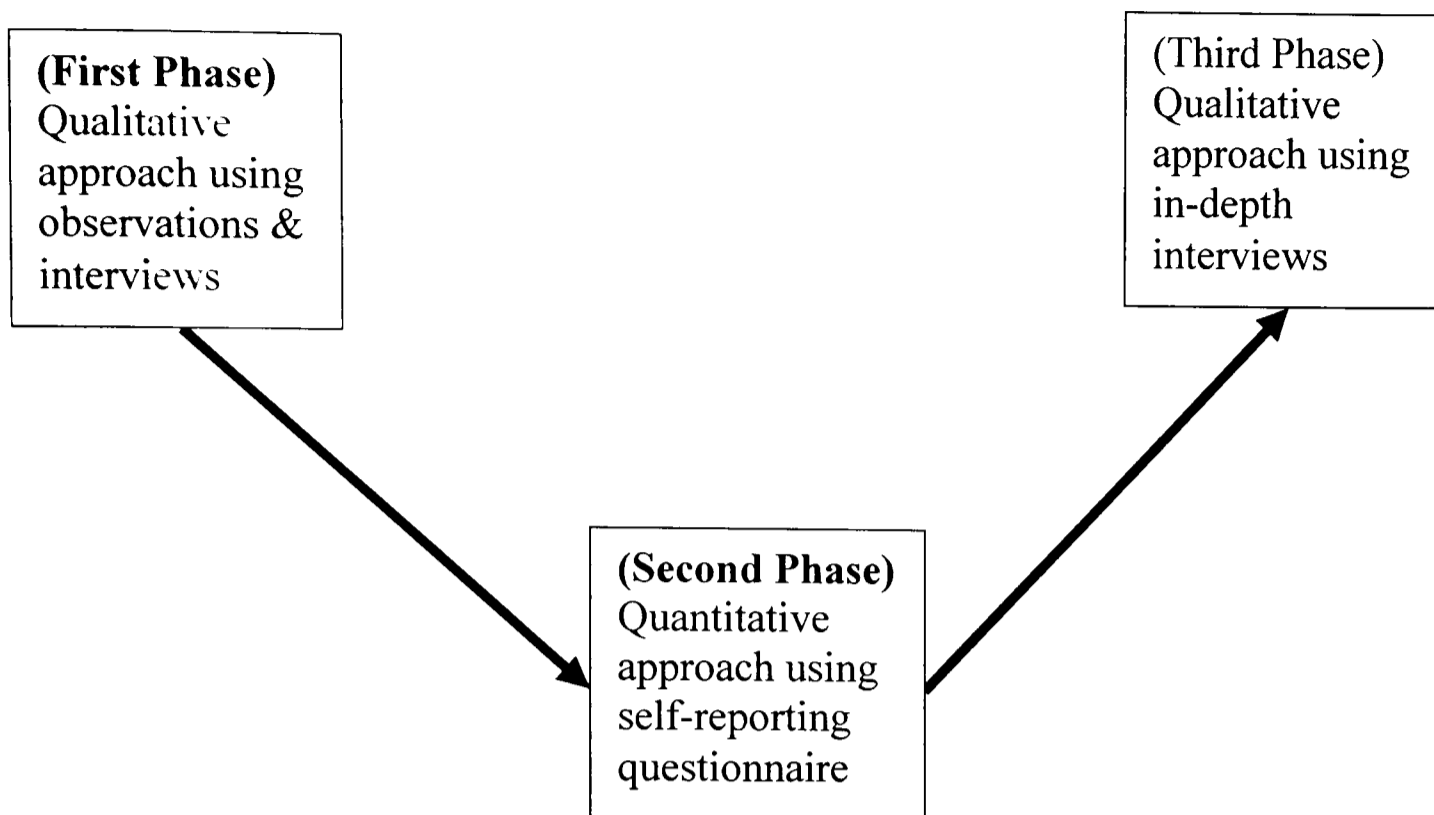
There are two main goals in selecting triangulation as a research approach; the goal of completeness and/or confirmation:

“Appropriately used, triangulation might enhance the completeness and confirmation of data in research findings of qualitative research. The use of both quantitative and qualitative strategies in the same study is a viable option to obtain complementary findings and to strengthen research results. However, researchers must articulate why the strategy is being used, and how it enhances the study” (Boutain 2001, p. 257) (cited in Streubert & Carpenter 2003, p. 308).

In the current study, both qualitative and quantitative approaches were deliberately planned (diagram 3.1, and table 3.1) to serve the main purpose of the research.

Diagram 3.1 provides a simplified illustration of the methods of triangulation employed in this investigation. Triangulation has three interrelated phases.

Diagram 3.1: The three phases of triangulation approach



The arrows indicate to the path the study followed to reach the third phase.

Triangulation is a process of confirmation in which each research phase confirms the previous phase. For example, the ITNs who completed the questionnaire in the second phase confirmed the questionnaire items, which were the main findings of first phase. In the case of non-confirmation, the majority of nurses would tick on the item as not applicable or not meaningful. Ticking the items as meaningful could be interpreted as an indicator of confirmation of previous findings. Similarly, the third phase interviews would confirm the previous two phases; otherwise, the interviewer would ask questions that were ticked as either not applicable or unsuitable by the ITNs. Many researchers have used triangulation for the purpose of confirmation in their studies (Mitchell, 1986; Denzin, 1989; Mayers & Haase, 1989; Murphy, 1989; Fontana, 1996).

In the current research, triangulation is also employed to ensure completeness of findings. It provides breadth and depth to the investigation, offering a more accurate picture of the phenomenon (Denzin & Lincoln, 1994) of emotional changes. Triangulation also provided a more complete, holistic and real representation of the phenomenon of this study (Jick, 1979, 1983). In this study, and for the purpose of completeness, the data collected in each phase, was a prerequisite for the next phase. This went on until the whole picture became comprehensible by the integration of the three phases. The findings of the first phase were employed as components of the questionnaire items of the second phase. Also, the findings of the second phase were employed as the key components of the interview guide for the third phase. All of the three phases led to completeness of the findings.

In this study, triangulation was both time-consuming and expensive¹. Many other researchers highlighted similar limitations (Begley, 1996; Duffy, 1987; Mitchell, 1986). On the other hand, triangulation provided the complete picture of emotional changes within ITNs from different angles, situations, and contexts; and these increased the credibility of the study.

Table 3.1 (next page) gives a brief presentation of research techniques and procedures used in the current study. It also gives the details on each research techniques.

3.4. Research Procedures

¹ The researcher had to travel many times to Jordan in order to complete the three phases of data collection.

Table 3.1 shows a summary of the procedures and techniques for the whole investigation. It gives the time, the research methods used, the locations, the number of participants and the objectives of each phase.

Table 3.1. The summary of procedures and techniques

Phase	Time	Method	Location	Participants	Objectives
First Phase	February to April 2000	<u>Qualitative exploratory</u> using observations and interviews	Royal Hospital AITU, PITU, PCSU	3	a) To describe the range of emotions experienced by ITNs. b) To formulate a questionnaire containing the nurses' emotions in ITU.
Second Phase	April to June 2001	<u>Quantitative</u> using self-reporting questionnaire	Three Hospitals Public, Private, University	73	a) To identify the range of emotions that is highly meaningful. b) To formulate an interview guide for the third phase
Third Phase	January to February 2003	<u>Qualitative</u> using in-depth interviews based on interview guide	The same three hospitals	9	a) To explore the emotional changes within ITNs. b) To explore the impact of emotional changes on nurses and nursing care

The current research was designed to understand the phenomenon of emotional changes within its context and as perceived by ITNs. Many situations were encountered that were opposite to researcher's own feelings, beliefs and values. For example, some nurses reported a feeling of guilt when they missed a prayer, this feeling (guilt) was contrary to researcher's belief. Therefore the researcher presented the intensive therapy context as perceived by ITNs not as perceived by him. The researcher's input was in constructing a deep understanding of the phenomenon and in presenting it in a simple way through schemes, diagrams, graphs and models.

3.5. Data Collection Methods

Demographic data (Appendix V) was collected in all the three phases of the investigation. It consisted of: age, gender, marital status, number of children, children's age, education level, experience in nursing, experience in intensive therapy nursing and experience in the current position. These demographic data were expected to have an impact on nurses' work in ITU and in their responses to stressful situations.

3.6. Passive observations

In the first phase, a passive observation technique (Spradley, 1980) was employed to observe the ITNs in their working context. This gave the researcher an awareness of stressors that affect emotions, but seemed to go unnoticed (Spradley, 1980) by the ITNs. Passive observation was an important technique to identify the real-life situations encountered by nurses in ITUs.

Passive observation would increase the credibility of the current study as the data were collected from the natural context. The study also has high neutrality of data collection as the researcher was observing and recording situations that happened within ITU's which could affect nurses' emotions without interfering with work situations.

The researcher collected the data by himself, this gave rise to follow up hunches and leads that were further clarified during interviews. The researcher had been living in the same social context as the ITNs studied, and this observation easier. The researcher was also part of the culture being studied and felt the same as the nurses in the research context

(Atkinson & Hammersley, 1994; Boyle, 1994). This gave the researcher a better ability to understand and construct the reality of the emotional changes within ITNs.

In the current study, this observation technique had many difficulties: 1) Data collection was time consuming. The data was collected over three weeks of observation in different working shifts (including night shifts). 2) The need to maintain the privacy of participants. There were some situations in which this privacy was (unintentionally) affected. For example: some personal details of participants, such as when the participant goes to toilet was known. And some details concerning the participants' performance and what the participants did in their free time also affected the participant's privacy. Although these data were not necessary for the investigation, but in some way it affected the privacy of the participants. The study would like to acknowledge that complete privacy during observation techniques could be hardly achieved.

The research employed interview technique directly after the observation technique. It was conducted in the same working shift for immediate validation of the situation and immediate exploration of feelings. This was to avoid dependence on nurses' memory and recalling, in which the nurse might give a logical answer rather than a real (feeling) answer.

Data collection was undertaken by the researcher using a logbook (Appendix IV) to record the situations that triggered participants' emotions. The logbook was beneficial to document the situations that occurred, the people involved and the participants' activities. This directed the questions in the interview session, around the actual situation and the nurse's emotions towards all people on the scene, one by one.

3.7. Interviews (used in the first and third phases)

A successful qualitative interview may have an intimate and personal sharing of confidence with a trusted friend and the information given must be treated likewise, with respect (Morse & Field, 1996).

This research used semi-structured interviews. It was a useful technique that ensured the research obtained the required data, without forgetting questions and permitting a freedom of responses for the ITNs to explain the situation in their own words (Morse & Field, 1996). The current study developed the questions from the observed situations in the first phase and from the interview guide in the third phase. Interviews were conducted with a preset of open-ended questions. The participants had the freedom to express themselves. The questions were repeated if there was a misunderstanding from the participants. The interviews were conducted using the method of Morse & Field (1996, p. 77-78) and Pontin (2000, p. 189-199).

In the first phase, the researcher and the nurses knew each other. The researcher was perceived as a colleague more than a researcher. The matter of gaining trust in the relationship was already established, even prior to the commencement of the study. This point facilitated both the observation and the interview processes.

Using the interview guide (Appendix VII), the interview was piloted with one ITN who did not participate in the study, to check the clarity of questions and to test the recording

equipment. Everything operated well, however, the researcher always kept spare recording machine with extra batteries and cassettes.

The first phase of data collection was sensitive to participating ITNs because it had observations, therefore a written informed consent was obtained from the first phase participants. Verbal consent was obtained from ITNs in the second and third phases at the beginning of the interview, and the participants were informed about their right to participate or not to participate in the study and the right to withdraw from the interview at any time besides the confidentiality rights. All interviews were tape recorded with permission and were conducted within the intensive therapy setting, either in the staff rest room or in the in-charge office of the ITU. The intensive therapy managers were very helpful in allowing access to and use of their offices for research purposes.

3.8. Questionnaire (employed during the second phase)

A self-reporting questionnaire was used in the second phase of the study. The questionnaire technique revealed information that was difficult, if not impossible, to obtain by other means (Polit & Hungler 1995). Many human qualities such as feelings are hidden. It is difficult to observe these unless the participants wanted to demonstrate that quality. Usually “people’s actions do not always tell us about their state of mind” (Polit & Hungler, 1987, p. 228). Therefore, the easiest way to obtain accurate data about the people’ state of feeling was by directly questioning them using a self-reported questionnaire. This depended on how much the participants were willing to answer the questionnaire.

The questionnaire used in this study was prepared according to the suggestions of Polit & Hungler (1995). Some of these suggestions are: 1) questions should be clearly worded. 2) the researcher should consider the respondents' ability to give information. 3) the researcher should strive to be courteous, considerate, and sensitive to the needs and rights of respondents. 4) try to state the questions in the affirmative rather than the negative to avoid sentences with double negatives. 5) avoid long sentences or phrases. 6) avoid technical terms. 7) avoid double-barrelled questions that contain two distinct ideas or concepts. 8) avoid leading questions that suggest a particular kind of answer. (Polit & Hungler, 1995, p. 351-354)

3.9. Questionnaire of ITNs' Emotions (QITNE)

The ultimate goal of the questionnaire was to identify the most meaningful feelings, as perceived by ITNs. The situations and the emotions analysed in the first phase were used to formulate the questionnaire items.

The questionnaire had two parts. Part one contained the same demographic questions as those in appendix V, and part two contained the questionnaire items (Appendix VI). The questionnaire was consisted of 172 items, including 2 repeated items, in order to test the questionnaire's reliability. Each question demanded an answer on a five point scale, as follows: 0=not applicable, 1=not meaningful, 2=low meaningful, 3=moderately meaningful and 4=highly meaningful.

Not applicable meant that the questionnaire item was not applicable to working conditions and situations.

Not meaningful meant that the emotion was not frequent, and/or not intense, and/or not important, and/or had no impact on the nurse.

Low meaningful meant that the emotion was less frequent, and/or less intense, and/or less important, and/or had less impact on the nurse.

Moderately meaningful meant that the emotion had moderate frequency, and/or moderate intensity, and/or moderate importance, and/or moderate impact on the nurse.

Highly meaningful meant that the emotion had high frequency, and/or high intensity, and/or high importance, and/or high impact on the nurse.

Each statement had two parts, one part related to the situation in ITU, and the other part to the perceived emotion of ITNs in this specific situation.

A professor of psychology from the University of Jordan checked the items for face validity by reading the items thoroughly. There were no major changes required. Cronbach's alpha coefficient¹ was (0.78) for the second phase which was checked by a statistician, the sample size for the second phase was 73 participants. Cronbach alpha gave an idea about the consistency of the questionnaire, in which the same participants answered the same question without their knowledge twice, Cronbach's alpha indicated to what extent the participants provided the same answer. After that an English language expert checked the items for language clarity. The questionnaire was piloted by two ITNs

¹ Cronbach's alpha coefficient is a measure of internal consistency of a test, based on the extent to which test takers who answer a test item one way respond to other items the same way.

to check for feasibility and any unexpected problems. Everything about piloting went well very good way, except one for single thing; it was rather too long. The best anticipated solution was to do a good follow up for data collection, in order to improve the response rate.

3.10. Inclusion and Access: First Phase Sample

Permission was granted for data collection from the hospital authorities through formal letters.

The sample of the first phase was selected from Jordanian ITNs who were working at a tertiary hospital in Oman. The ages of the participants were between 34 and 37 years.

The three participants were Muslim nurses who met the following selection criteria:

1) The participants must be working in an ITU (adult, paediatric or post-cardiac), in which the following characteristics should be maintained:

- It is a closed unit, not a ward setting;
- The unit is designed to support patients requiring mechanical ventilation;
- Most patients were admitted for mechanical ventilation;
- The average length of stay-hospitalisation, for the majority of patients, was equal to or more than 3 days.

2) The participants must have at least six months of experience working in the same unit. This was meant to exclude ITNs under orientation process (six months was a period which suggested that ITNs could function independently in the unit).

3) Participants must not be holding managerial positions, because managers usually do not provide direct nursing care to critically ill patients.

4) Participants must be qualified -at least- with a diploma in nursing. This was meant to exclude practical and aid nurses.

3.11. Inclusion and Access: Second Phase Sample

Permission was granted for data collection by the hospital authorities, through formal letters for the second and third phases.

In the second phase, all Jordanian Muslim ITNs working at three hospitals in Amman (Jordan) were included. These participants met the same selection criteria stated before.

3.12. Inclusion and Access: Third Phase Sample

Permission was granted for data collection by hospital authorities, through formal letters from the second phase.

Participants for this phase were selected because they were the most experienced Muslim nurses working in the ITUs. These ITNs were working in the same three hospitals in Amman. The ages of the participants ranged from 24 to 33 years. Three participants were selected from the university hospital, four from the public hospital and two from the private hospital. All of the selected participants completed the questionnaire in the second phase and met the selection criteria, which was presented in the earlier sections.

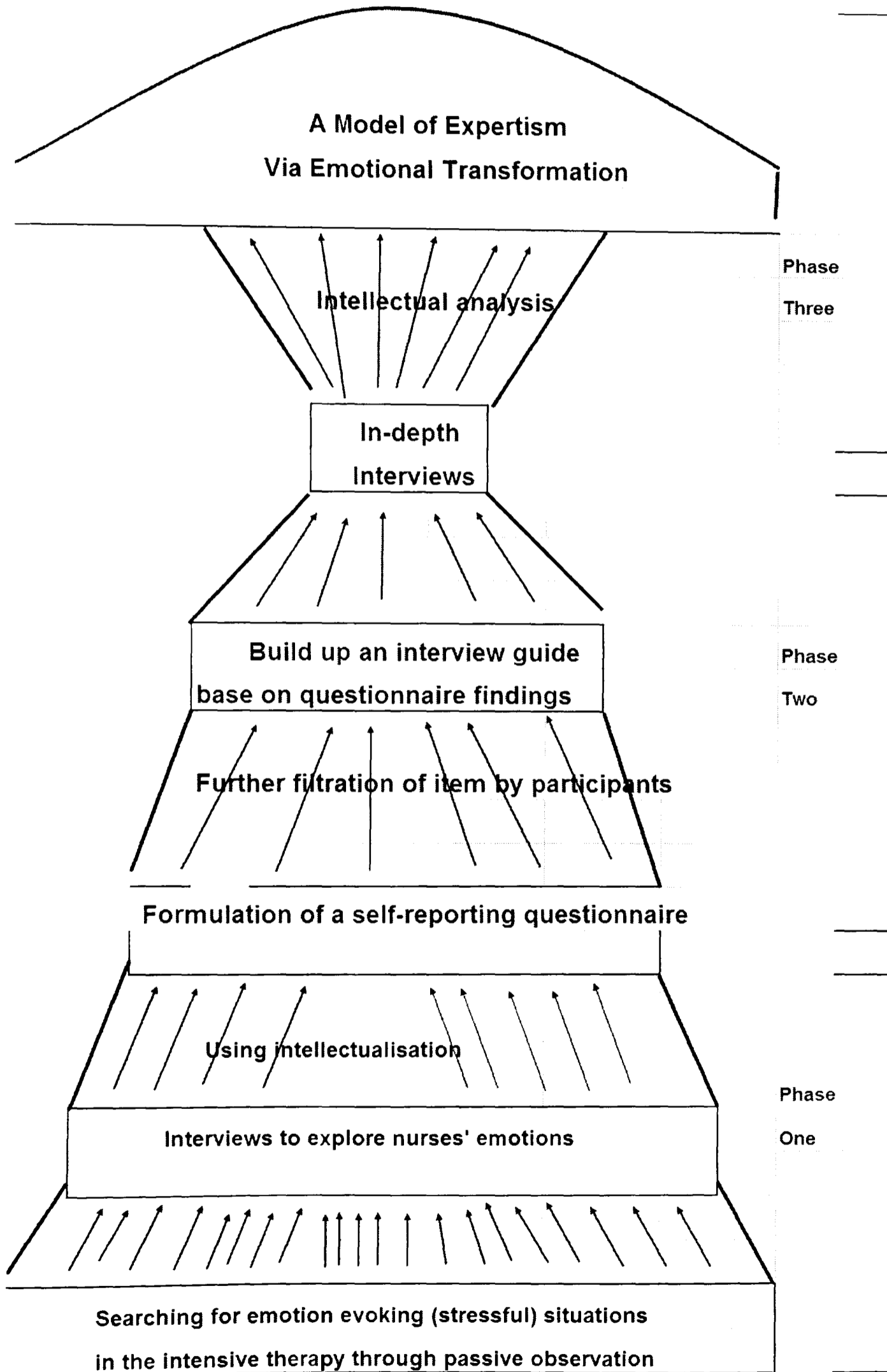
3.13. Interview Guide.

An interview guide (Appendix VII) was developed based on the second phase's findings. The highly meaningful emotions (Appendix VI) were used to determine the interview guide. Each item on the questionnaire had an emotion and a situation that was rated as highly meaningful by the ITNs who participated in the second phase of the study. In addition, the same demographic information was obtained again for each nurse in the third phase (Appendix IV).

3.14 Overall View of the Analytical Processes

We start with diagram 3.2 (next page) which shows the process of searching for an emotion-evoked situation in the intensive therapy context using observations. This step highlighted the main situations (stressful/not stressful) encountered by ITNs (explained in chapter four table 4.3). After that, each situation revealed was further explored with the ITNs through interviews. Through these interviews the nurses expressed their perceived

Diagram 3.2 shows the triangulation and analysis processes used at each step of the investigation.



emotions within observed stressful situations. An example to explain the first phase data collection and analysis is presented in appendix VIII. The observed situation was an advanced nursing procedure of assisting endotracheal intubation. During the interview, the questions to the participant were directed at his perceived emotions towards the patient, physicians, colleagues and relatives, in this particular situation, as perceived by the participant.

3.15. Data Analysis: First Phase

In appendix VIII, the left column is a transcription for one of the interviews during the first phase. The right column has the raw emotions of ITNs. Many statements were omitted such as *'I feel I have to be accurate'*, and *'feeling we save his life'* as they were not considered to be emotions but very general words; they could not be categorised as emotions, other examples are: *'feeling of high pressure'*, *'feeling of high collaboration'*, *'bad feeling towards the doctor'*; etc. On the other hand, many emotions such as feelings of anxiety, concentration, fear, relaxation, pride, empathy, comfort, and self-appreciation were accepted.

There were plenty of emotions that were specific to their situations. By analysing each emotion-situation separately, each emotion was made exclusive to a specific situation in the context in which it took place. These emergent emotions were further confirmed one by one with the help of a psychologist in order to decide whether the ITNs expressed an emotion or not. Appendix VIII presents an example of the inclusion/exclusion process. Out of 500 items built up from the raw statements, only 172 emotion-situation items were accepted as exclusive and context dependent.

It was anticipated that a large number of emotion-situations would be explored. It was necessary to further focus these emotion-situations. To do so, attempt was made to explore only the emotions meaningful to ITNs. The questionnaire was thus designed to meet this aim. The word meaningful is clarified in the questionnaire in terms of frequency, and/or intensity, and/or importance, and/or impact of each emotional item in relation to the individual ITN.

3.16. Data Analysis: Second Phase

Data gathered by questionnaire survey during the second phase were analysed using SPSS based on frequencies and percentages. Each item of the questionnaire was coded. For example, *comptran* stood for feeling of competency to transfer the patient out of the ITU. Then each item was entered into the computer using the following levels of meaningfulness of the emotions:

0=NA: for not applicable

1=Not: for not meaningful

2=Low: for low meaningful

3=Mod: for moderately meaningful

4=High: for highly meaningful

Data of each participant was entered into the computer accordingly. With this all participants had the frequencies and percentages of their data generated. The findings are reported in detail in chapter five along with the corresponding analysis.

3.17 Data Analysis: Third Phase

The content of the in-depth interviews was thoroughly read, and the direction of the change in each emotion was determined by the increase, decrease or lack of change in the emotion based on the ITN's answer. The impact of the change on nurses and nursing care was determined based on the ITNs' perception of the impact of this change on their nursing care. This helped to identify the third phase research findings. There were many patterns of emotional changes which had taken place over time (refer to chapter 7). They were identified in relation to knowledge, experience, and cultural training of the nurse.

Constructive thinking played a major role in the process of building the relationships between the different items in the study findings. The contents of the transcriptions of the third phase were read many times over in order to synthesize the relationships among the different situations and the different emotions. This led to the construction of a model based on the interrelationship between the stressful situations, ITNs' knowledge and experience, as well as ITNs' emotional changes. Chapter nine presents the details of this model.

3.18. Research Rigour

Rigour is viewed as “the striving for excellence in research through the use of discipline, scrupulous adherence to detail, and strict accuracy” (Crookes & Davies 1998, p. 327). Rigour is an essential criterion for judging the value of research in terms of methodology and findings. This study is a qualitative research in which the trustworthiness of research methods and findings are rigorously maintained. Trustworthiness may be applicable to

both qualitative and quantitative investigations, the criteria for trustworthiness are: credibility (truth value), applicability, consistency and neutrality (Lincoln and Guba, 1985). The following is a brief discussion of these criteria as applied to this research.

Credibility / truth value (Guba & Lincoln 1989) is enhanced by a detailed and accurate description of the setting and the research participants. It was related to internal validity of the data collected in quantitative studies. Internal validity was the extent to which the effects detected in the study were a true reflection of reality rather than being the result of the effects of extraneous variables (Crookes & Davies, 1998). In this investigation, attention was paid to make sure reality was as it was perceived by ITNs. No attempt was made to alter the situations or the participants' responses in order to assure high level of credibility.

Transferability (Guba & Lincoln, 1989) or applicability or fittingness refers to whether the findings could be applied to other contexts. It is related to the threat of external validity in quantitative studies. External validity is the extent to which study findings can be generalised beyond the sample used in the study (Crookes & Davies 1998). The current research concerned transferability within intensive therapy contexts, nevertheless the possibility for its transferability to similar stressful environments such as accident and emergency or operating theatres is there.

Confirmability (Guba & Lincoln, 1989) or neutrality refers to freedom from bias in research procedures and results. It may be achieved by the rigour in methodology by which reliability and validity are established. It is related to the objectivity of the researcher and the collection of data in quantitative studies. Objectivity is the extent to

which the researcher has tried to distance himself or herself from the data and to minimise his/her influence on the collected data (Crookes & Davies, 1998). It is impossible for any qualitative researcher to be completely free from bias. This is due to the nature of qualitative studies. However, all efforts have been made in this study to avoid bias. Interference with participants' responses was avoided; even when it seemed that a participant gave a response that was contradictory to those of others. In fact, it was seen upon analysis that contradictory responses played an important role in the discussion and building up of the resultant analytical model of expertism discussed later.

To summarize, the following strategies were adhered to in order to enhance the rigour of the research:

First, from the beginning of the study, there was a determination to maintain a clear audit of the whole study. Decisions, choices and insights were therefore, clearly documented and kept explicit.

Second, the obtained data was original in terms of context, research purpose and findings.

Third, academic supervision guided the research process.

3.19. Translation Procedures

This study was conducted in an Arabic speaking country but it included participants with a reasonable ability to speak English. This made it possible for interviews to be conducted either in English or in Arabic, whichever was more convenient to the

participants. ITNs in Jordan document their notes and communicate with each other in English during working time. There was need to transcribe the interviews from dialectic Arabic-English to English. Following the transcription a bilingual Arabic-English translator checked the translation for accuracy.

3.20. Ethical Considerations

Ethical considerations were important in this research. Adequate measures had been taken to protect the rights of ITNs. Careful attention was paid to research ethics and ethical issues that arose from the conducting the investigation. The following examples illustrate some of the role conflicts during the study:

- 1- Being a highly experienced ITN observing many cardiac arrest situations, the researcher could not help coming to the aid of the staff he was observing as part of the research.

This was obviously not helpful as it created a conflict of roles; it made the researcher both an observer and a participatory ITN.

- 2- Some ITNs were working in ITUs which lacked the required nursing standards for ITU. Many factors such as staff shortage and heavy-workload (mainly in public hospitals) affected the ITNs' performance. All effect was made to avoid criticising the ITNs in order to maintain relationship of trust with the staff being observed. This also created a feeling of role conflict between the researcher's role as a researcher and ITN at the same time.

During the phases of the research the following practices were followed:

- 1- Official access was obtained through official letters to each of the participating hospitals.
- 2- Written consent forms were obtained from all participants in the first phase, and verbal consents were obtained for the third phase.
- 3- Anonymity and confidentiality were maintained throughout the research process.
- 4- All participants knew that their participation was voluntary at all times, and they had the right to withdraw from the study at any time without retribution.
- 5- Verbal agreement and completion of the questionnaire were considered as participants' consent to participate in second phase of the study.
- 6- The participants' privacy was maintained throughout the study.

3.21. Conclusion

This investigation was designed to compile basic data and to explore a subject which has not been studied in the intensive therapy context. The most useful and meaningful evidence for further exploration and analyses had to be identified. To do so, the multiple triangulation (Mitchell, 1986) methodology was used. Between-method triangulation with sequential implementation (Denzin, 1989) was used. Triangulation in this study consisted of three inter-related phases. The first phase employed a qualitative exploratory approach using observations and interviews in order to describe the range of emotions experienced by ITNs, and to formulate a questionnaire that contains the nurses' emotions in ITU. This phase would meet the first and second objectives of the current study. The second phase

employed a quantitative approach using a self-reporting questionnaire (that was developed from first-phase findings), in order to identify the range of emotions that are highly meaningful to ITNs and to formulate an interview guide for the collection of data for the third phase. This phase was designed to meet the third and fourth objectives of the investigation. The final phase employed a qualitative approach using in-depth interviews based on an interview guide (developed on the basis of second phase findings), in order to explore the emotional changes within ITNs and to explore the impact of these changes on nurses and nursing care. This phase was designed to meet the fifth objective of the investigation.

Triangulation allowed the combining of different approaches. This assisted in confirming and completeness of the findings, and in overcoming the limitations of using a single strategy.

The next four chapters will give information about the three phases of triangulation described above.

CHAPTER FOUR

EXPLORATION OF POTENTIAL EMOTIONS OF ITNs

FIRST PHASE: FINDINGS AND ANALYSIS

The chapter aims to identify the potential emotions and their correlating situations as encountered by ITNs. As discussed in Chapter 3, these emotions and their correlating situations were explored by direct observations and interviews. This chapter presents the findings and analysis of the first phase followed by a conclusion.

4.1. Findings

The following part presents the profile of the ITNs who participated in the study and the situations revealed by observations in this phase.

4.2. Profile of the Participants

Three participants contributed to the data collection in this phase. Table (4.1) gives their demographic details. Two female ITNs aged 34 and 36 participated in the study. One of them was married and had three children. The third participant was a married male aged 38, with three children. The participants had extensive clinical nursing experience ranging from 12 to 15 years including a number of years in ITUs.

Table 4.1. Characteristics of the first phase participants

Demographic factor	First Participant (AITU)	Second Participant (PITU)	Third Participant (PCSU)	Average
1- Age (in years)	38 Y ¹	34 Y	36 Y	36 Y
2- Gender	Male	Female	Female	
3- Marital status :	Married	Single	Married	
4- Number of children	3	Not married	3	2
5- Age of the first child	8 Y	Nil	9 Y	8.5 Y
6- Age of the second child	7 Y	Nil	8 Y	7.5Y
7- Age of the third child	2 Y	Nil	7 Y	4.5Y
8- Educational level	B.Sc	B.Sc	Diploma.	
9- Experience in Nursing	15 Y	12Y	15Y	14 Y
10- Experience in ITU	6 Y	3 Y	15	8 Y
11- Experience in the current position	4 Y	3 Y	2 Y	3 Y

The following presents details of the observation and interview processes.

¹ Y stand for years

Table 4.2. Observation and interview processes

Participant	No of Interviews	Total Duration of interviews	Observation Period	Working shifts		
				Morning	Afternoon	Night
First Participant	10	66 minutes	5 days	2	2	1
Second participant	11	88 minutes	5 days	2	2	1
Third participant	10	38 minutes	5 days	2	2	1
Total	31	192 minutes	15 days	6	6	3

Each participant was observed for one week. A total of 15 working days totalling 120 working hours was spent on this. The observation for each participant was spread across the day with two in the morning, two in the afternoon and one during night shifts.

4.3. Data collection

The data was collected from February to April 2000 at a tertiary hospital in Oman (only this data collection was done outside Jordan). Access consent was obtained as follows:

- a- Permission for data collection was granted by the hospital's administration.
- b- Communication with the unit managers was made in order to obtain a list of the staff working in their ITUs.
- c- The staff list was edited according to selection criteria.
- d- Only the participants who met the selection criteria were included in the study.
- e- A general idea of the study was given to the participants (in a very broad sense, participants were told that the study focused on the effect of environmental

stressors on nursing staff).

- f- The research procedures were explained to the participants and they were informed that the observations and interviews would be carried out for a complete working week.
- g- Each participant was informed about his/ her rights in the study. Refer to appendix III (consent form), and a written consent was obtained from each one of them.
- h- The observation period was arranged according to the existent participant's roster and with the consent of the selected staff and nursing managers.
- i- Observations and interviews took place between February and April 2000.

4.4. Data analysis

As previously mentioned, the aim of the observation was to identify situations that were either stressful or non-stressful as encountered by the participants during their daily work.

As mentioned in chapter 3, appendix VIII shows an example of the data analysis used in the first phase. Table (4.3) Shows 20 different situations that were encountered by the three nurses observed.

4.5. Situations Identified by Observations

Through observations, twenty different situations were identified and interpreted from the researcher's perspective, (Table 4.3). These situations were also verified by the participants by restating them at the beginning of each interview session. They were considered as the contributing stressors that affected nurses' emotions within ITUs.

Table 4.3 Situations identified during observation with first-phase participants

Situation	First Participant	Second Participant	Third Participant
1- Rest time (Break time & prayer time)	X ¹	X	X
2- Care for critically ill patient	X	X	X
3- Care for chronically ill patient	X	X	X
4- Arrival on duty	X	X	X
5- Dealing with narcotics and medications	X	X	X
6- Nurses' duty hand over	X	X	X
7- Interaction with colleagues	X	X	X
8- Interaction with physicians	X	X	X
9- Interaction with other health care professionals (e.g. x-ray technician, physio-therapist)	X	X	X
10- Interaction with patient's relatives	X	X	X
11- Care for patients undergoing invasive medical procedures.	X	X	X
12- Cardiac arrest	X	X	X
13- Death of a patient	X	X	X
14- Relief break (each nurse will look after colleague's patient during rest time)		X	X
15- Supervisor round (the head-nurse's round in different clinical areas)	X		X
16- Additional assignments (e.g. checking and topping up the emergency trolley)	X	X	X
17- Heavy workload (frequent cardiac arrests, engagement)	X		
18- Light duty (the work-load less than usual, or caring for stable patients)	X	X	X
19- Dealing with advanced machines (cardiac monitors, ventilators)	X		
20- Updating self-knowledge and skills (e.g. attending lectures, workshops, etc.)	X	X	X

¹ X= Means the situation occurred for the participant.

4.6. Emotions Identified by Interviews

Interviews were conducted during ITNs working hours and sometimes directly after a critical situation had been determined, so that the nurses' emotions could be captured immediately. For example, a critical situation such as a patient's death, created a high intensity of emotions, that needed to be explored immediately to get a good understanding of an ITN's feelings.

The participants were asked about their feelings during the situations (Table 4.3). Table 4.4.. Table 4.5. In addition, Table 4.6 presents some of the feelings, which were identified during the interviews with the three participants

Table 4.4 Situation-specific feelings: Participant 1.

Participants 1		Male 38 years old, with six years of experience in ITU.	
N	Feelings	Feelings directed towards	Specification of the situation
1	Afraid	Patient	(Dealing with invasive procedures) The patient may suffer more during invasive procedures
2	Empathy	Patient	(Dealing with advanced machines) to care for a patient on a ventilator
3	Empathy	Relatives	(Death of patient) when a patient died
4	Empathy	Colleagues	(Invasive procedures) when intubating a patient
5	Competence	Self	(Care of critically ill patient) when caring for a critically ill patient

Table 4.5 Situation-specific feelings: Participant 2

Participant 2		Female 34 years old with three years of experience in ITU	
N	Feelings	Feelings directed Towards	Specification of the situation
1	Business	Self	(Cardiac arrest) when assisting in patient cardiac arrest
2	Confidence	Patient	(Caring for critically ill patient) when receiving the patient
3	Confidence	Self	(Dealing with narcotics and medications) when giving medications
4	Courage	Self	(Cardiac arrest) when assisting the patient in cardiac arrest
5	Empathy	Patient	(Care for a chronically ill patient) when giving care to a chronically ill patient
6	Happiness	Situation	(Cardiac arrest) when assisting the patient in cardiac arrest

Table 4.6 Situation-specific feelings: Participant 3

Participant 3		Female 36 years old, with fifteen years of experience in ITU	
N	Feelings	Feelings directed Towards	Specification of the situation
1	Competence	Self	(Caring for a critically ill patient) when transferring a patient out of the unit
2	Closeness	Patient	(Caring for a critically ill patient) when caring for post-operative patient with complication
3	Sadness	Patient	(Caring for a chronically ill patient) with poor prognosis (post-operative complications)
4	Suffering	Self	(Interacting with other health care professional) because of the slow response of other health care professionals

After thirty-one interviews with the three participants, the analysis revealed 52 different emotions. Table 4.7 lists these emotions in alphabetical order.

Table 4.7 The emotions revealed from the first phase participants.

Feelings	First Participant	Second Participant	Third participant	Emotional Group
1-Ability		X		Physical
2-Achievement	X			Professional
3-Activity		X		Physical
4-Afraid	X			Disparagement
5-Anger		X	X	Disparagement
6-Anxiety	X	X	X	Disparagement
7-Appreciation	X	X		Self-worth
8-Attachment		X		Mutual
9-Attention concentration &	X	X	X	Professional
10-Boredom		X		Disparagement
11-Business	X	X		Disparagement
12-Closeness	X	X	X	Mutual
13-Comfort	X			Self-worth
14-Competence	X	X	X	Professional
15-Confidence	X	X	X	Professional
16-Cooperation		X	X	Professional
17-Courage		X		Professional
18-Control	X			Professional
19-Empathy	X	X	X	Mutual
20-Encouragement		X		Professional
21-Fear	X	X		Disparagement
22-Frustration		X		Disparagement
23-Giving	X	X	X	Mutual
24-Guilt	X	X		Disparagement
25-Happiness	X	X	X	Self-worth
26-Hatred		X	X	Disparagement
27-Helpful	X	X	X	Self-worth
28-Hope		X		Self-worth
29-Involvement		X		Mutual
30-Isolation	X			Disparagement
31-Knowledgeability	X			Self-worth
32-Needing more	X	X	X	Disparagement
33-Non-acceptance	X			Disparagement
34-Observed	X			Disparagement
35-Pain			X	Disparagement
36-Power	X	X		Professional
37-Pride	X	X	X	Self-worth
38-Relaxation	X	X	X	Self-worth
39-Respect	X		X	Self-worth
40-Responsibility	X	X		Professional
41-Sadness	X	X	X	Disparagement
42-Safety	X	X		Self-worth

Continued in page 82

Feelings	First Participant	Second Participant	Third Participant	Emotional Group
43-Satisfaction	X	X		Self-worth
44-Self-esteem	X	X		Professional
45-Sensitive	X			Mutual
46-Sorrow			X	Disparagement
47-Suffering	X	X	X	Disparagement
48-Sympathy				Mutual
49-Tension	X	X	X	Disparagement
50-Tiredness	X		X	Disparagement
51-Trusting			X	Professional
52-Upset	X	X	X	Disparagement

The 52 emotions were categorised into five emotional groups. Each group was based on similarities of emotions within it, for example, professional group contained the emotions of self-competence, self-confidence and feeling of high self-esteem, which all are related to nurses' competency level. Therefore, out of the 52 emotions, the five emotional groups were identified. They were professional, self-worth, mutual, disparagement and physical emotions.

With reference to appendix IX, the following section presents how the researcher grouped the emotions mentioned above were grouped based on the new classification:

4.7. Professional Emotions

Emotions related to the competency level of ITNs, included the following: attentiveness and concentration, achievement, competence, confidence, control, cooperation, trust, courage, encouragement (by something), knowledgeability, power, responsibility and self-esteem. For example: 'Feeling of self-confidence when transferring a patient out of an ITU'.

4.8. Self-Worth Emotions

These emotions are related to the internal satisfaction of ITNs. They include the following: appreciation, comfort, happiness, helpful, hopeful, pride, respect, safety, satisfaction and relaxation. For example: 'Feeling of happiness when transferring a patient out of an ITU'.

4.9. Mutual Emotions

These emotions are related to ITNs' empathetic relationship with patients. They include the following: attachment closeness, empathy and sympathy, involvement, giving, being sensitive. For example: 'Feeling of closeness to a patient who has complications'

4.10. Disparagement Emotions

These emotions are related to the tension of ITNs. They include the following: afraid of, anxiety, anger, boredom, business, fear, frustration, guilt, hatred, isolation, need more, non acceptance, observed (being), pain, sadness, tension, tiredness, upset, sorrow and suffering. For example: 'Feeling of sadness towards chronically ill patient with poor prognosis.'

4.11. Physical Emotions

These emotions are related to the ITNs' physical ability to perform nursing care. They include the following: ability and activity. For example: 'Feeling of ability when arriving on duty'.

4.12. Questionnaire Items

The emotions revealed in the first phase (table 4.7) were matched with the situations of context (table 4.3) to form the questionnaire items used in the second phase. For example, in a situation of caring for a critically ill patient, the feelings of self-appreciation, high self-esteem, fear, happiness, hopefulness, tension, self-respect, responsibility, and suffering were reported by participants.

These situations shown in Table 4.3 were similar for the three participants. Most of these situations were perceived as stressful (caring for critically ill patient, caring for chronically ill patient, caring for patient undergoing cardiac arrest), some situations were not perceived as stressful (taking rest time, or working on light duty). This was because ITNs in the ITUs dealt with advanced machines and usually they received critically ill patients who were subjected to cardiac arrest, death and the patient commonly underwent invasive medical procedures. However, there were differences in each participant's emotional response to each situation. This could be related to personality differences and their perceptions, which were not measured, as these were not within the scope of the present study. The study dealt with the data gathered from the three participants as a collective whole in order to explore the intensive therapy context from different perspectives.

4.13. The Five Emergent Themes of Situations

The situations affecting nurses within the ITUs in Table 4.3 were categorised in five themes:

- 1) Technology.
- 2) Advanced nursing procedures.
- 3) Nurse-patient relationships.
- 4) Nurse-human relationships.
- 5) Working conditions.

The above five themes are explained from the researcher's point of view, in details as follows.

4.14. Technology

In the current study, technology refers to the advanced machines, such as cardiac monitors and ventilators, which are frequently used in ITUs.

The intensive therapy patients depend heavily on technological machines to sustain life. These machines are broadly operated and monitored by nurses. Technology is found everywhere in the ITUs, ranging in complexity from advanced ventilators with a lot of operational modes and data output to advanced cardiac monitors which show almost all aspects of a patient's haemo-dynamic status, to ripple mattresses, to suction apparatus, to syringe pumps and volumetric pumps.

Neophyte nurses have to make an effort to gain the knowledge and skills required to operate the advanced machines. New nurses need support and encouragement from managers and leaders to obtain such knowledge and skills.

Technology facilitates the work of nurses, saves their time and makes work easier and faster. It can be a main motivator for nurses to develop themselves and to promote a high quality of nursing care. Technology plays a big role in promoting health care services. It affords a closer and better understanding of what is happening to the patient.

4.15. Advanced Nursing Procedures:

In the current study, advanced nursing procedures refer to the nursing procedures in ITUs.

There are four main procedures used in ITUs which are:

- 1- Narcotics and Medications
- 2- Intubation and extubation
- 3- Invasive lines
- 4- Cardio-pulmonary resuscitation

1- Narcotics and Medications

Preparation and administration of medications may be one of the most frequent and dangerous nursing interventions in ITU. Nurses are required to know almost all medications, which are available in all types, for almost all uses, for almost all diseases, with a huge diversity of side effects, requiring plenty of precautions. There are many drugs such as the infusion of strong narcotics, strong sedatives, paralytic agents and

inotropic agents only for intensive therapy use. Therefore, ITNs need to be highly knowledgeable and confident in the preparation and administration of medicines to be safe and effective.

Narcotics are part of medications and are most commonly used in ITUs, however they need more attention in preparation and administration due to the firm restrictions on their use and potential respiratory depression.

In ITU, any mistake of medication has detrimental effects on both patients and nurses. It may be life threatening to the patient, and it may affect a nurse's appraisal.

2- Endotracheal Intubation and Extubation

Assistance in the endotracheal intubation and extubation of a patient is one of the most common skills of an ITN, but at the same time, it can be a life-threatening procedure if delayed or carried out unsuccessfully.

This procedure commonly is carried out under high tension within the anaesthesia team and the nursing team. Many things must be done quickly and correctly in a certain sequence. Nurse must inform the relatives (or the patient) about the condition of the patient, prepare sedation and paralyzing agents, and prepare and check intubating equipment and material.

Preparation and assistance in endotracheal intubation is an individual procedure that depends on the patient's age, medical history, and the seriousness of one's illness.

Anaesthetists most commonly use nasal endotracheal intubation for children, while oral endotracheal is used for adults. Patients with hypotension, heart failure, renal failure or hepatic failure are sedated and paralysed using different medicines. Patients with neck injury and facial trauma may also be ventilated by tracheostomy rather than endotracheal intubation.

3- Invasive Monitoring Lines

Invasive monitoring lines are those lines inserted in the patient's arteries or main veins, such as Central Venous Pressure (CVP) line and Arterial Blood Pressure (ABP) line. They bring many benefits to both critically ill patients and the ITNs. They keep the nurses updated on changes in the patient's haemo-dynamic status. Paradoxically, the removal of invasive lines as the patient's condition improves, also produces many benefits to ITNs such as:

- a) less attention is now needed for the lines.
- b) less possibility of complications.
- c) less stress as the removal of a line indicates improvement in the patient's condition.

4- Cardio-Pulmonary Resuscitation (CPR)

CPR may be one of the most crucial, critical and complicated situations for nurses in ITUs. Crucial because it may save the patient's life, critical and complicated because it has many delicate procedures such as emergency medications, Direct Current (DC) shock, and cardio-pulmonary resuscitation that may affect a patient's life directly.

CPR includes a number of advanced procedures provided to critically ill patients. These include endotracheal intubation, reading electrocardiogram, giving emergency drugs, defibrillating patients, cardio-pulmonary massage, inserting tubes such as intercostal tubes, peritoneal aspiration, pericardial aspiration and so on. All these require high knowledge and skills and proper training for ITNs.

4.16. Nurse-Patient Relationships (Intensive Therapy Cycle):

Nurse-patient relationships are related to ITNs' caring relationships with patient in ITUs. Patients admitted to ITUs usually pass through an Intensive Therapy Cycle. This cycle consists of a patient's admission; care of the patient in ITU; a patient with pain, complications, and / or who is chronically ill; patient's rights and humanity; a patient transfer and / or death. Each aspect of the Intensive Therapy Cycle are hereby discussed.

1- Patient Admission

2- Care of Intensive Therapy Patient

3- Patient with Pain; Complications and/or Chronic illness

4- Patient's Rights and Humanity

5- Patient Transfer

6- Death of patient

1- Patient Admission

Intensive therapy nurses need to think about all aspects of the patient's health needs, bio-

psycho-social and spiritual needs, in order to provide the required quality care needed.

2- Care for Intensive Therapy Patients

ITUs are characterised by patients with life threatening health problems. ITNs take the responsibility for holistic care: technical and emotional. To meet these demands, the ITUs need nurses with high tolerance to stress, challenge and enthusiasm.

Caring in ITUs does not always go smoothly. Even experienced nurses may face trouble with patients or their relatives over the quality of care. Experienced nurses (from observations in the first phase) deal with intensive therapy procedures with a high level of competence in dealing with critically ill patients, they are proud of themselves as they are ITNs and as they are able to provide care in such difficult and highly demanding contexts.

3- Patient with Pain, Complications and / or Chronically Ill

A patient's pain (Nagy, 1998) is a demanding situation of emotional care. One of the main goals of nurses is to relieve a patient's pain by all possible nursing interventions. Experienced nurses are able to interact with a patient professionally and meet the patient's emotional needs via emotional care. Emotional care is a crucial component of nursing care which should be provided to all patients in most situations especially patients with pain, complication or chronic illness.

4- Patient's Rights and Humanity

The issues of patient's right and humanity are important to ITNs. Experienced nurses show and value these issues and shape their practice upon them. Experienced ITNs become more aware of their role as patient's advocates, which is an indicator of moving towards advanced nursing role in the intensive therapy context.

5- Patient Transfer

A patient's transfer out of an ITU as they improve, is a moment of reward to ITNs because it represents the positive result of their technical and emotional care. It is a moment of happiness nurses. It is a moment of ITNs' achievement, which would motivate their productivity. Patient transfer can also be seen as an indicator of quality care and successful effort of teamwork from all disciplines.

6- Death of Patient

A patient's death may be one of the most traumatising events in an ITU. Most of the time, it demands a lot of holistic care. Tremendous technical care is provided prior to death, to avoid this end, which could be a natural end in the care of many people. A lot of emotional care is also extended to the relatives of the patient who died in ITU.

4.17. Nurse-Human Relationships:

Nurse-human relationship is a term used to include the ITNs' communications with people other than the patients. It refers to nurses' communications with colleagues, physicians,

other health workers, patient's relatives and nursing students. The following is a discussion about nurses' communications with each group of people.

1- Colleagues.

2- Physicians.

3- Other Health Workers.

4- Patient's Relatives.

5- Nursing Students

1. Colleagues

Teamwork characterises the performance of nurses in ITU. Teamwork becomes a necessity during heavy workloads of ITUs. Nurses work in ITUs as a team with accountability to one or two allocated patients. Cooperation among the team is required in order to run the nursing care in a harmonious and smooth manner. In case of any cardiac arrest, for example, the team works together to save the patient's life: One-nurse hurries to the patient, another hurry to call the doctor, yet another brings the emergency trolley while one other takes care of the rest of the patients.

Teamwork with patient allocation system seems to be effective especially when the workload is heavy. The relationship between the team and team competency determines the quality needed for successful teamwork. Heavy workloads provide an opportunity for cooperative teamwork in which nurses' performance are integrated for the benefit of the patient. It is also an opportunity to promote relationships between colleagues for better nursing care as everybody is trying his/her best to help.

2. Physicians

Teamwork is another positive description of nurse-physician relationship. The team should work in harmony for best results. No doubt, any inadequacy of any part will affect the whole team's performance; the performance of nurse affects the physician's performance and vice versa.

It is important for nurses to recognise the barriers of each profession in order to function within the professional lines of authority and responsibility and to avoid overlapping with other professional lines of authority and responsibility. Health rounds are examples of nurse-physician relationships. It is the time to plan the patient's health interventions for the next twenty-four hours. Medical rounds according to the researcher's experience are the best source of fruitful clinical knowledge and experience, if a cooperative health team is available. These rounds provide the best opportunity to formulate the care plan for the next twenty-four hours based on the latest updates of the patient's condition from a multi-disciplinary perspective. The rounds may be the best indicator of the harmony amongst health team.

High morality and conscience are important for the health-team to function effectively and efficiently. It is impossible to monitor continuously each health care worker, and therefore, there should be an internal regulatory system within each worker in order to do his/her best. Religious teachings may play a crucial role in forming this regulatory system by enhancing a nurse's self-consciousness. Moreover, enhancing the fear of Allah can prevent one from committing any mistakes or inadequacies as it strongly influences the health-team workers making to strive for optimal performance.

3. Other Health Professionals

ITNs' appreciation of other health care professionals depends on the level of relationships, the level of cooperation, and mutual understanding of each other's situations and difficulties. Quick responses of health professionals have many benefits for nurses: a) fast intervention depends on the availability of information about the patient, b) it may prevent a patient's condition from collapsing and promotes collaboration among health care team members. Good relationships, mutual understanding and collaboration serve to enhance the quality of a health care system in general and of the quality of nursing care in particular.

Many ITNs consider the patient to be primarily their responsibility. Other health workers help patients under a nurse's supervision and coordination. The ITN's control over the working context has many benefits for nurses and nursing care: Among other things, it will help in giving care in coordinated, easier, quicker, organised and proper manner.

4. Patient's Relatives

Communication with the relatives of a patient with complications is a source of more stressors on ITNs. Nurses feel sorry and close to the relatives when the patient develops complications. Knowledge about the patient's disease and possible prognosis are important for nurses to interact with the patient's relatives and to function well under stressful situations to provide optimal nursing care.

5. Nursing Students

Teaching nursing students may be a burdensome to ITNs as they lack of time owing to their heavy workload. Nevertheless, almost all ITNs are involved in teaching nursing students. Their expertise encourages them to teach new graduates as well as students. The main responsibility of learning nursing falls on nursing students themselves. Students should take the initiative to ask, prepare their questions and goals in the ITU. Mostly, ITNs have no time to take care of the student. It is highly appreciated when the nurses give time to teach students. An ITN's teaching role is secondary to their nursing role.

4.18. Working conditions

There are many conditions, which have a significant impact on a nurse's performance regarding either technical or emotional care. This part will cover the following working conditions:

1. Arrival on Duty.
2. Rest Time (break & prayer time)
3. Light & Night duty
4. Leave the Unit Without Mistakes

1. Arrival on Duty

Nurses' abilities change over time. This may be because aging affects their technical care in terms of physical ability, or because of the highly demanding working conditions they find themselves in.

The ability to arrive on duty is high when nurses are younger and maintain good relationships with patients. This is also the time when the nurses have the possibility to work overtime. These three reasons are more applicable to private sector as there is no overtime work in the university or public sector. It is hereby suggested that all hospitals must be encouraged to permit overtime work and to institute more flexible working schedules for nurses as these measures are expected to elevate the nurses' satisfaction and retention of work force.

2. Rest Time (Break / prayer time)

ITNs need a peaceful place that can be an alternative to the busy atmosphere of the ITU, a place to have a private conversation, to pray, to meditate, and to grieve (Krumberger, 2001). Break/prayer time is a short time given to working nurses. It ranges from fifteen to thirty minutes depending on the type of hospital and the internal hospital policies.

Break/prayer time may be a good opportunity for ITNs to ease work tensions and worries, to build up good relations with colleagues in nursing and other health professions. Break/prayer time is a crucial need for nurses due to long working hours. Break/prayer time energizes the nurses' ability and releases their tensions.

Prayer time is vital to ITNs due to the Islamic background of the participants. Conducting daily prayers is very essential to nurses. In most situations, if the ITNs organise their own working time, break/prayer time does not conflict with working time.

3. Light & Night Duty

Heavy workload usually the general characteristic of an intensive therapy environment. Nevertheless, occasional light duties are good opportunities for ITNs to calm down work in order to recharge themselves for the coming heavy duty. However, the general feeling among ITNs' is that they always work under heavy duty regimes.

In this study the sufferings of experienced ITNs due to the night duty is acknowledges. ITNs tend to become physically tired. This burden intensifies when they get married. This is especially true for female ITNs because of the cultural aversion to have females working at night. It is also one of the main reasons behind the low social image of nursing. The importance of keeping the night shift the same length (seven to eight hours) as the day shift, not more, not less and reducing the frequency of night shifts for experienced nurses is hereby asserted.

4. Leave the Unit Without Mistakes

It is important for nurses to leave the unit without making any mistakes. It has a positive impact on their productivity and quality of care. The promotion of an ITN's knowledge and skill through training and experience reduces the possibility of mistakes and elevates some positive emotions such as self-confidence and high self-esteem. On the other hand, more mistakes end up with more criticism on nurses, which increases some negative emotions such as feelings of frustration, which may lead to poor performance, evaluation and poor quality care.

ITNs obtain many benefits if they leave the unit without mistakes. It enhances their awareness of working in a proper position and doing the right things. It increases the respect for nurses by their supervisors; it also elevates nurses' satisfaction and self-motivation. This results in the improvement of an ITN's performance in terms of quality care. On the other hand, to leave with mistakes has tremendous adverse effects on ITNs' inner-self comfort. This decreases the feeling of self esteem due to the frequent blame from supervisors and colleagues. This may have devastating result on the performance of nurses in terms of quality of care.

4.19. Conclusion

The study revealed many situations faced by ITNs in the ITUs (Table 4.3.). These situations were emerged into five themes: 1) technology, 2) advanced nursing procedures, 3) nurse-patient relationships, 4) nurse-human relationships, and 5) working conditions.

The study further explored each situation by asking the ITNs about their emotions during these situations in the same working shift. A variety of emotions expressed by nurses is shown in Table 4.7. These emotions were categorised into five emotional groups: 1) professional, 2) self-worth, 3) mutual, 4) disparagement, and 5) physical. This help achieve the first and second objectives of this study.

There were many differences in the ITNs' emotions regarding a particular situation. This resulted in the number of coupled emotion-situation statements to be large (172-coupled

items). Appendix VIII shows the first phase data analysis, which was the basis for the development of the questionnaire items that was used in the second phase.

The next chapter identifies the emotions that were highly meaningful to ITNs.

CHAPTER FIVE
SCRUTINIZING EMOTIONS IN THE CONTEXT
SECOND PHASE FINDINGS AND ANALYSIS

This chapter presents the findings and analysis of the second phase carried out in the current investigation. The chapter aims to scrutinize the highly meaningful emotions that were reported in the first phase. A self-reporting questionnaire was developed for this purpose. Then the scrutinised emotions were categorised into groups, each group was based on emotional similarities within the group.

5.1. Description of the Participants: Second Phase

The following table (5.1) gives an overview of participants for the second phase and the response rate.

Table 5.1 Overview of participants and response rate.

No	Item	University Hospital	Public Hospital	Private Hospital	Total
1	The number of questionnaires distributed	37	23	22	82
2	The number of participants who responded	33	21	19	73
3	The number of participants who did not respond	4	2	3	9
4	Response Rate %	89%	91%	86%	89%
5	The number of nursing staff working in ITU	46	33	34	113
Those excluded from participating in the second phase					
6	The number of nurse managers working in ITU	2	2	1	5
7	The number of staff nurses on leave	4	3	0	7
8	The number of practical nurses in ITU (two were on annual leave)	3	1	4	8
9	The number of staff nurses with less than 6 months in the current position	0	4	6	10
10	The number of expatriate nurses	0	0	1	1

A self-reporting questionnaire (Appendix V) was developed to meet the second objective of this study, which was “to identify the range of emotions which were meaningful to ITNs”.

5.2. Data Collection

Data collection took place from April to June 2001, at the three hospitals in Amman (Jordan). Access and consent was obtained as follows:

- a- Permission for data collection was granted from the three hospitals authorities.
- b- A meeting was arranged with each intensive therapy manager in the assigned hospitals. The meetings aimed to obtain a list of ITNs working in the unit and seek help in choosing the participants according to the selection criteria stipulated in the research. With the help of the intensive therapy managers, ITNs who did not meet the selection criteria (nurse managers, expatriate nurses, practical nurses, and aid nurses) were excluded. Nurses on annual leave and maternity leave were also excluded due to time limitations.
- c- All the selected participants were coded using a special code known only to the researcher (example 21B, stood for the participant number 21 public hospital name list).
- d- Each ITU was visited at least once to introduce the researcher to the ITNs.
- e- The researcher did not find any difficulty in gaining access to the ITNs, and introduced himself as a nurse who was doing research on ITNs.

- f- The pre-coded questionnaire was personally handed over to each ITN in order to ensure that the nurse received the questionnaire.
- g- The completion of questionnaire was considered as the participants' consent to participate in the study.
- h- All effort was made to ensure no interference with any participants' willingness to complete the questionnaire.
- i- The researcher was available for one to two hours in the ITU, in order to answer any queries from the participants. The researcher's availability was for the following reasons: (1) to give the questionnaire to the participants personally, by hand (2) to explain the questionnaire, (3) to answer any participant's enquiries- for example: some participants asked about the difference between not applicable and not meaningful. The same answer was given to all those who asked. The researcher explained that "not applicable" meant that the nurse did not encounter the situation during her / his work in intensive therapy and that "not meaningful" meant that the nurse encountered the situation while working in ITU, but the situation was not important, or intense, or frequent, or had no impact on him / her.
- j- The participants were given two weeks to complete the questionnaire. Time to do this was granted from all hospitals.
- k- The researcher accepted the rights of those who refused to participate. (The main reasons given for declining was the length of the questionnaire and the time taken to complete it).

The target population for this study were Jordanian ITNs who met the selection criteria as stipulated on page 62. There were 113 ITNs working in the three hospitals at the time of data collection. 82 of them met the selection criteria. Five nurse managers, seven ITNs who were on different types of vacations (annual leave, maternity leave, and emergency leave), ten ITNs with less than 6 months of experience, eight practical nurses, and one expatriate nurse, were excluded from the sample. Of the 82 ITNs who met the selection criteria, 73 completed the questionnaire, and the overall response rate was (89%).

5.3. Profile of the Participants: Second Phase

Table 5.2. Gender of participants

N= 73

Gender	Frequency	Percentage
Female	40	54%
Male	33	46%
Total	73	100%

It was found that the percentage of gender differences of participants is relatively small; only 4%. This difference almost matches the proportion of male nurses to female nurses in Jordan, were in 2001 (55%) were female and (45%) were male registered nurses in Jordan (Jordan nurses and midwives association, 2001). Participants in this study were proportionately the same in percentages terms.

Table 5.3 Marital status of participants

N= 73

Marital status	Frequency	Percentage
Married	22	30%
Not married	51	70%
Total	73	100%

The majority of nurses in the second phase sample (70%) were single. This must have been because the majority of nurses were young with relatively moderate experience (less than 6 years) in nursing (refer to table 5.7).

Table 5.4 Cross-tabulation of participant's gender with marital status

Gender/Marital status	Frequency	Percentage
Female and single	30	41%
Female and married	10	14%
Male and single	21	29%
Male and married	12	16%

The above table shows that three-quarters of the female nurses were single and constituted a (41%) of the participants, while approximately two-third of the male nurses were single. This seems to suggest that being a nurse and a female could be a factor in delaying marriage. This may be also due to years spent studying in the university as females usually prefer to finish their studies before getting married.

Table 5.5 Academic qualifications of participants

N= 73.

Academic qualification	Frequency	Percentage
Master	1	1%
Bachelor	53	73%
Diploma	19	26%
Total	73	100%

Nearly three quarters of the ITNs in the three hospitals were certified and held bachelor degrees. Bachelor degree nurses graduate from universities while diploma nurses graduate from MOH colleges. This means that intensive therapy nursing attracts university graduates more than diploma holders.

Table 5.6 Cross-tabulation of participant's gender and academic qualification

Gender/Academic qualification	Frequency	Percentage
Female and diploma	15	21%
Female and bachelor	24	33%
Female and master	1	1%
Male and diploma	4	5%
Male and bachelor	29	40%
Male and master	Nil	0%

Table 5.6 shows that (88%) of male nurses were bachelor degree holders. This represented (40%) of participants. As for female nurses, 60% of them were bachelor degree holders. This constituted (33%) of the total number of participants. It appears, therefore, that ITUs attracted both male and female bachelor nurses.

Table 5.7 Experience of participants N= 73

Experience in Nursing	Frequency	Percentage
Less than 3 years	28	38%
3 to 6 years	31	43%
More than 6 years	14	19%
Total	73	100%

The majority of the nurses had moderate levels of experience, with (81%) of them having six years or less experience. Only (19%) had more than six years experience. The range of experience was from six months to 14 years.

Table 5.8 Length of time in current position. N= 73

Experience in the current position	Frequency	Percentage
Less than 3 years	50	68%
3 to 6 years	16	22%
More than 6 years	7	10%
Total	73	100%

The above table shows that (90%) of participants had been in their current position for six years or less. This may be an indicator of a moderately experienced nurses currently working in the three hospitals.

The following tables (5.9. and 5.10) present the ways of deciding which emotions are highly meaningful based on frequency and percentages, by using SPSS¹ statistical package. Table 5.9 is an example of a questionnaire item that was reported as highly meaningful.

Table 5.9. Percentage obtained using SPSS package: Example-1

Feeling of competent, even if patient died	Frequency	Percentage
Not applicable	2	3%
Not meaningful	4	5%
Low meaningful	10	14%
Moderately meaningful	25	34%
Highly meaningful	30	41%
Total	71	97%
Missing system	2	3%
Total	73	100%

Table 5.9 shows that (41%) of ITNs' felt that self competence, even in the case of a patient's death is highly meaningful emotion.

Table 5.10 is an example of a questionnaire item, which was reported as not highly meaningful, but rather moderately meaningful.

Table 5.10. Percentage obtained using SPSS package: Example-2

Feeling of self-satisfaction after patient admission	Frequency	Percentage
Not applicable	3	4%
Not meaningful	11	15%
Low meaningful	19	26%
Moderately meaningful	27	37%
Highly meaningful	10	14%
Total	70	96%
Missing system	3	4%
Total	73	100%

1 SPSS is the statistical package for social sciences

According to the statistical data results, the feeling of self satisfaction after a patient's admission was not highly meaningful. This explains why it was not included in the third phase interview guide.

All the 172 items were analysed against the highest percentage of being highly meaningful. This was the main criterion for their inclusion in the third phase in-depth interview guide.

5.4. Questionnaire-Based Findings:

The findings of this phase revealed the diversity of perceptions held by participants. The most essential findings in this second phase however, were the "highly meaningful" emotions. Analysis in this phase was based on frequencies and percentages as depicted in (Appendix IX).

50 out of the 172 items studied were rated as highly meaningful. This chapter will emphasise the highly meaningful emotions, as they constitute a core contribution.

5.5. Highly Meaningful Emotions for Nurses

As discussed in Chapter 4, the emotions were categorised into five "emotional groups" (Mutual, professional, disparagement, self-worth, and physical). The different emotions that were reported by the participants as being Highly Meaningful are presented in the Table 5.11.

Table 5.11 Groups of Highly Meaningful Emotions Experienced by ITNs

N	Emotional Group	Emotions
1	Professional	Attention and concentration, competence, confidence, control, trust, courage, encouragement, responsibility, self esteem
2	Self worth	Appreciation, happiness, pride, respected, satisfaction, relaxed
3	Mutual	Closeness, empathy and sympathy
4	Disparagement	Anger, busy, fear, guilt, sadness, non-acceptance, sorry, suffering
5	Physical	Ability, activity

The following section lists the percentage of participants who expressed a particular emotion within each emotional group.

5.6. Professional Emotions:

1. The feeling of being “competent” when caring for critically ill patient (51%), transferring patient out of ITU (52%), leaving the unit without mistakes (70%), and even if the patient died (42%).
2. The feeling of being “in control” when dealing with other health care professionals (41%).
3. The feeling of being “confident” when leaving the unit without mistakes (53%), up-dating knowledge and skills (46%), and when dealing with technological equipment (40%).

4. The feeling of “self-esteem” when caring for critically ill patients (44%), attending in-service education update (43%) and teaching nursing students (43%).
5. Feeling of being “responsible” when caring for critically ill patient (52%) and teaching nursing students (42%).
6. Feeling of being “attentive and concentrative” when preparing and giving narcotics (50%), receiving the ITU patient (48%), during patient intubation and extubation (45%) and after finishing break and/or prayer time (44%).
7. Feeling of being “courageous” to resuscitate a cardiac arrest patient (40%).
8. Feeling that high technology “encourages” self-updating (51%).
9. Feeling of having “trust” to give medications (48%).

5.7. Disparagement Emotions

1. Feeling of "sadness" towards chronically ill patients with poor prognosis (41%).
2. Feeling "busy" during cardiac arrest resuscitations (50%).
3. Feeling "unhappy" to be on a long night duty (47%).
4. Feeling of "guilt" for missing any prayer (47%), and over any medications mistakes (40%).
5. Feeling "anger" and "sadness" for the slow response of health care professionals (44%).
6. Feeling of "non-acceptance" of the bad performance of intensive therapy doctors (42%).
7. Feeling of "suffering" when health care professionals are slow (41%).
8. Feeling "sorrow" for the relatives of a patient with complications (36%).

5.8. Self Worth Emotions

The following were the highly meaningful emotions that were classified under the self worth group:

1. Feeling of "happiness" when transferring a patient out of an ITU (63%), extubating patient (55%), updating knowledge and skills (51%), medical team doing their job completely (49%), succeeding in resuscitating a cardiac-arrest patient (44%), dealing with highly technological equipment (44%), removing the invasive lines (43%), relieving a patient's pain (41%) and caring for a critically ill patient (38%).
2. Feeling of "self appreciation" when caring for critically ill patients (52%). Feeling of appreciation towards other health care professionals for their quick response (51%) and toward the efforts of colleagues during heavy workloads (47%).
3. Feeling of "self respect" when caring for critically ill patients (44%), feeling of respect for a patient's rights and humanity (41%) and respect for colleagues during heavy workloads (40%).
4. Feeling of "relaxation" when a doctor's round has been smooth and quiet (44%) and the work in light duty (36%).
5. Feeling of "pride" in providing nursing care to critically ill patients (42%).
6. Feeling of "satisfaction" when transferring patients out of ITUs (42%).

5.9. Mutual Emotions

The following are the highly meaningful emotions that were classified under mutual groups:

1. Feeling of "closeness" to a patient who has complications (44%).
2. Feeling of "empathy" (sympathy) toward a patient with pain (38%).

5.10. Physical Emotions¹

The following were the highly meaningful emotions that were classified under physical group:

1. Feeling of "ability" when arriving on duty (53%).
2. Feeling "active" after break/prayer time (52%).

Physical feelings can be considered as essential emotions for nurses to carry out their nursing care. They are related to nurses' physical ability to perform their duties.

5.11. Analysis: Second Level

All the highly meaningful emotions were analysed retrospectively using Analysis of Variance (ANOVA) at (level of 0.05) to determine the significance of these emotions in relation to demographic data of the participants. The analysis showed that these emotions had significant differences based on the nurses' demographical data. There was a significant difference between diploma and bachelor nurses towards the feeling of guilt when missing a prayer (sig. 0.042), feeling busy during critically ill patient admission (sig. 0.021), feeling empathy towards a patient with pain (sig. 0.010), feeling of not appreciating doctor's poor intubation skills (sig. 0.007) and feeling of self-competence when interacting with patient's relatives (sig. 0.006).

¹ Physical emotions were not included in the third phase of the current study, because they were related to ITNs' physical ability while the emphasize of the study is on the emotions that are related to psychological status of ITNs .

There was also a significant difference between nurses based on their experience in the current position regarding the feeling of ability to do the work when arriving on duty (sig. 0.015), the feeling of empathy towards a patient with pain (sig. 0.049), the feeling of self-competence during handover (sig. 0.001), the feeling of self-appreciation post patient intubation and extubation (sig. 0.041) and the feeling of relaxation after post patient intubation (sig. 0.031).

The above significant findings resulted from non-directional ANOVA analyses. This ANOVA analysis of highly meaningful emotions reinforced the importance of these emotions to nurses. It also supported the need for future studies to investigate the directions and reasons for such differences between nurses' demographic data and their emotions. Finally, these findings supported the current study premises regarding emotional changes over time.

5.12. Conclusion

The purpose of the second phase was to scrutinize the range of emotions that are highly meaningful to ITNs. A self-reported questionnaire was developed to achieve this purpose. The questionnaire of 172 items were based on the first phase findings. The questionnaire was distributed to three assigned hospitals in Jordan. This phase revealed fifty highly meaningful emotions and a number of significant emotions. These fifty emotions were categorised into the five emotional groups.

In order to gain deeper understanding of the emotional changes within ITNs, these fifty emotions are to be used as the basis of the interview guide in the third phase.

CHAPTER SIX

DISCUSSION OF THE FIRST AND SECOND PHASES

This chapter discusses the first and the second phases. The discussions include the relationship of the situations revealed in the first phase with the current nursing literature and the researcher's interpretations of the findings. It also includes the highly meaningful emotions that were revealed in the second phase. The outcome of phase two necessitated the need for a third phase, in order to provide in-depth exploration of these emotions.

6.1 Discussion of the Context

In phase one, the study revealed five essential themes revolving around technology, advanced nursing procedures, nurse-patient relationship, nurse-human relationship, and working conditions. Various nursing scholars have discussed these five themes.

There are tremendous developments in technology and advanced nursing procedures in ITUs in recent years. Technology covers almost all aspects of intensive therapy nursing in which it serves many benefits to nurses and nursing care. The advancement in mechanical ventilators, cardiac monitors, CT-scans, and MRI had parallel advancements in nursing interventions. There were also advancements in medications, narcotics, antibiotics, procedures and techniques.

The current study suggests that technology and advanced nursing procedures would motivate nurses to work effectively and efficiently. However, they need good knowledge and experience in order to avoid unnecessary fatal complications. Advancements in

technology facilitate the nurses' work and make it quicker, effective and with high level of organisation and control over their work.

ITNs need appropriate training in order to be competent in these advanced technologies and procedures. The current study proposes the need for exploration of all stressful situations through an in-depth investigation in order to understand the impact of these situations on nurses' emotions and consequently on nursing care.

6.2. Nurse-Patient Relationships

Through intensive therapy cycle nurses experience a lot of situations, which are related to nurse-patient relationship. In these situations, the ITNs share each patient's experience through bio-psycho-social and emotional care. Nurses experience similar pain or suffering as well as joys of the treated patient (Maeve, 1994). This enforced the idea that all meaningful relationships were ordeals (Maeve, 1994). This is because all meaningful relationships need emotional care, which is seen as labour and hard work (James, 1989).

The current study accepts the idea of invisibility of emotional care (Hochschild, 1983; Graham, 1983; Smith, 1992). However, the impact of this care is visible on the quality of nursing care provided. It also answers the question "why should a nurse be more experienced in the work than others?" The experienced nurses build up knowledge and skills over time to deal effectively with emotional situations. ITNs are affected by patient experience (Maeve, 1998), and patient pain (Nagy, 1998) has an impact on their work. This study tries to demonstrate that experienced nurses who succeed in ITUs manage to develop a change in their emotions, which facilitate the emotional care in stressful

situations. This proposes the need for exploration of the emotions of ITNs in order to understand the shape of change of these emotions. It is anticipated that different types of changes may occur to nurses' emotions.

Many studies have revealed the importance of nurse-patient communication within the intensive therapy context, even if the patients were sedated or unconscious (Lawrence, 1995). Critically ill patients could hear, understand and respond emotionally to nurses' communication (Green, 1996). Recently, nursing is committed to individualised care (Meleis, 1991) that requires considerable emotional involvement from nurses. Emotional involvement may have the potentiality to produce stressors, which raise the emotional stressors on nurses.

In the study of the effect of patient's suicide on nurses, Midence, et al. (1996) reported that in stressful situations the nurse needs emotional and professional support from others such as colleagues, senior staff and managers. Midence, et al. (1996) showed: lack of emotional support, the need for training, the need for formal assessment of patients at risk and the need for regular multidisciplinary meetings are required for nurses following a patient suicide. Stressful situations, such as suicide, had a clear and visible impact on nurses' feelings of failure, guilt and shame (Flinn, et al. 1978). The current study proposes the importance of identifying all stressful situations in the working context (phase one) and to find out the proper way of dealing with these situations professionally and emotionally by providing proper training. This could be helpful in reducing the impact of emotional trauma in health working system in general, and on ITNs in particular.

Stressful situations, undoubtedly, will have negative consequences on ITNs. For example, situations associated with death and dying, as well as failed resuscitation have been shown to produce frustration, anger, guilt, resentment, professional failure, personal loss, helplessness, powerlessness and sorrow (Isaak & Paterson, 1996, Perkin, et al. 1997). This study recognises the importance of the effect of stressors on nurses' emotions. It also proposes that the highly meaningful emotions that have an impact on nurses' performance. These emotions may be susceptible to changes over time. These changes are of high value to nurses to survive in highly stressful context.

6.3. Nurse-Human Relationships

Nurses are interacting with a variety of human beings in the ITU. Team nursing is the main feature of inter-relationship among the ITNs. Health teamwork is general feature of the relationship between nurses and physicians and other health care professionals. In team nursing and health teamwork the good relationship among the team members and the high level of competency allows high productivity and smooth running of work.

The teamwork-nursing model with allocate nurse-patient assignment seems helpful and practically suitable in the intensive therapy context. Teamwork demands good relationship and high level of cooperation among nurses. Heavy workload acts as a motivator for colleagues to help each other and to show the level of relationship and cooperation. It is a driving force towards better relationships among colleagues.

In reviews of studies involving nurse-physician interactions during the ward round, Manias & Street (2001) have identified nurses' passivity and their lack of confidence

about asserting themselves in discussions (Busby & Gilchrist, 1992; Mallik, 1992; Whale, 1993; Felten, et al. 1997). Passivity, in the current study was not relevant to experienced nurses who reported many advanced nursing roles such as advocacy role, education role, assertiveness and critical thinking.

The health round has high value in medical discipline. It helps in obtaining the subjective information about the patient interaction (Mallik, 1992), with relatives, friends, nurses, as well as patient's personal preferences in the hospital. Health team demonstrated an awareness of subjective knowledge that held only by nurses for comprehensive patient health care, as this subjective information may complete the objective information obtained by physicians' assessment. This does not mean that all information obtained by nurses is subjective, but it does mean that nurses do obtain subjective information from patient's interactions with others and with the surrounding environment.

Through interactions with other health professionals ITNs develop high ability to take control over intensive therapy environment, which allow the nursing care to be coordinated, easier, more organized, quicker, quiet, proper, and correct. The nurses are more comfortable with less confusion, more confidence, and better relationship with others.

Lack of time and a heavy workload of ITNs made educating the nursing students and new nurses a burden. Nevertheless, almost all ITNs were willing to offer education to new comers. It seems that their high knowledge and experience encourage ITNs to educate newly graduated nurses and students.

In a context similar to intensive therapy, Hughes (1988) identified three situations which promoted the power of nurses in emergency nursing. The first was the large number of admissions with ambiguous complaints in which the medical staff have limited resources to assist them without getting help from nurses. The second was the high turnover of medical staff as opposed to nursing staff in the department, which meant that the inexperienced doctors tend to turn to experienced nurses for guidance. And, the third was the large proportion of Indian immigrant medical staff who does not know the social culture of patients. Because the recognition of social signals was important part of casualty work, the doctors often depended on nurses to clarify such signals. In the intensive therapy context, ITNs have more power than non-ITNs due to their knowledge and skills on advanced nursing care. The current researcher believes that a clever physician never misses nurses' notes, and usually does not ignore the nurses' observations and comments.

6.4. Working Conditions

Advancing age and heavy workload in ITU reduce ITN's ability to arrive on duty. Nurse's conscience and religious values often modified and compensated their physical inability. The current research would encourage nurses to strengthen these two factors in order to maintain high quality nursing care.

Prayer time is an essential spiritual aspect of nurses' life in the Muslim communities. It is highly beneficial to keep the ITNs active and productive.

The current research encourages nurses' relaxation during light duty with intra-unit small party, increases in nurse's break time, or any idea that promotes socialisation among ITU

staff. Tendency of keeping ITU nurses occupied with unnecessary matters, a common trait of ITU managers and supervisors, is strongly not recommended. ITNs should not be burdened with non-nursing extra work just to keep them busy.

The current research believes that long night duty is a burden on experienced nurses, especially female ITNs when they get married and when they are physically tired. This study would like to assert the importance of keeping the night duty as same as normal duty for not more than seven to eight hours, and to reduce the frequency of night duty for senior nurses.

When they make only fewer mistakes, it has a positive impact on nurses' self-esteem, self-satisfaction, performance, evaluation, and quality care. On the other hand, when they commit more mistakes, they end up in more criticism, frustration, poor performance, poor evaluation and poor quality care.

There are many environmental conditions, which provoke or release stressors. The availability of proper rest and prayer room would alleviate stressors while having heavy workload and committing mistakes augment stressors. The current study aimed to have a deeper understanding of the patterns of emotional changes within the ITNs, through the investigation of the impact of ITU environment on nurses' emotions and consequently on their nursing care.

6.5. Focus on Nurses' Emotions

This part presents an overall discussion of emotions in the first and the second phases with emphasis on the emotional groups.

Nursing literature presents many professional emotions, such as feeling of competence and feeling of control when nurses relieve patient's pain (Davidson & Jackson, 1985; Nagy, 1998). Feeling of acquired professional learning (Vachon & Pakes, 1985) supported the existence of these emotions within nurses. The professional emotions in current study may have a role in nurses' competency level in their way towards professionalism.

Some nursing literature reveals many disparagement emotions such as: feelings of sadness when a patient die (Zuppa, 1983; Davidson & Jackson, 1985), feelings of anger, frustration (Zuppa, 1983), and feelings of fear of death (Davidson & Jackson, 1985), feelings of embarrassment and fear (Lawler, 1991) in student nurses when bathing a patient. feelings of failure, guilt and shame (Flinn et al. 1975) when patients commit suicide. Smith's (1992) students also reported feelings of depression, anxiety, fear, frustration, and guilt feelings in many situations such as medical wards and surgical wards. These disparagement feelings which usually traumatised nursing students (Smith, 1992) also traumatise ITNs.

The mutual emotions are of a high value for ITNs because they exert high pressure on their emotions in order to provide quality care. Benner (1984) spoke about a certain level of involvement that is necessary for expert nurses in emotional situations. The mutual emotions are changing over time to meet the needs of both the nurse and the patient.

In self-worth emotions, the nursing literature focuses on opposite emotions such as feeling of helplessness and hopelessness in death situations (Zuppa, 1983), feeling of anxiety when patient complaints of pain (Nagy, 1998). These are within the scope of disparagement emotions. The current study observed many self-worth emotions such as happiness, pride, and self-appreciation (Table 5.11). These emotions were considered to be of high value for the nurses' retention in nursing and for their personal achievement.

To summarize, most of the ITNs in the current study were looking to achieve professionalism in their work. Many of them obtained this level, in which they became more self-competent and self-confident in working with intensive therapy patients and operating advanced machines, and other nurses were still in early stage of the professionalisation process. This raises the question, "What would happen to nurses' emotions due to their work in the ITUs?" Further explorations of emotional groups became a necessity for deeper understanding of the phenomenon of emotional changes within ITNs.

6.6. Summary and Conclusion

The first phase revealed the situations encountering nurses in the ITUs (Table 4.3), and the nurses' emotions during these situations (Table 4.7). The second phase revealed the 50 highly meaningful emotion-situations (Appendix IX).

The revealed situations of the second phase were categorised into five main themes: technology, advanced nursing procedures, nurse-patient relationships, nurse-human relationships and working conditions.

Through learning and experience ITNs were able to build up advanced knowledge and high skills in the intensive therapy nursing. For example, experienced nurses were able to promote their knowledge and skills in the intensive therapy medications and narcotics, endotracheal intubation and extubation, caring for invasive lines and managing critical situations such as cardio-pulmonary resuscitation. Furthermore, they were able to care for patients on advanced machines such as respiratory ventilators and cardiac monitors. Experienced nurses were also able to care for critically ill patients with high levels of self-confidence and competence. They provided a total bio-psycho-social and emotional nursing care to critically ill patients. They were able to receive a wide variety of critically ill patients with different diseases and health problems. They were able to care for patients with severe pain, patients with complications and patients with chronic illness with the appropriate considerations to patient's rights and dignity.

Working conditions played a role in the experienced nurses' performance in the intensive therapy context. The availability of proper rest room for break and prayer time, and moderate workload promote nurses' performance. The availability of resources such as training courses on new machines and procedures, rest rooms for break and prayer time, flexible working schedules, cooperative health workers and smooth rounds would act as stressor-releasers, whilst the unavailability of such resources and facilities would act as stressor-provokers. These situations were studied more deeply via interviews with each participant ITN. From these interviews, the emotions connected with these situations were identified. The current research categorised these emotions into five main emotional groups: professional, disparagement, self-worth, mutual and physical. Within each group,

there were many situation related emotions which proved to be highly meaningful to ITNs via the second phase findings.

The current study recognised these five themes of situations (technology, advanced nursing procedures, nurse-patient relationship, nurse-human relationship, and working conditions) as the main factors affecting ITNs' emotions within the ITUs. These factors may change nurses' emotions over time. These emotional changes are important for nurses' quality care. The conducting of a third phase became necessary in order to explore the emotional changes within experienced nurses. This would help nurses for better understanding of the changes of these emotional groups within ITNs. For this purpose, the current study developed a semi-structured interview guide containing all highly meaningful emotions for the ITNs. The interview guide will be used as the data collection tool for the third phase.

The next chapter will present the details of the third phase of the current investigation.

CHAPTER SEVEN

EXPLORING NURSES' EMOTIONS

THIRD PHASE: FINDINGS AND ANALYSIS

This chapter deals with the findings and analysis of the third phase of the current investigations. It aims to explore further the emotions revealed from the first and second phases and to gain a better understanding of these emotions in relation to ITNs and nursing care in ITUs. The chapter is divided in two parts. Part one explains the data collection method; the characteristics of the participants; the findings and analysis in relation to each emotional group; and selective transcriptions of ITNs' interviews for support. Part two presents the analysis of third phase findings in relation to the five themes discussed in the second phase—technology, advanced nursing procedures, nurse-patient relationships, nurse-human relationships, and working conditions. This part is also supported by selective transcriptions of the researcher's interviews with ITNs.

7.1 Data Collection

Data collection for the third phase was undertaken during January and February 2003. The access procedures used were similar to those in the second phase of the study. In addition, a time was set for interviewing each of the participants at their convenience. The interviews were tape recorded with their permission. Two nurses refused to participate; the researcher did not investigate their reasons for doing so, to avoid embarrassing them and threatening other participants.

The most experienced ITNs in the sample were deliberately selected, based upon their years of experience in the current position. It was expected that the more experienced nurses were the ones who had been most exposed to stressful situations in ITUs, and the most subjected to emotional stressors and emotional changes.

7.2. Part One: Third Phase Findings and Analysis in Relation to each Emotional Group

In the third phase of data collection, nine (five females and four males) in-depth interviews were conducted in the three assigned hospitals. Table 7.1 shows the duration of interview with each participant.

Table 7.1 The duration of interview for each participant

Participants	Hospital Name	Interview Duration
First Participant	Public Hospital	43 minutes
Second participant	University Hospital	32 minutes
Third participant	Public Hospital	38 minutes
Fourth participant	Public Hospital	57 minutes
Fifth participant	Private Hospital	31 minutes
Sixth participant	University Hospital	32 minutes
Seventh participant	University Hospital	42 minutes
Eighth participant	Private Hospital	41 minutes
Ninth participant	Public Hospital	42 minutes
Total		358 minutes

All interviews were conducted at the ITUs where the participants worked—either in the staff lounge room or in the supervisor’s office. The average time of interview was about 40 minutes. As mentioned in chapter 3, the nature of questioning the participants was based on semi-structured interviews that focused on two main questions:

- 1) Have your emotions changed over time? If yes, then, what has the direction of this emotional change been?
- 2) What has been the impact of that change on your nursing care performance?

7.3. Profile of Participants in the Third Phase

The following are the particulars of the participants in the in-depth interviews held in January-February 2003.

First Participant (ITN-1)

ITN-1 was a Jordanian male intensive therapy nurse. He was 33 years old, married and had two children. Professionally, he had a bachelor degree in nursing and 11 years of experience in nursing, including 6 years as an ITN.

Second Participant (ITN-2)

ITN-2 was a Jordanian female intensive therapy nurse. She was 29 years old, married and had two children. Professionally, she had a bachelor degree in nursing and 11 years of experience in nursing, including 6 years as an ITN.

Third Participant (ITN-3)

ITN-3 was a Jordanian female intensive therapy nurse. She was 29 years old, married and had two children. Professionally, she had a bachelor degree in nursing and 6 years of experience in nursing, including 3 years as an ITN.

Fourth Participant (ITN-4)

ITN-4 was a Jordanian male intensive therapy nurse. He was 32 years old, married and had two children. Professionally, he had a bachelor degree in nursing and 10 years of experience in nursing, including 7 years as an ITN.

Fifth Participant (ITN-5)

ITN-5 was a Jordanian female intensive therapy nurse. She was 26 years old and single. Professionally, she had a bachelor degree in nursing and 4 years of experience in nursing, all as an ITN.

Sixth Participant (ITN-6)

ITN-6 was a Jordanian female intensive therapy nurse. She was 24 years old and single. Professionally, she had a bachelor degree in nursing and 3 years of experience in nursing, all as an ITN.

Seventh Participant (ITN-7)

ITN-7 was a Jordanian male intensive therapy nurse. He was 28 years old, married and had one child. Professionally, he had a bachelor degree in nursing and 6 years of experience in nursing, all as an ITN.

Eighth Participant (ITN-8)

ITN-8 was a Jordanian male intensive therapy nurse. He was 28 years old and single. Professionally, he had a bachelor degree in nursing and 3 years of experience in nursing, all as an ITN.

Ninth Participant (ITN-9)

ITN-9 was a Jordanian female intensive therapy nurse. She was 27 years old and single. Professionally, she had a bachelor degree in nursing and 6 years of experience in nursing, all as an ITN.

Table 7.2 presents the profile of the participating ITNs in terms of age, gender, marital status, number of children, experience, and education level at the time of the interviews.

Table 7.2 profile of participants

Number	Hospital	Age in years	Gender	Marital Status	No. of Children	Years of Exp.1 In Nursing	Years of Exp. In ITU	Education Level
ITN-1	Public	33	Male	Married	2	11	6	BSN
ITN-2	University	29	Female	Married	2	11	6	BSN
ITN-3	Public	29	Female	Married	2	6	3	BSN
ITN-4	Public	32	Male	Married	2	10	7	BSN
ITN-5	Private	26	Female	Single	-	4	4	Dip.
ITN-6	University	24	Female	Single	-	3	3	BSN
ITN-7	University	28	Male	Married	1	6	6	BSN
ITN-8	Private	28	Male	Single	-	3	3	BSN
ITN-9	Public	27	Female	Single	-	6	6	Dip.

During the interviews, all participants reported a change in emotions. Sometimes their emotions increased and sometimes decreased. Trying to understand the nature of this emotional change became an interesting issue. As their experience as ITNs differed, it became necessary to understand what was happening in terms of emotional transformation. Emotional transformation is a useful concept as it implies a dynamic event that is influenced by the working context as well as personal factors pertaining to an individual. In addition, by analysing this as a transformation process, it may be possible to

1 Exp. Stand for experience

articulate ways of enhancing this transformation. This will be discussed further in the next chapter.

Throughout this thesis, the researcher was concerned with exploring emotional changes in the ITU context. In this final phase of data collection, the researcher deliberately selected Muslim nurses based on the duration of their work experience in the ITU. (Table 7.2 provides the profile of the participants). In the private hospital context, the nurses were less experienced than desired for the research purposes, and so, the researcher chose one additional participant from the public hospital.

In presenting the overview of the nurses' perceptions of emotional transformation, the researcher decided to structure case information according to the following categorisation of emotional groups: mutual, professional, disparagement, and self-worth emotions. This four-group classification was made based on the ITNs' responses to the interview questions:

1) Have your emotions changed over time? If yes, then, what has been the direction of this emotional change? , and

2) What has been the impact of that change on your nursing care performance?

These questions clarified each ITN's emotional transformation. The tape-recorded responses of participants are transcribed and examples for each of the four categories are given below.

7.4. Mutual Emotions

Mutual-emotion transformations can be categorised under two main themes:

- A) ITNs with high mutual emotions
- B) ITNs with balanced mutual emotions

A) ITNs with High Mutual Emotions

The following are quotations of the participants' expression of the emotional changes.

They are experienced as far as mutual emotions were concerned:

(Quotation 1) Participant number three reported:

*"... My emotions has been changing¹. When I am dealing with these types of patients, I feel bored. It happens, sometimes, **I do not like dealing with patient, because he has complications**. There is a reason other than emotions that control us; it is our conscience. I try to deal with patient (with complications) as best as I can and for the patient's good because I know Allah's watching me". (ITN-3, 29 years, female, married, BSN, public hospital, 3 years of experience)*

(Quotation 2) Participant number eight reported:

*"Surely, they have **increased** more so if the patient has complications. **The more critical the patient is, the more willing I am to work with him and the closer I feel I am to him**. Having this feeling, allow me to give the patient his due and more. (My nursing care) will be increased, because, as I said, the more I feel that the patient needs me, the better I will care for him". (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience)*

(Quotation 3): Participant number nine reported:

*"**I feel excessively close to the patient**. As such I find myself striving to give nursing care to a patient with complications using whatever means of my disposal ...every time **I feel close to a patient** irrespective of who they are or the nature of their illness, I am gripped with empathy and closeness so I find myself trying to help them as best as I can. I also look at it thus as something that could happen to me. One day I may become an ITU patient myself and be in need of ITU workers".*

¹ All quotations are transcribed from people who are not native English speakers.

(ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience)

(Quotation 4): Participant number five reported:

*“If a particular patient does not take any sort of sedation, I can do for him other things such as (passive) exercises so they may relax. **This enhances the relationship between the patient and myself and take nursing care to a higher level**”.* (ITN-5, 26 years, female, single, diploma, private hospital, 4 years of experience)

Some ITNs reported negative aspects of the emotional change, for example, '*I do not like dealing with patient*' quotation 1. According to the current research, this emotional change happens to ITNs who are more prone to emotional burnout (Maslach, 1982), due to patients' excessive demand for emotional care. Such nurses are more vulnerable to burnout. For such nurses, it is important at this early period of working at ITU to measure their levels of emotional fatigue before they burnt out and leave the profession (turnover).

Some ITNs show an increase in mutuality between the nurse and the patient. This is evident in quotation 2, '*The more critical the patient is, the more willing I am to work with him and the closer I feel I am to him.*' and in quotation 3, '*I feel excessively close to the patient*' and in quotation 4, '*This enhances the relationship between the patient and myself*' in quotation 4. This reported increase in ITNs' mutuality will put a burden on their emotions and they may end up with emotional exhaustions as reported in quotation 1, '*I do not like dealing with patient*'.

B) ITNs with Balanced Mutual Emotions

The remaining ITNs reported a different form of emotional changes (quotations from 5 to 9 below).

(Quotation 5): Participant number four reported:

*“By the grace of Allah I must say, **the intensity with which I feel close to a patient has been subsiding over time.** It has not getting augmented. The thing is I have become so used to seeing so many patients die in front of me. This now become quite normal. **During my maiden days in the nursing field, I used to be overwhelmed with the sight of patient's badly injured in a road traffic accident, for example. My mood would be badly affected all day long and I felt more upset dealing with such patients than I should have.** This time, however, seeing a patient die in front of me is nothing extraordinary; it is like nothing is happening, **which just show the degree to which this feeling has declined.** Feeling close to a patient never disappears completely, so I still do feel close to my patients. So I still do feel close to my patients,..., I treat a cancer patient in exactly the same way I treat a patient with common cold, no difference, clinically, I do appreciate the distinction: critically ill patients need more care than those with mild illnesses. As such, I provide more clinical care to seriously ill patient than I do to one who is not. I gave each patient the care they deserve clinically while on an emotional or relationship level I treat them equally whether their condition is critical or not”.* (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience).

(Quotation 6): Participant number six reported:

*“... **over time, unfortunately, I have become so used to dealing with patients who have complications that I no longer feel that close to them.** In the past, I felt that every case was especially distinct and new and so I would get overly involved with it emotionally. This has now changed. I view each case as just another name preceded by many names after names and one which will be followed by many more. **I can no longer get too emotionally involved .** My nursing care remains unaffected though I still strive to do my job better and give the patient everything they need. What I am trying to say here is that my feelings towards my patients are to those of one towards their family member . I could not help having these feelings. Yes, **I am the kind of person who believes that if I feel too close about a particular patient, then my ability to work with them effectively will be impaired .** This is because I will become too deeply involved in their suffering; I will become too sad to function properly; it will be like my own family member is sick”.* (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 7): Participant number seven reported:

*“...**Initially, I used to be gripped by a sense of guilt over a patient's complications.** Later I came to grips with the fact that a disease is a process and at times things may get complicated. Of course, I'm talking about normal situations here not complications we ourselves may have caused. At first I was barely aware of the nature of these situations and was left wondering. Now aware that I am ITU nurse and that ITU patients may get complications, I no longer wonder but ask myself a complication has occurred and how deal with it...this needs one not to be too close to his/her feeling towards the patient; what is needed is the provision of*

best care...In the past I felt too close about the patient when he had complications, but The fact that this has subsided and I am emotionally stable when faced with complications does not mean I do not care about the patient. It's the hyper emotion that gets dissipated, not the amount or quality of nursing care. It is my opinion, in fact that nursing care has become a lot better, hyper emotion does not benefit the patient. There are thing I have to do that require me to keep cool head and that is what I do. The bottom line that one needs not be too close to the patient. What is needed is to provide the best care " (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 8): Participant number one reported:

"I think it will dissipate over time. One begins to feel less emotionally close to critically ill patients but this does not adversely affect nursing care; the level of care stay the same". (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 9) Participant number two reported:

"My being empathy has decreased with time as I have come to realize that when a patient asks for analgesic, it isn't necessary true that they are in pain. I such I do not always give them analgesics. My emotional care has been affected. I feel less empathy about pain, death and anything else capable of arousing deep emotions.; it decreased with time toward the pain, toward the death or toward anything. (Effect on care)As far as caring for patients is concerned, I think our job is made easier, in long run we become able to deal with patients I do not like dealing with patient. I recall that when a patient died in the past, sometimes I would break down a cry because there was nothing I could do for them. This time, however, I do not break down and my job made much easier". (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

Many ITNs reported a decrease of mutual emotions after expressing an increase as reported, *'the intensity with which I feel close to a patient has been subsiding over time'* (quotation 5), and *'I no longer feel that close to them'* (quotation 6), and *'In the past I felt too close... but The fact that this has subsided and I am emotionally stable'* (quotation 7), and *'One begins to feel less emotionally close to critically ill patients'* (quotation 8), *'My being empathy has decreased with time'* (quotation 9).

Actually, the ITNs who reported a decrease in mutual emotions had reported an increase at the early stages as presented in the quotations with terms like, {‘*initially*’ (quotation 7), ‘*During my maiden days in the nursing field*’ (quotation 5), ‘*this now*’ (quotations 5), ‘*This time*’ quotation 9, ‘*I no longer*’ (quotation 6, 7), ‘*in the past*’ (quotation 6, 7, 9)}. These terms indicate the emotional change that has occurred over a period of time. However, none of the ITNs reported an increase of mutual emotions after it decreased. This seems to suggest that mutual emotions follow a certain pattern of change over time. The pattern here was characterised by an increase in mutual emotions and the feeling of mutuality at the beginning, and then gradually it decreased until it reached a degree of balance that suited each ITN's abilities.

The current research suggests that the experienced nurses’ mutual emotions underwent a gradual transformation from being high in mutuality to having it balanced. This transformation happened over years of building up knowledge and experience in intensive therapy nursing. (Measuring time factor was not important for the current study because the focus was on sensing the change in nurses’ emotions regardless of time).

ITNs (in quotations 5 to 9) realised the stress patients' emotional demands placed on them: ‘*I no longer feel that close to them*’ (quotation 6), and ‘*I am the kind of person who believes that if I feel too close about a particular patient, then my ability to work with them effectively will be impaired*’ (quotation 6), and ‘*hyper emotion does not benefit the patient*’ (quotation 7). Therefore, ITNs try to minimize their mutual emotions in order to lessen these difficulties, until they reach a point of balance: ‘*In the past I felt too close... this has subsided and I am emotionally stable*’ (quotation 7). They manage to reach a balance between their ability to provide mutual emotional care and the impact (negative) this care

has on them. The current study suggests that reaching such a balanced degree would alleviate the negative impact of high mutual emotional care on ITNs. This means that the reduction of empathetic and close feelings on the part of the ITNs' would assist them in providing better nursing care: *'It is my opinion, in fact that nursing care has become a lot better'* (quotation 7).

7.5. Mutual Emotions and Mutuality

In the current study, mutual emotions are related to the mutuality between the nurse and the patient. Mutuality refers to the emotionality in terms of mutual emotions in the nurse-patient communication process, within the intensive therapy context. Mutuality in the current study includes the highly meaningful mutual emotions (presented in table 5.11, p.106), which were derived from real-life working context.

Balanced mutuality of the feelings of empathy and closeness gave the ITNs better opportunities to alleviate the negative impact of emotional care that resulted from high emotional demands of mutual feelings. However, it does not mean the nurses should ignore the emotional aspect of nursing care. It only means that nurses should balance these emotions according to their own ability and the need of their patients. This depends on the specified working context and the individual ITNs' judgement.

7.6. Professional Emotions

Professional emotions transformations can be categorised under two main themes:

- A) Previous experience of low professional emotions
- B) Current experience of high professional emotions

The following are quotations of the participants' expression of the emotional changes.

They are experienced as far as professional emotions were concerned:

(Quotation 10): Participant number five reported:

“there has been an increase. I believe my caring skills has gotten better. When I become a nurse, I didn't pay much attention because I couldn't distinguish between what is important and what wasn't. After time a lot of things became clear; I eventually found myself doing the right thing” (ITN-5, 26 years, female, single, diploma, private hospital, 4 years of experience)

(Quotation 11) Participant number eight reported:

“Surely. it they have become stronger, when I started working as a nurse, I blame myself when a patient died believing that I had done something wrong; that had been my mistake. With time and feeling competence as well as the certainty that I had done everything correctly I understood that in such cases the death of a patient is an unfortunate eventually not attributed to my wrongdoing on my part. Now I feel increasingly competent” (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience).

(Quotation 12): Participant number seven reported:

“When leaving, I leave with a lot of confidence... previously I was worried that I might have overlooked something or might leave forgotten to do something. Now that I am more knowledgeable and experienced , my confidence has reached very high level ...when I go home, after duty, I look back ask myself if there was anything I forgot...going home full of the confidence that I have done everything well is an enjoyable feeling; it makes me report for duty the following day in a happy mood” (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 13): Participant number six reported:

“I believe this is the most important thing as far as increasing self esteem is concerned. It is very important for ITU nurses to have updated knowledge in order to better deal with the many diagnosis and patient cases that come our way. The greater our knowledge, the higher our self confidence and the more improve our nursing care ” (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 14): Participant number nine reported:

“Surely, over time, yes...as days went by I found myself having dealt with all kinds of diseases and patient cases. In the end all fear vanished. I'm now in a position to deal with any case no matter how complex. I mean, I am an ITU nurse who, for the past six years, has been able to get over all fear, especially when it comes to dealing with patients...I now have greater understanding of patient cases and situations; what a patient needs and; what care is most appropriate for them. I do not waste time at all” (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience)

(Quotation 15) Participant number three reported:

“Yes, there has been an increased, I mean, most of the patients who die despite all our cardiac arrest resuscitation efforts cannot be saved by any power or effort except Allah. if cardiac arrest resuscitation succeeds, , it encourages me to handle the patient a longer. As a new nurse, one is fear stricken and cannot provide care competently or as well as one would like. It all boils down to not knowing what the right thing to do is; what type of care is most appropriate and when to provide it. The exact needs of a patient tend to be somewhat elusive when one is new. Now that I'm experienced, fear is a thing of the past as I know exactly what to do with the patient. Fear has been replaced with courage instead, that's what's making do exactly what I'm supposed to do”(ITN-3, 29 years, female, married, BSN, public hospital, 3 years of experience)

(Quotation 16) Participant number one reported:

“Yes, there has been a changed, an upward. No effect on nursing care, though. No, it is no fault of mine; this has been a divine predetermination so it wasn't in my hands. I did the best I could; ,a divine predetermination is a divine predetermination. What Allah Wishes, he does’. Such unfolding have not affected my competency, I have sort of struggled to achieve competence, I must admit. These feelings have intensified over time without having any effect on my nursing care” (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 17) Participant number two reported:

“They have intensified, yes. My skills have improved to such a degree that I am now able to provide high quality care to any patient, no matter how critical. It is unlike long back when I was unable to provide high quality care to critically ill patients. Now, I'm absolutely up to the task” (ITN-2, 29 years, female, married, BSN, university hospital, 11years of experience)

(Quotation 18): Participant number four reported:

“Courage is there; by the grace of Allah there has been change over time. I recall that when I just entered the profession, hearing that a patient had cardiac arrest

was quite a big thing. My role then was that of an observer, not an assistant. This time it's all different. I'm able to carry out a complete CPR with no need for the presence of doctors, I am able to do everything from inserting an endotracheal tube, all the way to giving medications, performing cardiac massage, ... working as a nursing team, we are now capable of carrying out all operations (of proper CPR) competently with no flaws. Such success only shows how much nursing care has improved." (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience)

(Quotation 19): Participant number six reported:

"Yeh, no doubt, there has been an increase. I feel that the way I deal with patients has become better and better. It is only logical that one's provision of nursing care should improve with time as one becomes more organised and more competent with procedures. I definitely more competent... I don't know... It seems to me that as an ITN there comes a time when you deal with ITU patient full of self esteem. . This only serves to allow you to do everything to the benefit the patient. Working as ITN has made me more courageous because dealing with ITU patients requires more courage than dealing with ward patients," (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience).

A) Previous Experiences of Low Professional Emotions

At the beginning of their work in ITUs, many nurses reported lack of knowledge: *'I couldn't distinguish between what is important and what wasn't'* (quotation 10), and *'I blame myself when a patient died believing that I had done something wrong; that had been my mistake'* (quotation 11). Being afraid and panic: *'previously I was worried that I might have overlooked something or might leave forgotten to do something'* (quotation 12), and *'As a new nurse, one is fear stricken and cannot provide care competently or as well as one would like'* (quotation 15). These present low professional emotions. This is because these ITNs at that time had little experience and knowledge of ITU policies, procedures and skills.

B) Current Experiences of High Professional Emotions

ITNs have to promote their knowledge and skills. One simple way to do this was through frequent exposure to similar situations: *'as days went by I found myself having dealt with all kinds of diseases and patient cases'* (quotation 14). *'Because we are dealing with several cases and several diagnoses'* (quotation 13). Building up knowledge and experience promote ITNs' professional emotions: *'Now that I am more knowledgeable and experienced , my confidence has reached very high level'* (quotation 12), and *'the most important thing as far as increasing self esteem is concerned. It is very important for ITU nurses to have updated knowledge'* (quotation 13).

The change in the professional emotions presented in section 5.6 can be presented linearly. They increase with time. Time here is correlated to the amount of knowledge and experience gained over years, because not all ITNs acquire knowledge and experience at the same speed, and because of the differences in ITUs and the differences in educational resources.

7.7. Professional Emotions and Professionality

High professional emotions increase ITNs' Professionality. Professionality refers to the level of emotionality in terms of ITNs' professional emotions (presented in table 5.11, p. 106) in using technologies and advanced nursing procedures within ITUs.

Their knowledge and skills of technology and advanced nursing procedures allow experienced ITNs to provide quality nursing care. This was expressed in the following terms: *'The greater our knowledge, the higher our self confidence and the more improve*

our nursing care' (quotation 13), . *'I do not waste time at all'* quotation 14, *'I did the best I could'* (quotation 16).

These expressions represent a change in nursing professional emotions towards high professionalism. Therefore, the concept of high professionalism in this investigation came as an emotional state in ITNs who had transformation of professional emotions to higher level.

In this study, high professional emotions operate at two levels. In the first level, the ITNs' increase feelings of high self esteem, self confidence and self competence. In the second level, they develop the feelings of responsibility, courage and control within the working context. This study sees the two levels come in a sequential order, in which the first level is a prerequisite for the second. Professional emotions were related to the impact of the use of technologies and advanced nursing procedures in the ITUs on ITNs. Moreover, their ability to provide technical care to patients. Expansion of this idea will be in part two, under the relationships of emotional transformation and the five themes affecting ITNs in ITUs.

7.8. Disparagement Emotions

Disparagement emotions can be categorised under two main themes:

- 1) First group of disparagement emotions
- 2) Second group of disparagement emotions

1) First Group of Disparagement Emotions.

The first group of disparagement emotions can be categorised under two themes:

A) ITNs with high disparagement emotions (first group)

B) ITNs with balanced disparagement emotions (first group)

A) ITNs with High Disparagement Emotions (First group)

The following are quotations of the participants' expression of the emotional changes.

They are experienced as far as the first group disparagement (First group) emotions were concerned:

(Quotation 20) Participant number three reported:

*"I will work with **more anger and nervousness and discomfort. I will work while I am frustrated.** It will affect my care, which will be reflected on the patient in front of me. All these matters will affect my work, **when I am under pressure,** and the relatives asked me any question or the patient himself asked me any question, if he is conscious, and in need of help, **I exploded on them. Nobody helps us to deal with our anger and sadness.** From this point of view, nobody helps us, I am trying to speak up with anybody, and he (manager) reform the mistake on me. I am wrong regardless to any reason or condition at the end I am wrong which would increase my anger more and my sadness more than before".* (ITN-3, 29 years, female, married. BSN, public hospital, 3 years of experience)

(Quotation 21) Participant number eight reported:

*"Of course, they have changed, **I used to get very upset** especially if you add the difficulty of working with such patient. My ability to provide care to the patients remained unaffected, though. On the contrary, it becomes better. As I said before, it would make me try harder to provide better care and to prevent complications".* (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience)

(Quotation 22) Participant number nine, reported:

"Getting sad when a patient's prognosis was grim increased over time. If a patient had CA (cancer) or was the subject of any poor prognosis, I could seriously feel greater pain (emotional pain) for them. Far away from decreasing, this feeling has increased with time. Naturally, this makes me more

serious as I work with a patient. So great is the pain I feel for the patient that it drives me to work even harder at providing them with all they need, in a bid to soothe their suffering and my sadness” (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience).

(Quotation 23) Participant number five reported:

“Of course it is changed, I believe it is increased. I mean, I see a patient for many months without improvements, he actually will not be improved, he reached the final phase, I believe the sadness will be increased. Its effect on nursing care that I tried to do whatever patient’s need, everything, I tried to keep him feel more comfortable”. (ITN-5, 26 years, female, single, diploma, private hospital, 4 years of experience)

Some ITNs reported an increase in the first group of disparagement emotions: *'I will work with more anger and nervousness and discomfort'* (quotation 20), and *'I become very upset'* (quotation 21), and *'to be sad about poor prognosis patient increased with me over time'* in (quotation 22), and *'I believe the sadness will be increased'* (quotation 23). All these ITNs (ITN-3, ITN-5, ITN-8, ITN-9), were at an early stage of emotional transformation with regard to disparagement emotions. Some of them may have high level of burnout tendency such as ITN-3 who reported *'the relatives asked me any questions or the patient himself asked me any question ...I exploded on them'* (quotation 20, refer also to quotation 1).

Some other ITNs (ITN-8, ITN-5, and ITN-9) reported an increase in disparagement emotions although they had not reached the burnout level. The current study proposes that these ITNs are likely to develop burnout syndrome and turnover from nursing profession if they do not have adequate progress in disparagement emotional transformation.

B) ITNs with Balanced Disparagement Emotions (First group)

The following quotations demonstrate the participants' experiences of emotional changes concerning balanced disparagement emotions:

(Quotation 24): Participant number six reported:

"... I became less (busy) over time. I became more organized and I knew what steps I had to take exactly. I will not be confused as the first and second CPR I worked with. Surely improved (nursing care) because we concentrate exactly on what I will do and I did it quickly, no wasting of time on unnecessary things" (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 25) Participant number four reported:

"... It has gone down. Previously when a patient died or had a cardiac arrest, my inner self "was devastated", as they say. Now, I still do get upset but to a lesser degree. The two have moved in opposite directions, while the intensity of my emotions has dwindled, my ability to provide quality care has improved greatly. At the beginning, I used to feel like , well, the patient is tired and has had thus arrest. now what? I'd only try to do my level best. Now, though, I know just what it is that has to be done: do this and that for the patient; carry out this and that manoeuvre; etc. As one may say, I provide whatever I can but this time I do it in a correct and organised way with the full understanding of what I am doing". (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience)

(Quotation 26): Participant number seven reported:

"It (my sadness) depends on the patient's case and age, if the patient was cancer case and over 100 years old, I am not feeling sorry as a 25-years old patient with MI (myocardial infarction) and having two kids. Of course, it differs from case to case but generally, over time it comes down". (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 27) Participant number one reported:

"Yes, decreased. My sadness to such patient was reduced, decreased. It will not affect my care positively; I will provide care to the patient without feeling empathetic or sympathetic with him". (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 28) Participant number two reported:

“It sure has (decreased), but my nursing care has not been affected. I feel less sad, but that has not maimed my ability to provide good nursing care. Even when the patient is a hopeless case, I still do all I can do for them. Perhaps the one big advantage of this is that it drives me to double up the nursing care I provide to the patient” (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience).

Many ITNs reported a decrease in the first group of disparagement emotions after an initial increase: *‘I become less (busy) over time’* (quotation 24), and *‘Now, I will be upset but less than before’* (quotation 25), *‘My sadness to such patient was reduced, decreased’* (quotation 27), *‘My sadness becomes less’* (quotation 28). These disparagement emotions present almost the same pattern of change as the mutual emotions. Disparagement increases at the beginning and then it decreases until it reaches a balance that suits both the ITNs' and their patients' needs.

2. Second Group of Disparagement Emotions

The following quotations demonstrate the participated ITNs' experience of emotional changes concerning disparagement emotions (Second group):

(Quotation 29) Participant number one reported:

“Yes, feeling of guilt in the case of a medication mistake has become more intense over time. It is only natural that with experience comes the greater ability to perform with no mistakes. So when one is committed, I feel very very guilty. As such I'm always strive hard to work free of mistakes”. (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 30) Participant number two reported:

“... Yes, I feel more guilty, because I feel more responsible for that patient, because I am senior (staff) in ITU. I blame myself because I must not do that (mistake). It alerts me to, oh, oh, may be more attention on how to prepare and

give medications" (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

(Quotation 31) Participant number three reported:

"...A medication mistake, especially considering that one has considerable experience dealing with patients makes me feel immensely guilty. Of course having made a mistake will be reflected on one's. Although it is true that feeling guilty is expected to motivate me to work better, it does the complete opposite to me" (ITN-3, 29 years, female, married, BSN, public hospital, 3 years of experience)

(Quotation 32) Participant number four reported:

"I feel guilty and regretful; of course, these feelings have increased, as you know there comes with a time when you would not entertain negative comments from anyone. I just don't like being counselled by anyone, it upsets me. So, what I do is try by all means to make no medication mistakes" (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience)

(Quotation 33) Participant number five reported:

"The feeling of guilt is now more intense as I feel more responsible. I feel responsible when a patient is given the wrong medicine. I feel guilty because inadequate care has been given. These matters are especially sensitive, you know". (ITN-5, 26 years, female, single, diploma, private hospital, 4 years of experience)

(Quotation 34) Participant number six reported:

"Yeh, it has very much increased, because I have now reached a stage where I should not be making mistakes or my mistakes should be minimal. I am teaching people so I'm not supposed to be making mistakes. If I make a I feel I should discipline myself about it" (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 35) Participant number seven reported:

"Sure, it is changed, it has increased. By Allah, there is work and there are feelings. I try to separate the two. For your information, I'm just going a long night duty; I've been on night shift for one full month, this affects one deeply, ..., it is sound bad to complain but to tell you the truth, I feel it is HARAM (totally unmerciful to be treated like this) to come to work this way. If I am a nurse with all these years of experience, why should I still doing night duty? Deeply I feel really bad. It makes coming to work night painful. At times I'd spend quite some

time sitting while on C shift. This does not mean that I do not want to work, I do it just so I don't end up crying, I do it just to get over the bad feeling so I can be able to work. One month of doing nights is very difficult. There are people I need to be with, to socialize with. This makes it very difficult". (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 36) Participant number eight reported:

"It has increased, you know, this is more manifest if there we had heightened stress and a lot of fatigue. Care quality also get affecting; it comes down. I find myself not persistent in working correctly". (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience)

(Quotation 37) Participant number nine reported:

"Of course, when I first started working as a nurse, I used to like doing nights. This time, however, just the idea of being on night shift makes me sad. It does not affect my performance, it just disturbs my inner feelings". (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience).

The second group of disparagement emotions includes the feeling of non-acceptance of doctor's bad performance, sadness about the long night duty, guilt due to medication mistakes, and anger about the slow response of health workers. When a medication mistakes happens, experienced ITNs tend to have high feelings of guilt: *'feeling of guilt will be increased over time if I do any mistake on medication'* (quotation 29), and *'especially if I have long experience and dealing with the patient more often, my guilt feeling will be bigger'* (quotation 31). And *'I feel guilty and regretful; of course'* (quotation 32).

Some ITNs relate strong feelings of guilt to high feeling of responsibility: *'I feel more guilty, because I feel more responsible'* (quotations 30), and *'the guilt is now increased, because I feel more responsible'* (quotation 33).

Medication mistakes and the associated feelings of guilt may have negative effects on ITNs' care: *'although it is right that the guilty feeling should motivate me to work better, but many times it does the opposite'* (quotation 31).

The second group of disparagement emotions showed an increase over time.

7.9. Self worth Emotions

The self worth emotional transformations show an increase over time. The following quotations demonstrate ITNs' experience of emotional changes concerning self worth emotions:

(Quotation 38) Participant number one reported:

"Yes has definitely increased. I feel I appreciate myself if I do a lot things for my patient. What better thing is there than providing quality care to your patient; I feel happy" (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 39) Participant number two reported:

"These sure has been a change, I feel happier every time I transfer a patient. Having helped the patient to the point of having them transferred from ITU fills me with feeling of pride and a sweet sense of achievement. It drives me to enhance my nursing care when dealing with next patient. I work extra hard in a bid to have them eventually transferred out of the ITU" (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

(Quotation 40) Participant number three reported:

"Yes has increased. Whenever a patient leaves the ITU for any other unit, I feel happy. feel happy because the fact that one of our patients is being transferred to another unit means that the patient has improved thanks to the care he/she received from us. This means that our performance has been either very good or excellent" (ITN-3, 29 years, female, married, BSN, public hospital, 3 years of experience).

(Quotation 41) Participant number four reported:

"...When we've worked with a patient and have managed to help him improve, of course. 'all lives in the hand of Allah', of course and credit is ultimately due to Him. The fact that a patient has improved, recovered and finally transferred out of our ITU is a source of great happiness and pride for us. It is gratifying to know that all our efforts and fatigue have not been in vain; our goal has been achieved. If we achieve the same goals in subsequent cases, we have in more reason to be happy. It just increases our predisposition to deal with similar or even more difficult cases in the future" (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience)

(Quotation 42) Participant number five reported:

"I think it is the feeling of relaxation that comes with the knowledge that a patient is going to be transferred from ITU. I feel relaxed; I feel that I achieved something, that are we have been up to the task and managed to get the patient's condition so improved that he/she has had to be transferred out of the ITU. It encourages me to continue working with same zeal and tackle similar cases with the same determination". (ITN-5, 26 years, female, single, diploma, private hospital. 4 years of experience)

(Quotation 43) Participant number six: reported:

"...I am happy as long as I am trying to eliminate the patient's feeling of pain...surely, it effects my work very much, because, if I like the unit I am working in, I like the nursing care and feel happy, satisfied, surely my work will be better" (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 44) Participant number seven reported:

"Yes, it has changed over time. I mean the more knowledge I gain, the greater my confidence and the happier I am. It is just brings me so much happiness to know that I have been able to do something for myself; that is what acquisition of knowledge make you feel. When I first came, of course, I felt insignificant. I was eager to learn, though, and I soon found myself performing better". (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 45) Participant number eight reported:

"...Because I knew, the more I feeling that a critical patient is improving and his recovery is thus nearing, the less fearful I feel. Removing a CVP (Central Venous Pressure) or arterial line from a patient is a clear sign that the patient is improving so it makes me feel good. In fact every time I remove something from

a patient because they've getting better, I'm filled with happiness because I can see the fruit of my efforts on the patient” (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience).

(Quotation 46) Participant number nine, reported:

“Naturally, whenever I successfully perform an extubation on ITU patient, I feel so so happy because I know that my effort and that of the entire health team have borne fruit. Extubation is, of course, a sign of our success, there can't any reward greater than this” (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience).

ITNs reported an increase in self worth emotions when they care for a critically-ill patient:

'I will appreciate myself more when I feel that I am doing a lot of things for the patient'

(quotation 38), when they transfer a patient out of ITU: *'I became much happier when I*

transfer a patient' (quotation 39), and *'when any patient leaves ITU to any unit, I will be*

happier' (quotation 40), and *'This patient recovered, improved, and transferred out, this is*

a source of happiness and proud for us' (quotations 41), when ITNs relieve patient's pain:

'I am happy as long as I am trying to eliminate the patient's feelings of pain' (quotation

43), and when extubate patient from endotracheal intubation or remove invasive lines: *'As*

much I remove anything from the patient, something on him, as much I feel happier'

(quotation 45). ITNs self worth emotions increase when they deal with sophisticated

technological equipments and when they are successful in cardiac arrest resuscitation.

ITNs reported an increase in these emotions over time, similar to the changes in

professional emotions.

7.10. Part Two: The relationship between the five themes affecting ITNs within ITUs and the groups of emotional changes

This part of the chapter tries to connect the Second Phase findings and analysis that ended

up with the five themes, which affected ITNs (Technology, advanced nursing procedures, nurse-patient relationships, nurse-human relationships and working conditions) with the groups of emotional changes within the ITNs as specified in the Third Phase. Diagram 7.1 (next page) presents the interrelation among these concepts. Quotations from participated ITNs are used to support this analysis.

7.11. Technology and ITNs' Emotional Transformation

The following quotations help establish the relationship between technology and emotional transformation.

(Quotation 47) Participant number one reported:

“I mean, I enjoy dealing with more advanced machines. It just makes work easier, it makes it easier for me to render my services; it reduces the time I need to accomplish my tasks and thus allows me to do more things. The presence of advanced machines reduces task time (saves time) and so it provides me the opportunity to perform more tasks...it gives me the opportunity and time to render better care as I can prioritize my care activities and to do much more”. (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

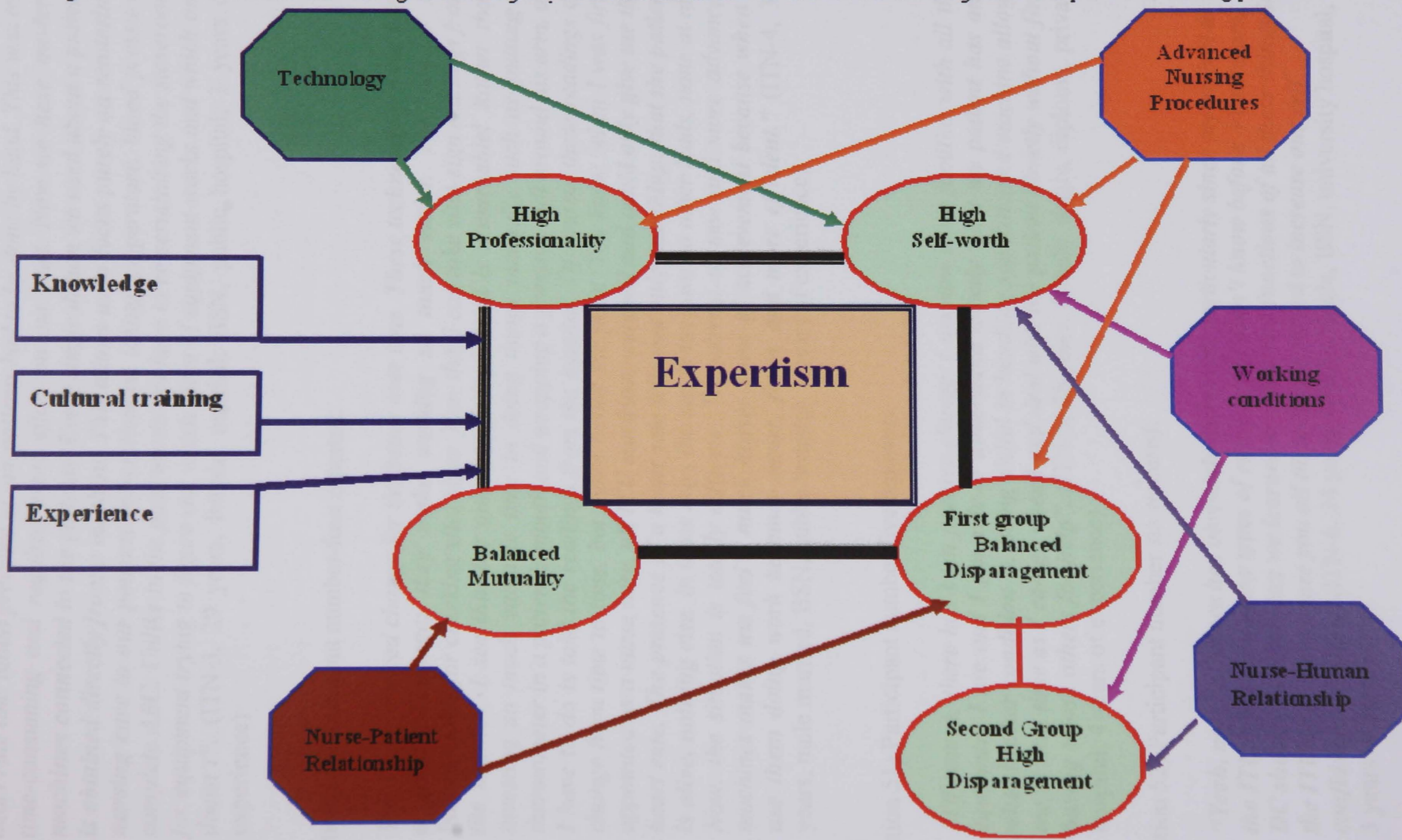
(Quotation 48) Participant number two reported:

“It has been enhanced, I should say; new technology has enhanced it. I have been able to learn new things because of new equipment and the like. Sometimes, it makes working a lot easier. High technology really makes my job easier. I mean, everything is based on the monitor. We don't need to take blood pressure by stethoscope, for example, we just read it off the monitor. The same is true for CVP (Central Venous Pressure) readings and everything else that can be handled by technology. No doubt, technology makes our work much easier. All we have to do is check everything on the monitor; it's that easy.” (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

(Quotation 49) Participant number three reported:

“My knowledge has expanded. Thanks to using the advanced equipment, my ability to render better nursing care has been given a boost. Nowadays, we have reliable equipment in ITUs. Previously, the equipment we had was old and faulty

Diagram 7.1 : The interrelatedness among emotional groups transformations and the five themes affecting ITNs to expertism in nursing practice.



so we had to do most of the work manually. All things like taking the temperature, heart rate and blood pressure of our patients had to be done by hand. This was too time-consuming and required extra effort on our part. Now we have modern machines connected to the patients. Every single datum we need about a patient is obtained directly from a machine. This allows us to focus purely on rendering nursing care to our patients rather than on taking temperature, blood pressure, complete ABC. Unlike in the past, we do not have to be scrutinizing the storeroom for equipment trying to figure out which piece of equipment works and which one doesn't". (ITN-3, 29 years, female, married, BSN, public hospital, 3 years of experience)

(Quotation 50) Participant number-four reported:

Yes, I have noticed change for the better over time. These technologies have been a great advantage; they make working so much easier. The monitor is indispensable for checking vital signs. Now that I can take vital-sign readings from the monitor, I see that the amount of time saved is remarkable! Rather than investing so much valuable time in doing things manually such as putting a thermometer in a patient's mouth and wrapping a pressure cuff around his arm, all I have to do is take the readings from the monitor. Of course, these readings do change from time to time, but that's beside the point. You know, when I was first appointed as a nurse here, all ITU machines were old and could only give me the heart rate. The presence of a heart rate tells you only one thing: that the patient is alive, nothing else. In those days the machines gave no other leads, none at all. Now, the situation is totally different. The arrival of new and more advanced machines makes me feel a much higher sense of achievement because when I use them doing work becomes easier, faster and more efficient." (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience).

(Quotation 51) Participant number five reported:

"Of course, there has been positive change. I am now more familiar with all the equipment I use and I am able to understand exactly what my patient has and what his/her condition is. Being skilful in handling sophisticated machine allows me to save time as I can go ahead and deal with the patient directly without first having to ask others for help". (ITN-5, 26 years, female, single, diploma, private hospital, 4 years of experience)

(Quotation 52) Participant number six reported:

"Yeah, my confidence has obviously increased, particularly since my arrival at the ITU. There are many types of equipment I didn't know before. Ventilators, DC shocks, monitor, etc; we learned the uses and functions of all these things in the ITU and I can assure you all these things served to increase our self confidence over time. (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 53) Participant number seven reported:

“...Of course the old ventilators that were here before were not like the new ones we have now. Now, everything is clear on the machine. I mean all information: figures, waves, and data. The Ultima, for example, (Ultima is a ventilator), it shows all figures and waves that establish the patient’s condition; nothing is unclear. Admittedly, modern equipment is more sophisticated but it is also easier to understand. Previously (with the old machines), I was lost as to what was happening! Now, with computerized machines, I feel more confident and am more aware of why things are happening the way they are. Of course, better equipment makes work easier for the nurses; we can pinpoint defects just like that! Understandably, I had to acquire greater knowledge and understanding of the use of sophisticated equipment in order to make my job easier and perform better”. (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 54) Participant number-eight reported:

“At present of course. At the beginning, we only focused on simple things such as the monitor’s pulse oximeter and the like. As time passed, though, I realized I could make better use of technology. I tasked myself with discovering new things and thanks to that; I gained insight into various features of a ventilator, its parameters and the full range of its functions. I now know how to obtain other types of information just by reading the monitor. For example, a simple thing of Swan Ganz Catheter, if it is present on the patient, we know how to read cardiac output on the patient. The more I deal with the machines the better my career gets. (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience)

(Quotation 55) Participant number-nine reported:

“Of course, the presence of new machines in the unit allows me to feel that there is improvement in my performance; I feel happier. Every time they bring a new machine, it makes me happier. By the way, they just brought some monitors, which show many things such as temperature, saturation, blood pressure, etc. Having said that, my dedication and attention towards the patient were greater. In the past when we used to measure all these things manually. Now it’s different. All, data is displayed directly on my monitor and I am able to see if the patient has high fever, for example, so I can give him the right nursing care. The same goes for hypotensive patients. I mean it is just nice, for example, to read a patient’s saturation level off the screen because it allows me to follow all the developments in my patient’s situation. This results in both my performance and confidence in what I do being higher”. (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience)

A) ITNs between Old and New Technologies

In their responses, some ITNs compared old technology with new technologies: “Previously, the equipment we had was old and faulty”... “Now we have modern machines connected to the patients. Every single datum we need about a patient is obtained directly from a machine.” (quotation 49), and “Now, everything is clear on the machine. I mean all information: figures, waves, and data.” ... “It shows all figures and waves that establish the patient’s condition; nothing is unclear (quotation 53).

With old technology ITNs could not get much information about a patient's conditions. New sophisticated technologies now provide them with more and accurate information about the patient's conditions without them having to do much: ‘Admittedly, modern equipment is more sophisticated but it is also easier to understand’ (quotations 53).

B) Benefits of Technology in ITUs

Technology is an integral part of ITU settings. It has many benefits for ITNs:

- 1) It facilitates the nurse's work: ‘It just makes work easier’ (quotation 47), and ‘these technologies have been a great advantage; they make working so much easier’ (quotation 50), and ‘better equipment makes work easier for the nurses’ (quotation 53).
- 2) It saves the ITNs’ time: ‘it reduces the time I need to accomplish my tasks’ (quotation 47), and ‘I see that the amount of time saved is remarkable!’ in quotation 50, and ‘... allows me to save time’ (quotation 51).
- 3) It saves the ITNs' efforts: For example, an ITN can utilize time effectively to bring down a patient's temperature rather than checking the patient's temperature, ‘I am

able to see if the patient has high fever, for example, so I can give him the right nursing care' (quotation 55).

- 4) It enables nurses to perform more tasks: *'it provides me the opportunity to perform more tasks'* (quotation 47).

C) Technology and the Transformation of Professional & Self-Worth Emotions

Technology is related to the professional emotional transformation of ITNs working in ITUs. It gives them a sense of achievement: *'...makes me feel a much higher sense of achievement ...'* (quotation 50), self-confidence: *'we learned the uses and functions of all these things in the ITU and I can assure you all these things served to increase our self confidence over time'* (quotation 52), and, *'Now, with computerized machines, I feel more confident'* (quotation 53), *'because it allows me to follow all the developments in my patient's situation. This results in both my performance and confidence becoming higher'* (quotation 55), and it makes nurses feel more attentive: *'my dedication and attention towards the patient were greater'* (quotation 55). Technology also is related to the self-worth emotional transformation of ITNs in ITUs, as it has a bearing on their happiness: *'Every time they bring a new machine, it makes me happier'*. (quotation 55).

D) Impact of Mastering Technology on Nursing Care

The ITNs who master technology within ITUs display many qualities of expertise within clinical setting such as being organized and being quick. Therefore, it can be said that technology makes nurses provide the nursing care more quickly: *'because*

when I use them, doing work becomes easier, faster and more efficient' (quotation 50).

- 1) It makes providing nursing care easier: *'it makes it easier for me to render my services'*(quotation 47), and *it makes working a lot easier* quotation 48, and *'doing work becomes easier'* (quotation 50).
- 2) It makes giving nursing care more efficient: *'thanks to using the advanced equipment, my ability to render better nursing care has been given a boost'* (quotation 49), and *because when I use them, doing work becomes easier, faster and more efficient'* (quotation 50), and *'I am able to understand exactly what my patient has and what his/her condition is. ... I can go ahead and deal with the patient directly without first having to ask others for help'* (quotation 51), and *'The more I deal with the machines (the technology) the better my career gets'* (quotation 54).
- 3) Technology acts as a motivator for ITNs to develop their professional emotional transformation. ITNs reported high professional emotions due to the presence of technology (quotations 50, 52, 53, 55). It also appears to have helped them develop their self-worth emotional transformation (quotation 55). Therefore, it could be affirmed that being knowledgeable and experienced in dealing with ITU technologies influences an ITN's ability to develop positive emotional transformation from a professional and self-worth standpoint. This investigation suggests that the increase in an ITN knowledge and experience in using ITU technology enhances his/her professional and self-worth emotional transformation (diagram 7.1), and therefore promotes the quality of nursing care within ITUs.

7.12. Advanced Nursing Procedures and ITNs' Emotional Transformations

The following quotations help establish the relationship between advanced nursing procedures and emotional transformation.

(Quotation 56) Participant number one reported:

Yes, when I succeed in carrying out a CPR, my feeling is one of immense happiness; it has a positive impact on me. It motivates me to do my best and save the lives of as many patients as I can. For example, if out of ten CPRs I perform, eight turn out to be successful, I feel extremely good and encouraged more ready subsequent cases” (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 57) Participant number one reported:

“Yes, having taken part in CPRs many times makes me feel less busy. I feel I know everything, you know, and that makes me feel less tense and, therefore less busy. I feel more organised,” (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 58) Participant number one reported:

“Yes, my guilty conscience due to medication errors has been getting more and more intense over time. You know, with experience comes greater ability to avoid mistakes, so when I make one, it just makes me feel even guiltier. I know I should try to avoid mistakes as much as I can and, yes, I am working on that by improving my knowledge and skills (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

Advanced nursing procedures were seen to be related to three groups of emotional transformations: The professional group of emotions, the disparagement group of emotions, and the self-worth group of emotions.

1) Professional Group: Experienced ITNs tend to have high professionalism in dealing with advanced nursing procedures such as resuscitating cardiac arrest patient. Experienced ITNs reported increased feelings of courage during CPR: *‘... if out of ten CPRs I perform, eight turn out to be successful, I feel extremely good and encouraged,*

more ready subsequent cases,' (quotation 56), and *'fear has been replaced with courage instead, that's what's making me do exactly what I'm supposed to do'* (quotation 15), and *'I'm able to carry out a complete CPR with no need for the presence of a doctor'* (quotation 18), and *'as an ITN, there comes a time when you deal with ITU patient full of self esteem'* (quotation 19).

2) Disparagement Group. Related to the first group of disparagement emotions, experienced ITNs tend to have balanced disparagement when dealing with advanced nursing procedures such as resuscitating cardiac arrest patient: *'having taken part in CPRs many times makes me feel less busy'* (quotations 57), and *'Over time, I've learned to feel less busy'* (quotation 24), *' Now, I still do get upset but to a lesser degree'* (quotation 25). Here, experienced ITNs reported feeling less pressure (they felt less busy) when resuscitating a cardiac arrest patient.

ITNs reported an increase in second group of disparagement emotions, such as high guilt feeling when they committed a medication mistake: *'My guilt conscience due to medication errors has been getting more and more intense over time'* (quotations 58), *'I feel more guilty'* (quotation 30), *'A medication mistake...me feel immensely guilty'* (quotation 31). And *'I feel guilty and regretful; of course, these feelings have increased'* (quotation 32). Also, *'the feeling of guilt is now more intense'* (quotation 33), and *'Yeah, it has very much increased'* (quotation 34).

3) Self-worth group: Experienced ITNs tend to have high self-worth emotions when their advanced nursing procedures such as CPR are successful: *'when I succeed in carrying out a CPR, my feeling is one of immerse happiness'* (quotations 56). And *'I'm*

filled with happiness because I can see the fruit of my efforts on the patient' (quotation 45), and *'I feel so, so happy' because I know that my effort and that of the entire health team have borne fruit'* (quotation 46).

These research findings suggest that mastering advanced nursing procedures within ITUs enhances ITNs' professional, disparagement, and self-worth emotional transformations. This may move ITNs towards expertise in clinical practice by virtue undergoing emotional transformations that lead to professionalism, balanced in disparagement (first group) and high in self-worth (diagram 7.1)

7.13. Nurse-Patient Relationship and ITNs' Emotional Transformation

The following quotations help establish the relationship between nurse-patient relationships and emotional transformation.

(Quotation 59) Participant number eight reported:

"... As we said a while ago, how well I can help a patient alleviate his/her pain depends on the degree to which I can empathise him/her". (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience)

(Quotation 60) Participant number seven reported:

"In so far as sympathy is concerned, it has come down. I don't mean it has all disappeared, no, don't get me wrong. What I am trying to say is that I deal with patients more professionally than sympathetically. By this I mean that if a patient's pain is not relieved, I don't feel too uncomfortable; this is what I mean when I say the degree to which I feel sympathetic has come down. Of course, I do feel some guilt for failing to relieve a patient's pain. However, if despite taking so much medication, a patient's pain persists, I do not feel that guilty anymore because I will have done all I could"

(Quotation 61) Participant number six reported:

“Frankly speaking, the level of sympathy that I feel has gone down but this hasn’t maimed my ability to render quality care at all. Every ITU patient is obviously critically ill and in great pain. Unfortunately, since I have to deal with around eight such patients every day, it is practically impossible for me to sympathise with each one of them as much as I would like to. I must emphasize, though, that my ability to provide quality care remains strong”. (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 62) Participant number nine reported:

“On the contrary; if a patient is terminally ill and his death is inevitable, I feel happy for him when he dies because his suffering will finally have come to an end; he finally gets to rest (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience)

(Quotation 63) Participant number-two reported:

“Yeah, it has increased; my self confidence has increased. This is because I have now been working with ITU patients for quite long. Let’s face it, confidence in myself was rock bottom when I just started. Now I am able to deal with several patients at a time, which only shows how far my self-confidence has come. There is no doubt that with time (and thus experience) I am now able to work much faster and achieve better results thanks to the fact that I have dealt with different types of cases many times over and this has only increased my competence. At the outset of my nursing career, I was rather slow in the way I dealt with patients; I wasn’t too sure how I should deal with them. But, you know, once you have dealt with a certain type of case, subsequent cases become so much easier.

(Quotation 64) Participant number six reported:

“Yes, I guess it’s only natural that I should feel happy when my efforts to try and alleviate a patient’s pain are having positive results. Of course my happiness increases upon seeing that what I have given the patient is bringing comfort to him/her. There is no question that this feeling will have a huge impact on the way I do my job because not only does it make me like the unit I am working in, but it also makes me enjoy providing nursing care there; I feel satisfied and happy; I definitely do my job better”. (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

The nurse-patient relationship is the core of ITN interactions in ITUs. The reciprocity of this relationship gets ITNs involved in patients' emotions to such a point that they show their full empathy and closeness to patients.

A) ITNs' with Strong Relationship with Patients

When they were first incorporated in ITU work, inexperienced ITNs reported an increase in their feelings of empathy and closeness to the patients thereby experiencing a state of mutuality: *'how well I can help a patient alleviate his/her pain depends on the degree to which I can empathise him/her'* (quotation 59), *'they have increased...the closer I feel I am to him'* (quotation 2), and *'I feel excessively close to the patient'* (quotation 3), and *'This enhances the relationship between the patient and myself'* (quotation 4).

Similarly, they also reported high disparagement state of emotions: *'more anger and nervousness and discomfort'* (quotation 20), and *'I used to get very upset'* (quotation 21), and *'Getting sad when a patient's prognosis was grim increased over time'* (quotation 22), and *'no doubt my sadness will increase'* (quotation 23).

As these emotional states are not ideal for an ITN's optimal functionality, ITNs should to be trained to minimize the impact of strong nurse-patient relationships that are based on high mutuality and disparagement.

B) ITNs with Balanced Relationship with Patients

ITNs should discover the balance in their emotional relationships with patients through knowledge and experience in order to be able to provide quality nursing care. ITNs need to transform their mutual and disparagement emotions to reach the state of balanced mutuality and disparagement to provide optimal nursing care: *'I do not feel that guilty anymore'* (quotation 60), and *'the level of sympathy that I feel has gone down'* (quotation

61). One can see similar opinions in quotations 5, 6, 7, 8, 9 with regard to balancing mutuality. Quotations 24, 25, 26, 27, 28, are a collection of opinions of ITNs regarding balancing disparagement.

Nurse-patient relationships have a positive impact on the professional emotional transformation of ITNs the tendency of which is to elevate their feelings of self-confidence and competence: *'my self confident has increased. This is because I have now been working with ITU patients for quite long'* (quotation 63), Moreover, this positive impact on ITNs' self-worth emotional transformation generates a high feeling of happiness which in turn helps ITNs to alleviate a patient's pain: *'I ...feel happy when my efforts to try and alleviate a patient's pain are having positive results'* (quotation 64).

7.14. Nurse-Human Relationship and the ITNs' Emotional Transformation

The following quotations helps establish the relationship between emotional transformation and nurse-human relationships.

(Quotation 65): Participant number two reported:

"It surely has increased. Most of the time, they are slow (in their response). This will increase my suffering as it makes my work slow. There isn't much I can do if, for example, the results of laboratory tests take long to come. It means I can't give the patient the care he deserves on time. This obviously decreases the quality with which I handle the patient". (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

(Quotation 66) Participant number three reported:

"It has increased of course; with time, the feeling has only gotten more and more intense. Every time my ability to work properly is hampered, I suffer even more immensely and this has a 100% negative impact on the work that I do. Suffering and sharing the pain with a patient while the people around you are not helping at all reflects badly on the quality of care the patient receives. I see my

competence weaken under such circumstances. (ITN-3, 29 years, female, married, BSN, public hospital, 3 years of experience)

(Quotation 67) Participant number one reported:

“My suffering has tended to decrease because, in my quest to provide much better care, I have taken it upon myself to find solutions to such problems so that I could avoid delays (caused by other health professionals)”. (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 68) Participant number seven reported:

“Yes, it is changed. Over time, it has abated. Now, I am a member of a full medical team comprising more than one hundred workers. If I kept on suffering from everything, I would be the cause of many troubles; I would be the spoiler. My aim now is to work in perfect harmony with the others”. (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience).

(Quotation 69) Participant number four reported:

“Yes, things have changed. We now work as a team and the need to cooperate among ourselves cannot be overstated. If I am busy doing something and there is another thing that has to be done, for example, a colleague must take up the task and not wait for me to do it after finishing what I am doing. Anything that benefits the patient is the responsibility of the entire nursing team” (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience).

Quotation 70) Participant number six reported:

“Of course, this point is very important, more so in the ICU. We actually need to work as a team. We cannot feel relaxed in our work nor can we provide comprehensive and continuous care to our patients if we do not work as a health team and if each nurse only wants to serve their own self interest without due regard for their colleagues” (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience).

(Quotation 71) Participant number four reported:

“Definitely, and for the better because everyone knows his or her duties very well. If we call an x-ray technician to perform an x-ray on such or such a patient, for example, we have the certainty that he will do it promptly and efficiently. We will be doing our part and he will come with his equipment and do his part; everything will be done smoothly without any glitches. ... so long as the guy comes and does his part and I do my part without any of us interfering with the work of the other, all will be fine and our jobs will be well done; no confusion and

no delay in giving the patient the right care” (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience)

(Quotation 72) Participant number nine reported:

“Naturally, time has played its part in causing change. If I need an x-ray tech to come and do a chest x-ray on a patient, for example, I will be very, very happy if the guy can come quickly and get it done so that the doctor can see it and follow up his work with the patient. Of course, I deal with them quite nicely; I do my job and they do theirs. I feel more in control when I have everything I need to deal with the patient such as x-ray, blood from the blood bank, etc. This has a positive impact on my work and makes me very happy. I suddenly find myself very active and giving the best I can to the patient” (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience).

Nurse-human relationships focus on an ITN’s relations with non-patient people who have to do with ITUs. In these relationships, ITNs are also emotionally involved. They respond emotionally showing disparagement or self-worth emotions in situations concerning nurse-human relationships.

A) ITNs with Weak Relationship with Human Beings (within ITUs)

At the beginning of their relationships with other health workers, inexperienced ITNs reported an increase in the feelings of anger, sadness, and suffering that were expressive of high disparagement: *‘Most of the time they are slow (in their response). This will increase my suffering’* (quotation 65), and *‘with time, the feeling has only gotten more and more intense. Every time my ability to work properly is hampered ...’* (quotation 66).

These emotional states were not convenient for ITNs. It was necessary, therefore, that the ITNs transform these emotions in such a way that their negative impact could be reduced, something that could then allow the nurses to provide quality nursing care.

B) ITNs with Balanced Relationships with Human Being (within ITUs)

Experienced ITNs transformed these high disparagement states into balanced disparagement: *'my suffering has tended to decrease because ... I have taken it upon myself to find solutions to such problems'*, (quotation 67), and *'Yes, it is changed. Over time, it has abated'* (quotation 68).

Experienced ITNs also reported feeling of high self-worth that represented by high self-worth emotions: *I will be very, very happy if the guy can come quickly and get it (the x-ray) done ...'* (quotations 72).

The nurse-human relationship is a factor affecting ITNs' emotional transformation in two main areas: Disparagement and self-worth. The ITNs' emotional transformation depends on their level of experience and knowledge regarding such situations and relations with other health care workers.

7.15. Working Conditions and Emotional Transformation

The following quotations helps establish the relationship existent between working conditions and emotional transformation.

(Quotation 73) Participant number two reported:

"Yes, it has increased. Wow, (amid laughter) it's a sad feeling when I report for night duty! I don't think it affects my work; not at all" (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience).

(Quotation 74) Participant number-seven reported:

“...My main concern is being able to perform all my prayers especially in the afternoon shift from 2pm to 9pm as that is when most prayers take place. I need to spare some time for prayer. For me, missing a prayer brings a great sense of guilt. With better time management, there should be no reason why I should miss any prayer. If I am attending to a very sick patient; one whose situation is dire, I wouldn't leave even if I have missed quite a few prayers unless there is someone to replace me. I feel frustrated if I do not pray; I feel frustrated too if I fail to comply with my duties. We are Muslims, you know, and our first priority is to help the patient before attending to our own interests”. (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 75) Participant number one reported:

“I do not feel a huge sense of guilt because I am at work and “work is worship” (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 76) Participant number nine reported:

“Naturally, whenever circumstances do not allow me to pray. I regard work to be the same as worship. If I have too much work and there is no time to go for prayer, I postpone the prayer to a later time. All the same, I still feel internally dissatisfied whenever I do not pray when prayer is due”. (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience)

(Quotation 77) Participant number eight reported:

“Surely, that is generally the case, especially in ITUs. I rarely come thinking I will have light duties; I always report for duty ready for a hectic day (shift). If the situation is less hectic, I will certainly be more comfortable and more profuse in the amount of care I give to the patients” (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience).

(Quotation 78) Participant number two reported:

“Yes I feel relaxed when I report for duty and find it easygoing. That way, I can be able to provide unrestrained care for my patients. Relaxation grows with time and allows you to give better care”. (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

(Quotation 79) Participant number six reported:

“Yes, of course, with fewer responsibilities on my shoulders, I feel more relaxed. I am certainly able to provide better nursing care. I mean, let’s face it; when you have too many things to do at one time, it will be very difficult for you to perform well, but if you have fewer things to do, then obviously you will be able to provide more and better care. (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

Working conditions related to the various situations within intensive therapy units have a crucial influence on an ITN’s job performance. These include situations such as workload, being able to pray when it’s prayer time, and the availability of continuous education programmes, among others.

A) Working Conditions and ITN Disparagement Emotions

Working conditions are related to disparagement (second group) and self-worth emotional transformation depending on working context. For example, working long night shifts continually for two or more weeks makes many ITNs express high disparagement emotional transformation: *‘Yes, it has increased. Wow, (amid laughter) it’s such a sad feeling when I report for night duty!’* (quotation 73). ITNs expressed similar emotions for being unable to pray at prayer time because of work had the ITNs the same: *For me, missing a prayer brings a great sense of guilt’* (quotations 74), and, *‘I still feel internally dissatisfied whenever I do not pray when prayer is due’* (quotation 76).

However, some ITNs also reported a decrease in disparagement emotions even if they miss a prayer: *‘I do not feel a huge sense of guilt because I am at work and “work is worship’,* (quotation 75). And, *‘I regard work to be the same as worship’* (quotation 76), These ITNs considered 'work as worship' in order to alleviate their guilt feeling when they missed a prayer.

B) Working Conditions and ITNs' Self-Worth Emotions

ITNs expressed high self-worth emotions when the working conditions were less stressful. For example, the feelings of relaxation and comfort will be high in light duty: *'If the situation is less hectic, I will certainly be more comfortable ... '* (quotations 77), and *'Yes I feel relaxed when I report for duty and find it easygoing'* (quotation 78), and *'with less responsibility on my shoulder, I feel more relaxed'* (quotation 79). This investigation defends such supportive working conditions as will be explained later in this chapter under disparagement between contextual and cultural situations.

(Quotation 78) Participant number two reported:

"Yes I feel relaxed when I report for duty and find it easygoing. That way, I can be able to provide unrestrained care for my patients. Relaxation grows with time and allows you to give better care". (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

(Quotation 79) Participant number six reported:

"Yes, of course, with fewer responsibilities on my shoulders, I feel more relaxed. I am certainly able to provide better nursing care. I mean, let's face it; when you have too many things to do at one time, it will be very difficult for you to perform well, but if you have fewer things to do, then obviously you will be able to provide more and better care." (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

7.16. Time Factor in Relation to Knowledge, Experience and Cultural Training

The following quotations demonstrate the relationship between time factor in relation to knowledge, experience and cultural training.

(Quotation 80) Participant number-one reported:

"...when I keep my knowledge and skills updated, I feel better; I will feel more competent, more confident in carrying out my duties". (ITN-1, 33 years, male, married, BSN, public hospital, 11 years of experience)

(Quotation 81) Participant number two reported:

"With the expanded knowledge and sharper skills I have acquired over time, I find that I am able to work faster on patients. I am able to work (give care) faster than when I first started. I find it easier to work on patients now; it's that straightforward. Enhanced knowledge and skills lead to better patient care. I now find dealing with a patient a lot, lot easier" (ITN-2, 29 years, female, married, BSN, university hospital, 11 years of experience)

(Quotation 82) Participant number three reported:

It has increased. Attending lectures to update my knowledge in nursing issues augments my self esteem as it allows me to do a better job when working on patients. With all that I already know and the newly gained knowledge needed to sharpen my skills, I simply cannot help feeling the sense of higher self esteem. It allows me to work more appropriately on the patients than if I didn't have the additional knowledge and my self esteem was low". (ITN-3, 29 years, female, married, BSN, public hospital, 3 years of experience)

(Quotation 83) Participant number four reported:

"... Every time I learn something new through reading a book or scientific publication, I am more than willing to share what I have learned with anyone who asks me; I also bring it out during discussions so that my colleagues can also benefit. Anything good that I read I talk about. Just being able to share new knowledge with friends and colleagues fills me with happiness. It simply feels great to see that they (the colleagues) have learned something from me. Of course, knowledge changes over time as new diseases appear and one has to stay abreast. Having everyone aware of and able to apply the latest developments at international level becomes a source of happiness for us and leads us to perform better. My motto is that if I don't know something, I have to educate myself about it and then share the knowledge with my colleagues. This translates into being able to deal with patients in a much better way. This is why whenever I am able to attend workshops or seminars on a regular basis, be it that I find them on my own or the hospital sends me there, I make sure that what I learn serves to enhance not only my own experience but of my colleagues as well. As a result, my self esteem is uplifted". (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience).

(Quotation 84) Participant number five reported:

“Yes, I believe so. Even with the increased workload that I have now I still look for books and read them. I just feel it is imperative that I read because it only serves to improve my performance. If I am dealing with an unusual case and I am not too familiar with it, for example, I read about it’. Say, I am dealing with a particular unusual case today, what I do is go and find out more about it in reference books or other relevant publications. The following day I return to work more enlightened. If, for some reason, I am unable to read about it, I ask”. (ITN-5, 26 years, female, single, diploma, private hospital, 4 years of experience)

(Quotation 85) Participant number six reported:

“Yeah, this is very important to me, and I feel really happy about it. To obtain even a single piece of useful information from any of my colleagues makes me very happy and this happiness motivates me never to give up reading. It obviously affects patients a lot, especially those in ITUs. Our work is not routine work; we face new cases every day; have to apply new procedures that are appropriate for those cases and strive to learn new ways of doing things. The more knowledge I acquire, the more I can benefit the ITU patients I deal with” she added “... this is the most important point in so far as increasing one’s self esteem is concerned. It is of paramount importance for an ITU nurse to have updated knowledge, because we are constantly dealing with a diversity of cases and a multitude of diagnoses. We need to know many things; it is the only way our self-confidence can increase and the care we give our patients improve. It seems to me that self confidence and updated knowledge have a huge impact on ITU nursing care. This is because as ITU nurses, we have relative autonomy; I mean, we are skilled in a lot of things and so are allowed more autonomy than other hospital staff. Besides, ITU doctors are not always present, so we have to be fully knowledgeable about CPR so we can independently apply the procedure to the patients. In general, nursing care is enhanced and I am able to take fast action before the doctor’s arrival”. (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience)

(Quotation 86) Participant number seven reported:

“Yes, it has changed over time. I mean, whenever I gain more knowledge, I become more self-confident and happier. I feel happy that I have been able to do something positive for myself; that I have expanded my knowledge. When I started my career, I felt that I was nobody in the unit, but I was eager to learn. After a while, I learned quite a bit and no longer felt that I was nobody. ... The more I read more the more confident I became and the higher my self esteem”. He added *“... the increase in my self confidence has been the result of my ability to follow proven scientific approaches when doing things. Following proven procedures that I know very well makes me feel better than working full of uncertainty ... when I am well versed with a procedure and am in possession of the latest information about it I work better; everything in front of me becomes absolutely clear”.* (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

(Quotation 87) Participant number eight reported:

“At the beginning, I didn’t know a lot of things. With time, I learned many things. I began to understand why certain things happened and why they were dealt with in one way as opposed to another. I also learned what the best way of doing certain things was. Just knowing how to carry out routine tasks could have been enough for some people, but not for me. I wanted to know not just what I was doing but also why I was doing it in a particular way. It is the only way one can increase his or her competence. Carrying out routine work blindly without understanding why becomes problematic when a mistake occurs because you won’t know how to deal with it. Deeper understanding breeds greater competence and leads to better work and better care. He added “... my self esteem rises in proportion to how updated my knowledge is and to how well I apply such knowledge (in conjunction with relevant skills) to perform better...” (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience)

Quotation 88) Participant number nine reported:

“Indeed, being exposed to new information and experience makes me happier and happier. How simple the info is and who it came from doesn’t matter. So long as the info is very helpful and both my skills and adherence to procedures are enhanced, I’ll do a far better job when working on patients. The secret lies in knowing how to find out exactly what the patient needs and providing it just when he or she needs it”. She added, “I guess it is only natural that my confidence increases proportionally to how knowledgeable and skilled I am and how much I adhere to the right procedures. I become more confident in what I do and in the care that I give; I fear nothing and so I work better. The end beneficiary is my patient, of course”. (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience)

Time was a constant variable in the current study. The important thing was the extent to which ITNs were able to gain knowledge, experience and cultural training over time, and were thus able undergo emotional transformation. This is why quantifying the time factor was not important. Instead, emphasis was placed on the extent to much the knowledge, experience and cultural training gained by ITNs over time influenced their emotional transformation. Most of the ITNs used to say 'over time¹' in their responses to indicate

that knowledge, experience and cultural training were cumulative over time. The following points were important in this regard:

¹Over time' is mentioned by ITNs by almost all quotations (such as quotations 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 24, 25, 26, 29, 32, 34, 37, 44, 50, 54, 62, 65, 66, 70,...,etc)

1) Hospital settings, the availability of continuous education programmes and the feasibility of ITNs to attend these programmes affect the extent to which they gained knowledge, experience and cultural training.

2) ITNs have different abilities to gain knowledge, experience and cultural training depending on individual differences, intelligence, willingness to educate themselves, personality, etc.

3) Without active effort to promote knowledge, experience and cultural training an ITN's emotional transformation cannot be achieved. The variables that actually influence an ITN's emotional transformation were knowledge, experience and cultural training, which change over time.

'Knowledge' was an important factor in promoting the professional growth of ITNs in ITUs. 'Knowledge', here means the theoretical knowhow obtained by ITNs through self study, training courses and/or by virtue working in intensive therapy unit. By large, this knowledge is obtained through reading: *'Every time I learn something new through reading...Anything good that I read I talk about'* (quotations 83), and *'I still look for books and reading them, I just feel it is imperative that I read...'* (quotation 84).

'Knowledge' is also obtained from colleagues and other health care workers: *'How simple the info is and who it came from doesn't matter'* (quotation 88).

ITNs also gain 'knowledge' through attending continuous educations programmes lectures, seminars and workshops: *'Whenever I am able to attend workshops or seminars, on*

regular basis, be it that I find them on my own or hospital sends me there , I make sure that what I learn serves ...my colleagues as well' (quotation 83).

'Experience' here means the theoretical and technical information obtained in the course of working in the ITU. It is usually obtained through frequent and recurrent exposure to similar situations: *'Because we are constantly dealing with a diversity of cases and a multitude of diagnosis'* (quotation 85), And *'as days went by, I found myself having dealt with all kinds of diseases and patient cases'* (quotation 14), *'...out of ten CPRs I perform eight turn out to be successful'* (quotation 56), and, *'having taken part in CPRs many times makes me feel less busy'* (quotation 57). Mental efforts to learn from these exposures also play a major role. 'Experience' was an important factor for ITNs' excellence in the skills pertaining to intensive therapy nursing care.

'Cultural training' in the current study refers to the values, norms, beliefs and way of life (Leininger, 2001) obtained by ITNs through socializing that help them face the stressful context of ITU. This includes the qualities obtained as stated in chapter two (patience, kindness, empathy, hope, forgiveness, brotherhood, anger repression, and shyness) in addition to religious and cultural ethos regarding such thing as death, dying, pain, divine preordainment, brotherhood etc: *'this has been a divine preordainment so it wasn't in my hands. I did the best I could; a divine predetermination is a divine predetermination'* (quotation 16) and *'Courage is there, by grace of Allah...'* (quotation 18) and *'all lives in the hand of Allah'* (quotation 41).

The absence of specialised ITU courses in Jordan made ITNs rely on themselves in obtaining the knowledge and skills mainly from colleagues like expert ITNs and

physicians, and by attending in-service education programmes besides studying on their own. Most of it depended on the individual ITNs' own effort to ask, attend and search for required information and skills.

As ITNs face many critical cases and situations, they have to update their knowledge and skills. This study concludes that there is great need for educational programmes to teach ITNs the necessary knowledge, and ITU-related skills would foster the emotional transformation of ITNs and enable them to reach the expertise level in clinical nursing much faster.

7.17. Conclusion

This chapter was divided into two parts. The first part presented the patterns of emotional transformation among ITNs, and showed the different patterns of transformation of each emotional group. The second part presented the relationship between the groups of emotional transformation and the five themes affecting ITNs in ITUs. Diagram 7.1 (page 152) summarizes these relationships.

The first part shown that ITNs with high mutual emotions were more prone to emotional burnout and those ITNs with balanced mutual emotions. Since the negative impact of balanced mutual emotions on ITNs' is minimal, ITNs will be in a position to provide better nursing care to their patients. ITNs who reported previous experiences of low professional emotions attributed it to their own lack of experience and knowledge at that time. Reporting that after years of building up knowledge and experience they currently had high professional emotions, ITNs with high professionalism were proud of their dexterity

in using technologies, advanced nursing procedures, as well as in providing quality technical care to ITU patients. ITNs with high disparagement emotions (first group) were more prone to emotional burnout (similar to high mutual emotions). While experienced ITNs had balanced disparagement emotions (first group) that similar to balanced mutual emotions. The second group of ITN disparagement emotions increased over time. ITNs reported high self worth emotions resulting from dealing with sophisticated technological equipment that lead to such successes achieving cardiac-arrest resuscitation.

The current study shows the importance of new technology for ITNs and for ITU patients. Moreover, the benefits of technology in ITUs. It showed also the relationship between technology and the ITNs' professional and self worth emotional transformation. Finally the impact of mastering technology on nursing care in ITUs.

Mastering advanced nursing procedures were related to high professionalism, balanced disparagement and high self-worth.

ITNs with strong nurse-patient relationship attributed them to high mutuality and disparagement while those who developed balanced relationships with their patients attributed them balanced mutuality and better nursing care.

Weak ITN relationship with human beings were the result of high disparagement; balanced relationships, on the other hand, were the result of balanced disparagement and high self worth.

Improper working conditions were related to ITNs' high disparagement emotions (second group) and conducive working conditions were related to high self worth emotions.

Time factor in the current study was related to ITNs' knowledge, experience and cultural training acquired during the time spent working and training within ITUs.

In the current study, Leninger's work is used as a way of referring to the general cultural influences of gender and religion on the ITNs' perceptions of emotions. Even though it may not be possible to definitively conclude from the findings that there are gender differences in how emotions and emotional transformations are experienced among the nurses in the samples, gender needs to be highlighted as a future area for investigation.

The third phase of analysis includes content analysis to determine the direction of changes occurring in each emotional item and the direction of change occurring in the entire group.

CHAPTER EIGHT

THE SYNERGISTIC RELATIONSHIP OF MUTUALITY, PROFESSIONALITY, DISPARAGEMENT, AND SELF-WORTH TO EXPERTISM

DISCUSSION OF THE THIRD PHASE

8.1. Introduction

This chapter discusses the inter-relationship among the emotional groups and expertism in nursing practice. The main idea of the emotional groups will be presented and compared with this nursing research. While discussing balanced mutuality, the idea of intuitive thinking is discussed in relation to rational thinking. While discussing professionalism, the idea of technical care is discussed in relation to emotional care. For disparagement, the contextual and cultural disparagement emotions are discussed. Self-worth is discussed in relation to qualities of expert ITNs. The conclusion connects mutuality, professionalism, disparagement and self worth with the level of expertise in nursing practice.

8.2. Balanced Mutuality: Expert Nurses between Rational and Intuitive Thinking

There is an ongoing debate in nursing literature about the rational and intuitive thinking of expert nurses. Supporters of intuitive thinking (Benner, 1984; Benner & Wrubel, 1989; Benner, et al. 1997; Darbyshire, 1994) claim that the highest level of expertise takes place when nurses use intuitive thinking, as they have a grasp the whole situation and are being able to take actions intuitively. On the other hand, supporters of rational thinking, which relies on evidence-based practice and on giving reasons for one's interventions

(English,1993; Walsh, 1997) claim that thinking-why is the sound basis of 'expertise' in the clinical nursing context. In this study both types of thinking are supported.

It is proposed that an ITN's balanced mutuality and high professionalism are related to each other at the level of expertism (Diagram 7.1, page 152). Expertism is seen in this study as the ITN's ability to be engaged in emotional transformation within the stressful context of intensive therapy nursing. (Professionalism will be discussed later).

In summary, the mutual emotions of ITNs have a certain pattern of change. These emotions increase at the beginning for most of ITNs. They start decreasing as the ITNs reach balanced mutuality in caring for critically ill patients. From the researcher's point of view, there are two main reasons for the increase in the beginning:

- 1) Educational institutions encourage ITNs to have strong relationships with patients and to be empathetic and close to the patient in order to produce high quality emotional care.
- 2) ITNs lack knowledge in dealing with emotional situations and are not sure as to what extent should they get involved in dealing with their patient's pain and suffering.

Educational institutions do not teach nurses how to protect themselves from emotional trauma resulting from the continuous emotional stressors in intensive therapy contexts. The majority of ITNs try to comply with what they have learnt, in terms of strong relationships with their patients. They try to be highly empathetic and as close to the patient as possible. Nevertheless, nurses after gaining more knowledge and experience, discover by trial and error that they have to balance their mutuality in order to be

successful in ITU. At this point mutuality starts to drop to a range that is consistent with the ITNs' 'expertise' and the patient's emotional needs, (refer to the analysis of mutual emotions section 7.4). This balanced mutuality is congruent with Benner's (1984) idea of involvement versus distancing, in that 'a certain level of commitment and involvement is necessary for expert nurses' (Benner, 1984) in which distancing techniques are weak in protecting nurses from stressful situations and in preventing them from reaping the benefits that emanate from engaging with and sharing the patients meanings of the situations. Also this is congruent with Carmack's (1997) findings on balanced engagement and detachment in which such nurses make conscious (rational) choices about their emotional needs. Carmack (1997) stated that nurses have an ability to exercise self-care. The idea of self-care presented by Carmack (1997) could be obtained by providing nurses with the necessary knowledge, experience and cultural training about their working context. This allows nurses reach the level of balanced mutuality faster and safer and to enter the expertise level.

It is interesting to note that the experienced nurses in Carmack (1997) and in the current study found themselves not responsible for the outcome of their care as they did what they could, '*I knew, I did what I could*' (quotation 60), and/or they did their best, '*I did the best*' (quotation 16), in order to minimise their trauma of emotional transformation, ITNs are to be taught about this.

The current study suggests that balanced mutuality could be learnt either through experience (Carmack 1997) or through training courses that take into account the possible stressful situations which nurses encounter in ITUs. The teaching of religious values such as kindness, empathy, anger repression, modesty, brotherhood and patience. This will be

helpful in minimising the hardship of stressors and in fostering the emotional transformation process.

8.3. High Professionality: Expert Nurses between Technical and Emotional Care

Nurses in intensive therapy contexts perform two interrelated types of care: technical and emotional. In technical care, nurses pay particular attention to operating and monitoring the machines and equipment around the patient. In emotional care, the nurses are more conscious of the humane aspect of care, the manner of dealing and relating to the patient and the ability to attend to the latter's emotional needs that are amenable to nursing actions.

Many nursing researchers emphasise the value of emotional care through the nurse's use of 'self' such as sitting, laughing, and talking with patients (Graham, 1983; Masson, 1985; Maeve, 1994 & 1998). This care is augmented by a strong nurse-patient relationship. On the other hand, many other authors emphasise the value of technical care. They think that it is the sound base for nursing science and for developing the nursing knowledge and skills (Ray, 1987; Walters, 1995). The current study proposes that the importance of each type of care (technical or emotional) is determined by the situation within the working context. Ray (1987) the situations where nurses provide nursing care through technological equipments 'caring is technology'. This type of care is named 'technical care' in the current study. It includes nurses' actions and reactions to technological machines, equipment and advanced nursing procedures. This is congruent with Alasad (2002) and Ray (1987) in that technical care in ITU is concerned with the nurses' ability to manage technology skilfully and to perform technical care in a competent manner.

Conversely, many other authors emphasize technology more than the humanity aspects. Technology focuses more on equipment and procedures while humanity focuses more on the patient's emotional needs. The emphasis on technology alone is contrary to the ethical practice of nursing (Gadow, 1984; Sandelowski, 1988).

In this debate of technical care versus emotional care, the current study supports the idea of balanced harmonious co-existence between the two. Many authors support the idea of harmony between technologies and care (Ray, 1987; Walters, 1995; Barnard & Sandelowski, 2001). Harmony between technical and emotional care is usually determined by the situation in the ITU. In case of a patient's emergency, resuscitation, or massive bleeding, nurses tend to be technically oriented in order to provide the care, which could save the patient's life. In regular ITU work, experienced nurses strike a balance between the two types of care. In case of conscious and oriented patient, emotional care is given a priority. The current study argues that the ultimate purpose of intensive therapy nursing is to save patient's life and then to support him emotionally and socially. It is not acceptable that ITNs cry at the time of a cardiac arrest, when that patient is in need of technical care.

A question may arise, "Does this mean that 'technical care' has the first priority in intensive therapy context?" The current study suggests that in life threatening situations such as Cardio-pulmonary resuscitations or massive bleeding, attention should be focused on saving patient's life through 'technical care'. However in situations in which patients are stable, emotional aspects come to the fore. (reassuring, touching, and chatting).

One of the emergent themes of Walters' (1995a) study was 'being busy'. It refers to a concentration on the technical aspects and the fast pace of nursing practice in the ITU. The current research argues that feeling busy is more applicable to the neophyte staff nurses who are in the process of acquiring the necessary knowledge and experience to deal with technology. It appeared to be not applicable to experienced nurses who reported less busy feeling even during critical nursing procedures such as cardiac arrest.

In summary, high professionalism requires nurses to obtain technical competence regarding the equipments and procedures within intensive therapy contexts. Such technical competence makes nurses feel in control (Alasad, 2002) of the working environment. The current study supports this:

(Quotation 89) Participant number-eight reported:

"...I am more able to manage many things, because in real situations, my colleagues, mostly, are stressed. So, it is our ability to control ourselves and deal with the situation..." (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience).

This may be because technological equipment keeps nurses updated about the patient's condition. Continuous updating assists nurses to regulate their interventions and reactions according to the changes in the patient's condition.

It makes sense that it may not be possible for nurse to have the feelings of responsibility, control and courage if they do not have the feeling of self competence, self confidence and self esteem. Professional emotions are divided into two lines of emotions. The first-line of professional emotions includes the feelings of high self competence, self confidence and self esteem. In this study, these emotions were assumed to be essential prerequisites for the feelings of responsibility, control and courage, which can be called the second-line

of professional emotions. There was no evidence from the current study to support this assumption. It can therefore be assumed that high professionalism is related to an ITN's experience in advanced nursing practice.

High professionalism is related to the ITNs' competency level (Alasad, 2002; Ray, 1987) with regard to their ability to deal with technological machines and advanced nursing procedures. The current study relates such abilities to high professionalism, which encompasses all professional emotions, presented in chapter 5, (section 5.6).

In nursing literature, there are many discussions of professional emotions such as those of Davidson & Jackson (1985) Nagy (1998), Vachon & Pakes (1985). This study went beyond identifying the presence of professional emotions to understand how these professional emotions change over time and what their impact on nursing care is.

In summary, nurses with high professionalism had the courage to assist in difficult procedures such as cardio-pulmonary resuscitation, endotracheal intubation-extubation and many other emergencies. They had high emotion of control over working environment, *'So, it is our ability to control ourselves and deal with the situation'* (quotation 89), which permits them to organize their nursing care, *'Surely my nursing care will increase and becoming more organised and ,more programmed'* (quotation 19), *'I become more organised and know exactly what steps I have to take exactly'* (quotation 24), *'I provide whatever I can but in correct and organised way'* (quotation 25). For more about ITNs' organised work, refer to quotations 57, 92, 93.

8.4. Disparagement: Expert Nurses between Contextual and Cultural Situations

Disparagement emotions are those feelings related to the nurses' tension within intensive therapy contexts. Balanced disparagement is related to the reduced negative impact of tense feelings (disparagement feelings) on nurses through knowledge and experience.

Jordan is an Islamic country where it is very essential for Muslim nurses to have a prayer time, which is a part of break time, *'My main concern was being able to pray, especially in the afternoon shift from 2pm to 9pm which is when most prayer sessions are due'* (quotation 74).

In reality, it happens that a nurse might miss a prayer time:

(Quotation 90) Participant-number six reported:

"Many times I seriously get busy with a lot of things, more than my tolerance. It is not my desire to miss the prayer at that moment. For example, very busy with CPR patient, or massive bleeding patient and there is no blood at that moment. I feel, surely that, our Lord is seeing me and He knows what I am doing, so, He will forgive me for that moment...this thing is between me and my Lord and the patient has nothing to do with it" (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience).

From an Islamic perspective, the brief statement *'work is worship'* (quotations 75, 76), is well known to Muslims. Besides, Islam gives the priority to saving a patient's life under life threatening situations. However, under the routine ITU workload, the missing of a prayer is not acceptable from a religious point of view because the nurses can organize routine work in such a way that prayer can be performed on time. The current study suggests that enforcing the idea of *'work is worship'* among Muslim ITNs' would reduce the stress of missing a prayer. Missing prayer should not affect, under any circumstances, the nursing care provided to the patient.

Prayer time is essential to the spirituality of ITNs. The current study recommends that institutions should take the matter seriously because the negative emotions resulting from missing a prayer may later affect nurses' performance and the quality of care as reported by ITN-9:

(Quotation 91) Participant number-nine reported:

"If I had too much work and there was no time for prayer, I would possibly delay the prayer. But surely, I will not be satisfied internally if I did not pray" (ITN-9, 27 years, female, single, diploma, public hospital, 6 years of experience)

There is a lack of educational courses for ITNs¹, and this forces nurses to go through tedious and unsafe ways of developing their knowledge and skills. It is expected that the integration of nurses' emotional needs in educational courses as well as nursing curricula will foster the process of emotional transformation within ITNs.

These disparagement emotions are either contextual such as the feeling of guilt due to medication mistakes, feeling of sadness due to working long night shift, or cultural related feeling such as that of guilt for missing a prayer. The current study points to the importance of dealing with these emotions in order to reduce the negative impact of their high level of stress on nurses' emotions and work performance.

In conclusion, balanced mutuality and high professionalism are the way to reach balanced disparagement (Diagram 7.1, page 152). Balanced disparagement (related to first group disparagement emotions) has the same pattern of change as balanced mutuality. The two increase at the beginning, and decrease to a certain range with increased knowledge and experience to suit to the nurses' level of experience. Some disparagement emotions

¹ Many courses started during the course of this thesis

(second group-disparaged emotions) increase all the time. These emotions are either context or culture related. Their harsh impact should be lessened through proper nursing management and education.

8.5. Self Worth: Expert Nurses and the Qualities of Expertism

The following interesting story from one of the participants shows the impact of a patient's transfer on a nurse's self worth emotions:

(Quotation 92) Participant number four reported:

"...When a critically ill patient comes and I provide the necessary nursing care, then he recovers and is transferred out, this is something which makes me feel more active and happier. I do remember a simple example, before five to six years, RTA (Road Traffic Accident) patient. Of course, the patient had basal skull fracture and brain haemorrhage. The patient was very very critical. This patient stayed in ITU for three weeks on ventilation, and then the anaesthetist decided with the working team to start weaning and removing the ventilator. They succeeded; they disconnected him from the ventilator. Over days, the patient started to get better and better to a point we transferred him out of ITU to the neuro-ward. We transferred him, as you say; our relationships with the patient are stopped. We got surprised, that after approximately two months, the patient himself and his father came to shake hands and visit us. Of course, this thing elevated our self-esteem and our 'inner self comfort'. We were very happy to note how this patient was, and how he became now. Patient transfer elevated our spirit and improved our performance" (ITN-4, 32 years, male married, BSN, public hospital, 7 years of experience).

The patient's transfer acts as a strong motivator for nurses to put in more effort, '(this patient transfer elevated our spirit and improved our performance' (quotation 92), and quality nursing care. It augments the feeling of achievement, which is an essential professional emotion. This sort of motivation should be encouraged in every nurse's interventions. Nurses should know that their assistance in endotracheal intubation or cardio-pulmonary resuscitation or in any other ITU procedure is highly valued and appreciated regardless of the outcome of their work. They did their best, and the rest is in

Allah's hands. The current study suggests that, giving the nurses the recognition they deserve for doing their best during nursing care will facilitate the emotional transformation within ITNs. This would also promote the quality of nursing care given to patients as it will lessen the ITNs feelings of frustration and sadness. Enhanced knowledge and skills allow the ITNs to have high self-worth. This helps the ITNs give nursing care with greater quietness, calmness and organization, without confusion or panic:

(Quotation 93) Participant number six reported:

" ... I became more attentive and concentrative, because over time I feel more responsible...surely, my nursing care improved due to more organization in my work..." (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience).

(Quotation 94) Participant number-eight reported:

"... When a patient arrests, everybody just gets busy. The good point is that, I know what I want, then what to request. I mean, I try to be a leader, organizing the situation, in general, not all people have this ability but it comes by days." (ITN-8, 28 years, male, married, BSN, private hospital, 3 years of experience).

(Quotation 95) Participant number six reported:

"...It is increased (self-pride) whenever I introduce something better... May be I will do many things, for example, not ordered by the doctors, which seems to me, it is for patient's interest, because, I am feeling more self-confident, and feeling more ability of good management. I may do many things, not away from medications or all-over nursing care, but nobody was alerted to it. I do it on my own for the patient" (ITN-6, 24 years, female, single, BSN, university hospital, 3 years of experience).

Nurses with high self worth provide quality care to critically ill patients and develop advanced nursing roles. When nurses reach the level to be initiative, to autonomous, to be critical thinkers, and to be their patient's advocate and educator, they can provide the latter with optimal and advanced nursing care, *'The point is that, I know what I want and what to request, I mean, I try to be a leader'* (quotation 94), and *'May be I will do many things, for*

example, not ordered by the doctors which seems to me it for patient's interest' (quotation 95). Nowadays operating technologically sophisticated machines and conducting advanced nursing procedures have become ordinary activities for nurses in ITUs. However, there is no routine work in intensive therapy context, as each patient's case is unique in term of patient experience, age, sex, marital status, illnesses, family history, etc. It is very difficult to match two individual patients in the intensive therapy context. Although they might have the same medical diagnosis and some similarities in laboratory tests, they could be different in cultural, socio-economic, demographic and life experience backgrounds. This emphasizes the uniqueness of the individual patient.

In conclusion, although nursing interventions may have procedural similarities, they are different from patient to patient. In this study, it is suggested that as technological and advanced procedures are complex and critical activities, it is imperative to have good knowledge and experience in order to avoid fatal complications.

8.6. Culture and Emotions

In the cultural context, the cultural beliefs are likely to play a major role in shaping emotional responses in stressful situations. Nurses in the current study believed that 'Allah observes them' in all actions, reactions and even inner intentions. They believed that Allah would reward or punish them for their deeds. The fear Allah's punishment in the hereafter could make many nurses dedicate more effort to providing quality care. For example, a patient's death and dying are part of stressful situations facing ITNs. The cultural belief in death as 'a divine preordainment' may act as a stress releaser for

experienced nurses (quotation 16). Such cultural beliefs do not conflict with nurses' rationality in dealing with a patient's death and dying:

(Quotation 96) Participant number-seven reported:

"(With experience) when a patient dies, I became more objective, why did the patient die? He did not die due to malpractice! He died because of the series of events that happened to him." (ITN-7, 28 years, male, married, BSN, university hospital, 6 years of experience)

Knowledge and experience besides the culture act as stress modifiers for ITNs. These factors influence emotional transformation. ITNs in this study gradually realised that they did their best and became more rational about the reality of death in ITUs. (Refer to quotation 61).

Experienced ITNs balance their emotions towards the dead patient. The range of sadness depends on the patient's age, health conditions, marital status, and if he is in the terminal stage of an illness or not. Such emotions can even amount to a degree of relief in the case of the death of terminally ill patients when ITNs realize that the patient's death is more comfortable than his life.

8.7. Gender and Emotions

The current investigation presents that there are similarities in the content of the reported transformation on mutual and disparagement emotions by ITNs. At the beginning, they reported an increase in these emotions, (quotations 1,2,3,4, 20, 21, 22, 23). These are reported by the same ITNs (ITN-8, ITN-5, ITN-9, ITN-3). Similarly, there is a similarity in the pattern of the content of mutual and disparagement emotions reported by the experienced ITNs. They reported balanced mutual and disparagement emotions,

(quotations 5, 6, 7, 8, 9, 24, 25, 26, 27, 28). They are reported by the same ITNs (ITN-1, ITN-2, ITN-4, ITN-6, ITN-7).

A critical review of the previous findings showed that mutual and disparagement emotions within ITNs increased over time for the participants who were female, diploma nurses with less than six years of experience, (ITNs-3, 5, 8, 9). These ITNs included the two nurses from the private hospital and two nurses from the public hospital. This could be explained as follows:

- 1) Private hospitals may encourage their ITNs to be more involved in the mutual emotions with their patients in order to show high level of emotional care, and they have less support related to disparagement emotions.
- 2) These female-ITNs are relatively younger than the male-nurses who reported a balance in their mutual and disparagement emotions.
- 3) These female-ITNs are in the early stage of mutual and disparagement emotional transformation, which means they have not reached the stage of emotional transformations characterised by the decrease in mutuality and disparagement prior to achieving balanced mutual and disparagement emotions.
- 4) Gender may play a role in the emotional responses of ITNs. There three out of four quotations reported from female ITNs (ITN-3, ITN-5, and ITN-9).

On the other hand, the findings from ITNs-1, 2, 4, 6, and 7 show a decrease of mutual and disparagement emotions after experiencing an increase. These ITNs include the three ITNs from the university hospital and two from public hospital. This could be explained as follows:

- 1) These male-ITNs are relatively older compared to the ITNs from the private hospital.
- 2) Here gender may also play a role in the emotional responses of ITNs. There three out of five quotations reported from male ITNs (ITN-1, ITN-4, and ITN-7).
- 3) All of these ITNs hold bachelor degrees in nursing and worked in university hospital. Therefore, the ITNs in the university hospital have had emotional transformation of their mutual emotions and were able to balance their mutuality and disparagement state of emotions. This may generate a few research questions such as:
 - 1) Are the emotional transformations within the mutual and disparagement groups related to ITNs' gender?
 - 2) Are the emotional transformations within the mutual and disparagement groups related to hospital setting (university, private, and public)?
 - 3) Are certain emotional transformations related to the level of education (diploma and BSN)?

A good amount of existing literature shows that women and men demonstrate different patterns of emotional expressions even within the same working context (Leidner, 1991; Rafaeli, 1989). Women (female clerks) display higher levels of positive emotions toward clients than men do (Rafaeli, 1989). This may be because women are expected to

suppress negative emotions such as anger, in favour of displaying positive emotions, such as enthusiasm and warmth (Hochschild, 1983). In contrast, men are expected to demonstrate negative emotions such as detachment and anger, while suppressing positive emotions such as sympathy (Sutton, 1991). This may be explained, according to Fabes & Martin (1991) in terms of the fact that being a woman is associated with acceptable communication of actually felt emotions to others, while being a man is associated with the ability to hide experienced emotions from others. Therefore, Cricks (1997) argues that due to the negative effect on social relationships, the expression of anger and aggression are generally seen as acceptable for men but not for women. Warmth is more appropriate for women (Eder & Parker, 1987).

The majority of studies show that women are most likely to provide emotional labour and are expected to do so (Hochschild, 1983; James, 1989). This is why work is generally undervalued by their employers, and their salaries lower.

In the current study, gender is considered an important aspect of an ITN's emotional response. In this study almost equal numbers of male and female ITNs were used as the selection was purposeful (in the first and third samples). The second sample, which included all ITNs from the three different hospitals, also had relatively similar male-ITNs percentage (44%) in the three ITUs. This was conformity with the original proportions of male-female nurses in Jordan (refer to page 9).

In summary, based on analyses and discussion in chapter seven, it is seen that there are some differences in emotional responses attributed to gender. Female ITNs reported high disparagement and mutual emotions than male ITNs, three female ITNs reported high

disparagement and mutual emotions and only one male ITN reported them high. While male ITNs reported balanced disparagement and mutual emotions, three-male ITNs reported balanced disparagement and mutual emotions.

Table 8.1. Gender of the participants in the three phases of the current study

Research phase	Male ITNs	Female ITNs	Total
First phase	1	2	3
Second phase	33	40	73
Third phase	4	5	9

All ITNs reported an increase in professional and self-worth emotions irrespective to gender. Time factor in terms of the rate of emotional transformation was not considered in this study. It is quite possible, though, that and therefore gender differences may affect the speed of professional and self-worth emotional transformation within ITNs.

In conclusion gender differences may play a role in ITNs' emotional transformations. Further investigations are required to add into nursing literature information about the role gender play in the emotional transformation of nurses in general and ITNs in particular.

8.8. Conclusion

This chapter presents four emotional states that derive from the analysis of the third phase, which contributes to the expertism of nurses: Balanced mutuality, high professionalism, balanced disparagement and high self-worth (Diagram 7.1, page 152). Knowledge,

experience and cultural training are the main influencers of balanced mutuality, balanced disparagement, high professionalism and high self-worth.

These four emotional states emerged from the patterns of emotional transformation within ITNs as presented in chapter 7. All of the four emotional states were interrelated at the level of nurse expertism. Diagram 7.1 shows the view of the interrelationship between these emotional states and expertism in nursing practice. ITNs' emotional transformations that occur due to knowledge, experience and culture training are supplemented by the ITNs' own perception of change within the working context.

Gender (besides knowledge, experience and culture training) is an important factor that influences ITNs' emotional responses. Even though it may not be possible to definitely conclude from the findings that there are gender differences in how emotions and emotional transformations are experienced among ITNs in the samples, gender needs to be highlighted as a future area for investigation.

Expertism is a state in which ITNs reach (over time of acquiring knowledge, experience and cultural training) the balanced mutuality and high professionalism in which they achieve balanced disparagement and high self worth status. These place them in a better position to provide advanced nursing care.

The next chapter will present a model of expertism in clinical nursing practice through emotional transformation. The model presents an overall view of the study of the phenomenon of emotional transformation within the ITNs.

CHAPTER NINE

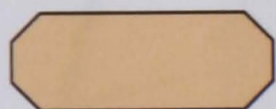
SUMMARY AND CONCLUSION: TOWARDS A MODEL OF EXPERTISM THROUGH EMOTIONAL TRANSFORMATION

9.1. Summary

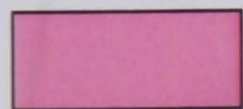
This chapter aims to summarize and conclude the thesis. It integrates all aspects of the thesis in the form of a model of expertism in clinical nursing practice. The model of expertism in clinical nursing practice is articulated through the emotional transformation of ITNs. The chapter integrates situations affecting emotions of ITNs, expertism, and quality of nursing care using a diagram that represents the model (Diagram 9.1, next page). The different shapes used in the diagram are explained below:



This shape refers to the qualities of expert ITNs



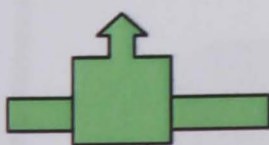
This shape refers to emotional characteristics of expert ITNs



This shape refers to stressful situations affecting ITNs



This shape refers to the level of expertism in nursing practice



This shape refers to the factors affecting ITNs' expertise



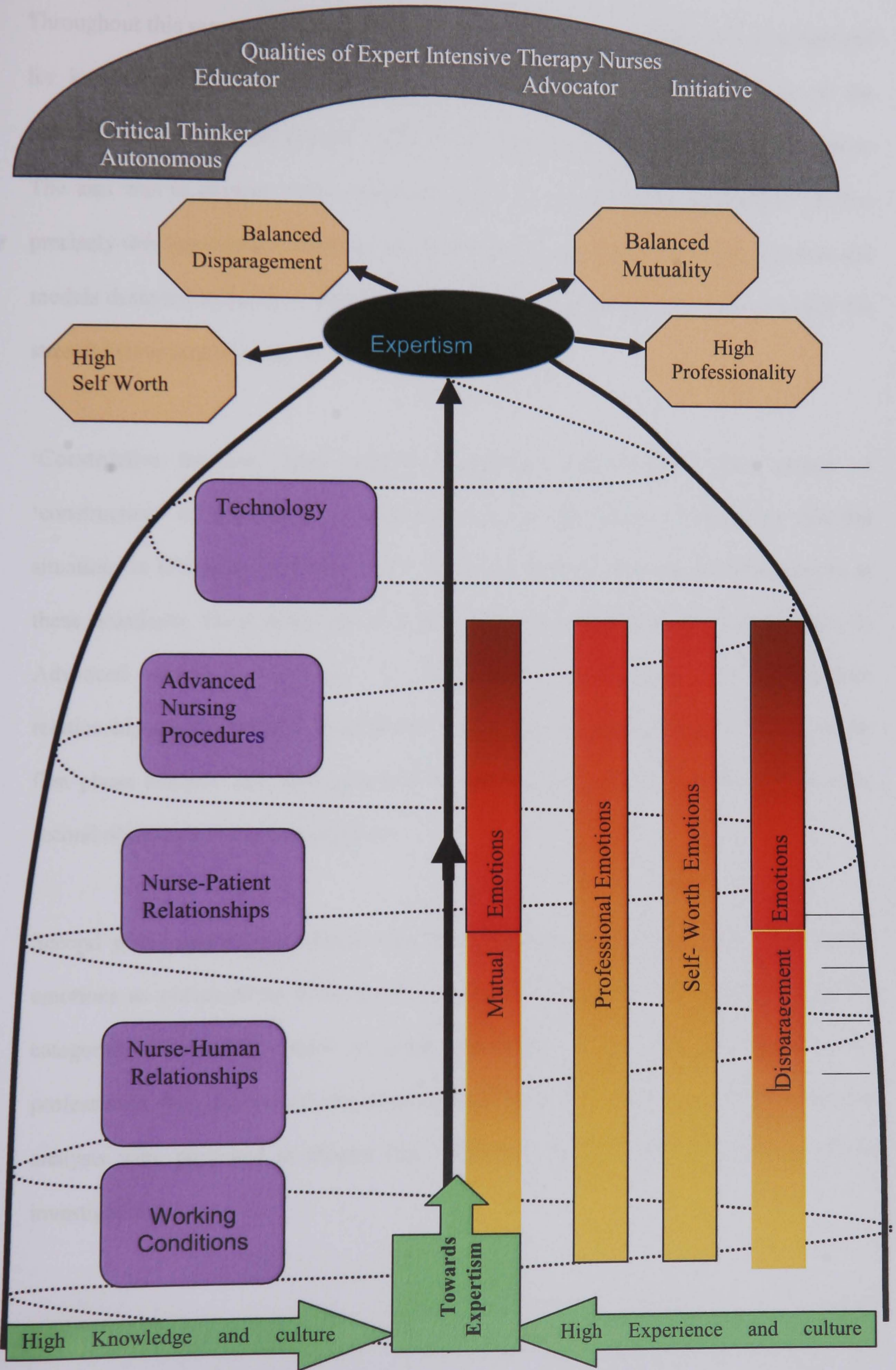
This shape refers to ITNs' emotional groups, the darker the colour the greater to the intensity of the emotions



Dotted line refer to the emotional transformation process



An arrow refers to the direction of the effect of change or influence



Throughout this research, 'constructive thinking' was used as a philosophical background for knowledge acquisition. The researcher's personal cognitive recognition of the phenomenon of emotional change was the first mental process to initiate the investigation. The aim was to explore ITNs' emotions within the intensive therapy context. It was precisely this 'constructive thinking' that led to the formulation of concepts, schemes and models designed to facilitate understanding of an ITN's emotional experiences within the stressful environment of the ITU.

'Constructive thinking' used multiple triangulation that involved three phases of 'construction' of knowledge. Construction in the first phase revealed the stressful situations in ITUs that influence an ITN's emotions and the ITN's emotional responses to these situations. These situations were categorised under five themes: 1) Technology, 2) Advanced nursing procedures, 3) Nurse-patient relationships, 4) Nurse-human relationships, and 5) Working conditions. These were the findings and the results of the first phase analysis that were presented in chapter four. This covers the first and the second objectives of this investigation.

Second phase construction ended with the recognition of the fifty highly meaningful emotions as perceived by ITNs in ITUs. The fifty emotions were grouped into five categories of emotions based on their similarities. The emotional groups were: professional, physical, mutual, disparagement and self worth. Corresponding findings and analysis were presented in chapter five. This part covered the third objective of the investigation.

Construction in the third phase was accomplished through four themes with additional dimensions of the emotional groups: balanced mutuality, high professionalism, balanced disparagement and high self worth. These themes were related to ITNs' expertism and manifested themselves through a process of emotional transformation. The interrelations among these four themes were discussed in detail in chapter eight. These were the results presented in chapter eight. With this the fourth and the fifth objectives of the investigation were covered.

This chapter incorporates the outcome of all the three phases in a model (Diagram 9.1) which presents the schematic relationships among the different parts of the model. To explain this model, the definitions of the concepts constructed in the process of investigation and used in the current chapter are given on page xiv.

9.2. Explanation of the Model

To simplify explanation, the model is divided into various components. The components are: the model premises, the stressful situations that affect ITNs' emotions, transformation of emotions, and expertism as a new dimension.

9.3. Model Premises

The following are the premises of the emotional transformations in the conceptual model:

- 1- ITNs are human beings.
- 2- Emotions are inherent qualities of human beings.
- 3- ITNs provide nursing care within the intensive therapy context.

- 4- Emotions are important to all nurses irrespective of their gender differences.
- 5- Nurses may respond differently to stressful situations based on their gender differences.
- 6- ITUs are stressful environments.
- 7- ITUs have three types of stressors: contextual, interactional and emotional.
- 8- Nursing care is composed of two components: emotional care and technical care.
- 9- Emotional care is related to the stressful situations of nurse-patient relationships and nurse-human relationships.
- 10- Nurse-patient relationships and nurse-human relationships create interactional and emotional stressors on ITNs.
- 11- Technical care is related to technology, advanced nursing procedures and working conditions.
- 12- Technology, advanced nursing procedures and working conditions create contextual and emotional stressors on ITNs.
- 13- Stressful situations (technology, advanced nursing procedures, working conditions, nurse-patient relationships, and nurse-human relationships) are the primary influencers of ITNs' emotions within the ITUs.
- 14- Stressful situations make ITNs susceptible to emotional transformation within ITUs.
- 15- Knowledge, experience and culture training work as modifiers for the stressful situations that affect ITNs' emotional transformation.
- 16- Religious beliefs may play an important role on ITNs cultural background.
- 17- Neophyte ITNs experience an increase in mutual emotions which can be modified by knowledge, experience and cultural training.

- 18- ITNs' knowledge of, experience in and cultural training on stressful situations affect the balance in mutual emotions and this leads to balanced mutuality.
- 19- Neophyte ITNs experience increased disparagement emotions which can be modified by knowledge, experience and cultural training.
- 20- ITNs' knowledge of, experience in and cultural training on the stressful situations affect the balance in disparagement emotions and this leads to balanced disparagement.
- 21- Acquisition of knowledge, experience and cultural training elevates ITNs' professional & self-worth emotions and balanced mutual & disparagement emotions.
- 22- ITNs with high professional & self-worth emotions and balanced mutual & disparagement emotions reach expertism in nursing practice.
- 23- Expert ITNs are characterised by balanced mutuality, high professionalism, balanced disparagement and high self worth.

9.4. Stressful Situations Affecting Nurses' Emotions in ITU

The stressful situations were grouped into five themes in chapter 4: technology, advanced nursing procedures, nurse-patient relationships, nurse-human relationships, and working conditions.

Each of these themes is composed of many sub-situations. 1) Technology is related to the use of modern technology embedded in the new mechanical ventilators, cardiac monitors, syringe pumps, suction apparatus, etc. 2) Advanced Nursing Procedures are related to the intensive therapy medications, endotracheal intubation and extubation, cardio-pulmonary

resuscitation, caring for patients who have invasive procedures such as central venous pressure monitoring, arterial pressure monitoring, intercostal drainage, tracheostomies and others. 3) Nurse-Patient Relationships are related to a patient's admission to an ITU, care for an intensive therapy patient, care for a patient with pain, the rights of patients, patient transfer, and a patient death. 4) Nurse-Human Relationships are related to an ITN's relationship with their colleagues, physicians, other health workers, a patient's relatives, and nursing students. 5) Working Conditions are related to arrival at duty, rest time, light and night duties, and leaving the unit without having made any mistakes.

These five themes are represented in the model using rectangles. They are in continuous interaction with the ITNs' level of knowledge, experience and cultural training which are represented by a spiral dotted line. The spiral dotted line indicates the ITNs' progress towards expertism within ITU practices.

The spiral dotted line also presents the level of an ITN's emotional transformation on the road to acquisition of knowledge, experience and cultural training. The amount of change created by knowledge, experience, and cultural training on an ITN's ability to intervene in stressful situations is correlated to the amount of emotional transformation within the ITN.

9.5. Transformation of Emotions

Knowledge, experience and cultural training of the stressful situations (the five themes) are the influencers of the emotional transformation within ITNs. ITNs can move from high mutual and disparagement emotions to balanced mutual and disparagement

emotions, through experience and/or through proper educational programmes that include cultural training.

9.6. Mutual and Disparagement Emotions

At the beginning of their career in ITU, ITNs experience an increase in mutual emotions such as the feelings of closeness and empathy to ward patients. This is also accompanied by an increase in disparagement emotions such as the feelings of sadness, being busy and guilt. The reasons for such an increase have not yet to be identified. There may be three factors which have a role in the increase of mutual and disparagement emotions. The first factor is that as ITNs are human beings, it is natural for them to have an increase in mutual emotions when caring for a suffering human being. The second factor is that at the beginning, ITNs are inexperienced in time management, organisation of work task and ability to set care priorities. They also lack many skills and knowledge and this makes them feel very busy during an emergency. The last factor may be that ITNs are not able to tolerate emotional stressors for a long time. Therefore, after stretching in their mutual and disparagement emotions to the maximum, they reach a point where they are forced to consciously or subconsciously balance their mutual and disparagement emotions in order to provide quality emotional care. If they fail to do so, they either quit the job (turnover) or they get emotionally exhausted (burnout). Therefore, if emotional transformations are managed properly, emotional transformations help in ITN retention and in overcoming the burnout syndrome. Through knowledge, experience and cultural training ITNs learn to reduce their mutual and disparagement emotional responses to patients in ITUs until they reach a range that seems appropriate for them to provide quality emotional care.

9.7. Professional and Self Worth Emotions

When they enter ITUs, ITNs usually lack the necessary knowledge and skills. Their efforts focus on building the knowledge and skills for immediate nursing care. At the beginning, ITNs have low professional and self-worth emotions. The emotions such as feelings of competence, self-esteem, confidence, courage, responsibility, happiness and respect increase constantly because the ITNs' ability to promote their knowledge, experience and cultural training in relation to stressful situations and especially because of their ability to deal with technological machines and advanced nursing procedures within ITUs.

Knowledge, experience and culture training help ITNs move from low professional and self-worth emotions to high professional and self-worth emotions. Elevation of the feelings of self competence, self confidence, self esteem and trust is the first step towards professionalism in nursing practice. This step is followed by an increase in more professional emotions, such as the feelings of responsibility, control, and courage.

The increase in professional emotions is accompanied by an increase in self-worth emotions. ITNs' interaction with the five themes (the nurse-patient relationship, technology and advanced nursing procedures, nurse-human relationships and working conditions) is continuous and spiral (changing with the progress) until ITNs reach expertism.

9.8. Qualities of Experts

The four characteristics mentioned above allow ITNs to be experts in clinical nursing practice. Such nurses attain many qualities of expertism. It was observed in this study that some of those qualities are: 1) being organised, 2) assertive, 4) autonomous, 5) critical thinking, 6) being a patient's advocate, 7) and being an educator.

These qualities are reported by ITNs (Chapter 7). Many nursing studies have revealed the qualities of expert nurses. Benner (1984) concluded that expert nurses learn to organise, plan, and coordinate patients' needs and set priorities of nursing care that suits the patient's needs.

9.9. Expertism: New Dimension

Expertism in nursing practice is viewed as a process of emotional transformation within ITNs. Three factors affect the transformation: knowledge, experience and cultural training. These factors affect the work of ITNs the stressful situations as presented under the five themes. The impact of the three factors on ITNs' emotions and on their ability to work in stressful situations are parallel. Therefore, the high ability of ITNs' to work under stressful situations is accompanied by a high emotional transformation within them and vice versa. This allows the process of emotional transformation to be a continuous process of learning and development.

Expert ITNs who attain a balanced range of mutual and disparagement emotions reach a point of balanced mutuality and disparagement. ITNs who attain high professional and self-worth emotions also reach a point of high professionalism and high self-worth. These

are the four emotional transformations that characterize the performance of the expert ITNs within ITUs.

The current model of expertism through emotional transformation presents a new dimension of expertism in a clinical context. Expertism is based on the ITNs' emotional transformations that happen due to the enhancement of the ITNs' knowledge, experience and culture training. ITNs in this model have the ability to justify their interventions and reactions through knowledge, experience and cultural training.

Expert ITNs, according to this study, can be identified in two ways based on emotional transformation: 1) Through ITNs' responses in ITUs, 2) Through a questionnaire that presents questions specific to stressful situations, then the ITNs' emotional response to these questions would point out their level of expertism. Two examples of questions in the questionnaire are as follows:

1) How do you feel while resuscitating a cardiac arrest patient?

- 1- Not busy
- 2- Less busy
- 3- Moderately busy
- 4- Very busy
- 5- Not applicable

2) How do you feel towards a patient with complications?

- 1- Not empathetic
- 2- Less empathetic
- 3- Moderately empathetic

4- Very empathetic

5- Not applicable

These questions would give an indication of the ITNs' expertise based upon their answers. For example, the best answer for an expert ITN would be "feeling moderately busy" during resuscitating a cardiac arrest patient. This is because according to the current model, expert ITNs reach balanced disengagement in which they would feel moderately busy. The explanation of this is that expert ITNs become more organised in their work with high ability to control their working environment and train themselves to be emotionally less busy. Also, the best answer to the second question would be the feeling of moderate empathy towards a patient with complications. This is because ITNs with high empathy have less experience and would not perform the job properly, while non-empathetic ITNs are prone to experiencing burnout.

This study assumes that these examples would give the idea of expertism through emotional transformations. It is acknowledged that there is a need to develop an emotional scale to check for validity, reliability, and objectivity.

Nursing research is the best means for build up the nursing profession's body of knowledge. Nursing research should focus on situations affecting nurses in working contexts and on the best means to enable them to deal with these situations in order to prevent emotional burnout.

This study proposes that the interrelationships among the components of the model, (Balance mutuality, high professionalism, balanced disengagement, high self-worth,

Diagram 7.1 p.152) are not linear as they may all occur at the same time. This means that, at times, ITNs may develop high professional emotions simultaneously; they may develop a balance of mutual emotions and a balance of disparagement emotions.

CHAPTER TEN

IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

The model developed in this research will be beneficial to nursing education, practice and research. The following part will focus on the implications of the model on the nursing profession.

10.1. Implications: Nursing Education

There are many implications of this model on nursing education. A nurse educator can use the model to plan a complete training course for ITNs. The stressful situations within ITUs should be included in the course of the study. Chapter five of this investigation presents the five themes: technology, advanced nursing procedures, nurse-patient relationship, nurse-human relationship and working conditions to be included in the course. Each of these themes has many situations that are crucial to ITNs. Technology and advanced nursing procedures include narcotics, medications, intubation, extubation, invasive lines and Cardio-pulmonary resuscitation. Nurse-patient relationships include a patient's admission, care for intensive therapy patients, patient with pain; complications and/or chronically ill, a patient's rights and humanity, a patient's transfer and a patient's death. Nurse-human relationships include relationships with colleagues, physicians, other health workers, a patient's relatives and nursing students. working conditions include arrival on duty, rest time (break & prayer time), light & night duty and leaving the unit having made no mistakes. These situations are context and culture related for each ITU. The nurse educator should explore all meaningful situations through an in-depth investigation in order to familiarize ITNs with these situations for the sake of proper

interventions and reactions. Furthermore, the nurse educator should understand the cultural meaning of these situations and provide the ITNs with the best solutions and interventions for these situations. This would foster the process of emotional transformations and reduce the negative impact of this process on ITNs.

10.2. Implications: Nursing Practice

The model provides a road map for expertism in clinical nursing practice via planned steps of emotional transformations. ITNs should encounter the most meaningful situations in clinical contexts and gain the knowledge and the skills in dealing with such situations technically and emotionally, rather than abruptly facing a reality shock. At the same time, the working environment should provide the necessary means such as proper break time, prayer place and time that help in comforting ITNs. This model proposes, that ITNs should work in clinical contexts with good anticipation of what they would face and how to deal with expected situations with high ability so as to rationalise their interventions and reactions professionally and emotionally.

The model encourages ITNs to take care of themselves while providing advanced technical and emotional care to patients. This would enhance ITN retention. Furthermore, it would help in reducing the possibility of ITNs' burnout due to emotional exhaustion.

Nurse managers should facilitate the process of emotional transformations by introducing proper courses and educational activities. This would enable nurses to reach high professionalism and balanced mutuality quickly.

10.3. Implications: Nursing Research

The current model elicits plenty of research topics for investigation. Each component of the model is a subject for investigation, just as much as the whole model is itself amenable for testing. The following are some suggestions from the model for further research investigation:

- 1- To explore the meaningful emotions that affect nurses within the clinical context, based on cultural differences compounded by culture and gender differences.
- 2- To plan, conduct and evaluate training courses that would foster the process of emotional transformation within nurses based on technical, informative and cultural training.
- 3- To study the impact of cultural training on nurses' emotional transformations.
- 4- To develop the tools and the means necessary to measure nurses' high professionalism and/or balanced mutuality and/or balanced disparagement and/or high self-worth in order to facilitate the decision of choosing the expert nurses.
- 5- To plan and conduct seminars and workshops on cultural training which could foster emotional transformations.
- 6- To investigate if the emotional transformation is related to nurses' age, gender, academic qualifications, and marital status.

10.4. General Recommendations:

- 1- The knowledge, the experience and the cultural training regarding technology, advanced nursing procedures, nurse-patient relationship, nurse-human relationship and working conditions demand a full training course until the ITNs become self-competent and confident.
- 2- Educators in intensive therapy nursing may take this model of expertism as a ground for the development of a realistic intensive therapy-nursing programme.

The proposed programme should:

- a- Take into consideration the factors affecting ITNs within the intensive therapy context and proper training to manage these situations, which may foster the transition of the nurses to expertism level.
- b- The programme can be designed in a way that facilitates the achievement of balanced mutuality and disparagement while working in intensive therapy units quickly and without being exposed to traumatising experiences.

This would foster the process of emotional transformations and reduce the negative impact of this process that is related to gender and culture training.

- 3- The situations that affect nurses' knowledge and experience may be further investigated and explored to present a more holistic view of nursing in ITUs.

- 4- This model opens a wide window for nurse researchers to further validate the model or some aspects of this model and the possibility of adding more input to it as well.
- 5- This model establishes a good link between nursing practice, theory and research. This may have good implications for enhancing nursing body of knowledge and for promoting professionalism in nursing.

10.5. Specific Recommendations

- 1- This research encourages ITNs to relax during light duties a) by arranging a small intra-unit party, or b) increasing their break time, or engaging in anything that could promote socialising among intensive therapy staff.
- 2- The research also stresses the importance of the encourages religious practice of ITNs as an essential spiritual aspect of their life. The working environment should provide a time and a place for prayer.
- 3- All hospitals are encouraged to permit overtime work and more flexible working hours for nurses so that their satisfaction and retention can be enhanced.
- 4- Nurse managers should provide time and facilities for ITNs to perform proper education role in such a way that it does not overlap with direct nursing care and work management.

- 5- Religious teachings (as part of culture) can play a crucial role in forming an internal regulatory system by enhancing nurses' self-conscious, and by enhancing the fear of Allah to prevent them from committing mistakes or inadequacies.
- 6- Also asserted in this research the importance of keeping the night duty the same length as the day shift. It should not exceed seven to eight hours. Measures should be taken to reduce the frequency of night duty for expert nurses.
- 7- Another thing being asserted is the importance of changing public opinion regarding women's work during night shift using local media.
- 8- Rational thinking should contribute to the expert nurses' critical thinking. The thinking-why, which is actually based on cumulative knowledge, experience and cultural training, to justify nursing care.
- 9- It is suggested that some culture belief teachings of kindness, empathy, anger repression and patience may help minimise the hardship of stressors and help fostering the emotional transformation process.

10.6. Limitations

The following limitations are hereby acknowledged:

- 1- The researcher's role as an expert ITN within ITUs may have, in one way or the other, influenced his interpretation and analysis of data.
- 2- The small size of participants in the first and third phases limit the ability to generalise the findings.
- 3- ITNs in the current study sample are young (Table 7.2). This may be considered as a limitation of this study because expert ITNs develop their expertise in terms of experience and knowledge over many years of working.
- 4- Despite the purposeful sampling of the participants, the participants from the private hospital in the third phase were relatively young.
- 5- The findings of this study are context related so one should be cautious when generalising them to other contexts. For example, cultural peculiarities can cause great disparities in emotional responses among people of dissimilar cultures.
- 6- Translation from one language to another can distort the meaning of the participant's original expression, as this could be culturally related and difficult to translate.
- 7- The study is conducted in a single culture (in Jordan). This may necessitate replicating the study in different cultures and looking for commonalities and differences in order to present a generalized theory of emotional transformations within nurses.

8- The researcher acknowledges the limitations he encountered while conducting the thesis alone. And this advocates teamwork for similar research in the future.

9- It cannot be categorically concluded from the findings that there are gender-based differences in how emotions and emotional transformations are experienced among nurses in the samples. There is a need for gender to be investigated in future research.

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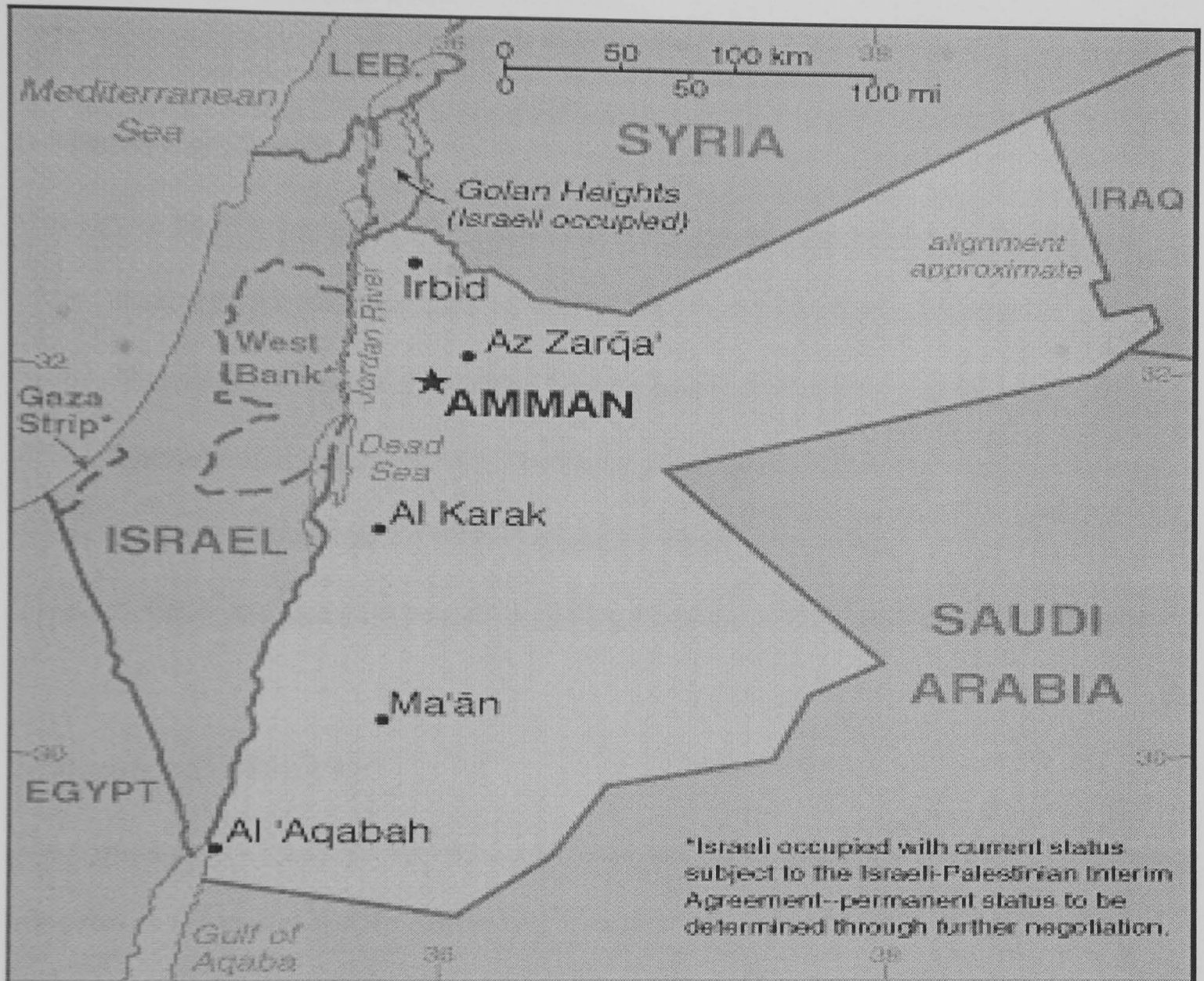
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Appendix I



- 1- Amman one school
- 2- Zarqa one school
- 3- Irbid eight schools
- 4- Balqa five schools
- 5- Jordan two schools
- 6- Ma'ana one school
- 7- Karak four schools

1 This appendix is reprinted from a book entitled "Jordan in Transition" published by the Ministry of Culture, Jordan. By Dale Rasmussen, Jordan 1994.

APPENDIX II ¹

Nursing Education in Jordan

There are several institutions that supervise nursing education at different levels. The following are the details of these institutions:

1- Ministry of Health

Ministry of health teaches nursing and midwifery through the following institutions:

- a- Rufiadah Al-Islamiah College for Nursing and Midwifery/ Amman
- b- Nusaibah Al-Maziniah College for Nursing and Midwifery/ Irbid
- c- Institute of Assistant Health Professions/ Zarqa
- d- Institute of Assistant Health Profession/ Irbid
- e- Schools for practical nurses in public hospitals. There are 19 nursing schools.

2- Ministry of Education

The Ministry of Education teaches Third Secondary Nursing in 42 schools, 10 of which are schools for males and 32 schools for females. The schools are distributed across Jordan as follows:

- a- Amman eleven schools
- b- Zarqa three schools
- c- Irbid eight schools
- d- Balqa five schools
- e- Jerash two schools
- f- Mafraq one school
- g- Karak four schools

¹ this appendix is adapted from a book entitled 'Nursing in Jordan, the evolution, the development and the ambition. Ministry of Culture, Jordan. By Fathi Abdulqader Sultan 1998.

- h- Tafila two schools
- i- Maan two schools
- j- Aqaba one school
- k- Madaba one school
- l- Ajloun two schools

3- Ministry of Higher Education

The Ministry of Higher Education supervises nursing education in the following universities:

- a- Nursing College/ University of Jordan
- b- Nursing College/ Jordan University of Science and Technology
- c- College of Health Sciences “Nursing Department” / University of Applied Sciences
- d- College of Pharmacy and Nursing “Nursing Department”/ Alzaitoona University of Jordan.

The Ministry of Higher Education also supervises the teaching of ‘Associate Nursing’ in the following Institutions:

- a- Institute of Assistant Health Professions/ Zarqa
- b- Institute of Assistant Health Professions/ Irbid
- c- The Royal Health Service College/ Amman

4- The Royal Health Services

The Royal Health Services teach nursing and assistant nursing course in the following colleges and schools:

- a- Prince Muna College for Nursing

b- The Royal Health Services School for Assistant Professions

The Levels of Nursing Education in Jordan

There are different educational levels of nursing in Jordan that based on the previous colleges and schools of nursing.

The first level: Master in Nursing M.Sc.

It includes the graduates of Master of Nursing Education from the University of Jordan.

The second level: Bachelor in Nursing B.Sc./ Registered Nurse

It includes the graduates of the four year programme in nursing education from The University of Jordan, University of Science and Technology, University of Applied Sciences and Azaitoona Univerity of Jordan.

The third level: General Nursing Diploma/ Registered Nurse

It includes the graduates of General Nursing Diploma. The study is for 39 months after third secondary school certificate. The graduates are from the colleges of Ministry of Health and The Royal Health Services.

The fourth level: Midwifery Diploma/ Basic Midwifery

It includes the graduates of Basic Midwifery course from the Nursing and Midwives Colleges that belongs to Ministry of Health. The study is for 27 months after third secondary certificate.

The fifth level: Associate Nursing Diploma

It includes the graduates of General Nursing Diploma of Two Years. It is 75 credit hours after third secondary school from the Institutions of Assistant Health Professions in Zarqa, Irbid and The Royal Health Services College in Amman.

The Sixth level: Practical Nurse

It includes the graduates of the schools of Assistant Nurses that belong to the Ministry of Health and The Royal Health Services School. It is 18 month course, or two academic years. It accepts the third elementary school certificate; however, since 1988 it only accepts students after third secondary school.

The seventh level: Third Secondary School Certificate in Nursing

It includes all graduates of third secondary schools (Nursing Branch) from Ministry of Education. They are working as Aid nurses in the Ministry of Health Hospitals, or as practical nurses in University of Jordan Hospital and in the private sector.

There are many Aid Nurses who practice their job without any previous education. They acquire some skills through working in hospitals. This level has been cancelled by a decision from the Developing of Nursing Education Committee.

The General Nursing Diploma and The Associate Nursing Diploma can continue their studies in Jordan Universities to obtain the bachelor degree in Nursing after qualifying.

APPENDIX III

Consent Form

Consent to participant for a research investigation

I.....hereby agree to participate in the research investigation that will be conducted by Mohammed Almahrouk. The research title is ' an exploration of nurses' emotions: a study of intensive therapy nurses in Jordan'.

I understand that the researcher will use passive-observations and interviews as research methods, in which the researcher will observe and interview me about my feelings regarding the situations and conditions that affect me in the context of intensive therapy nursing.

I understand that the interview may stimulate my feelings and increase my emotional load, which may create some discomfort for me.

I understand that it is my right to withdraw from the research study at any time without giving an explanation.

I understand that the researcher will keep confidentiality of the collected data throughout the research process and that the research will be finalised anonymously.

I understand that the researcher will keep the anonymity of the participants who are involved in the study.

I understand that this study may alert me to my feelings throughout my work in the intensive therapy context.

Signature

.....
The subject

.....
Date

.....
The researcher

.....
Date

APPENDIX IV

A sample of logbook

Date:.....

Participant Number:.....

Day:.....

Observation Number:.....

Situation Observed:

.....
.....
.....
.....

People involved:

1.....

2.....

3.....

4.....

5.....

6.....

Observer name

Signature

Date

APPENDIX V

Demographic Data Form

Participant code number ()

Age in years : (.....)

Gender: Female (.....) Male (.....)

Marital Status: Married (.....) Not Married (.....)

If married.

Number of children: (.....)

Children ages : 1. (.....) 2. (.....)

Education level 1. Diploma in Nursing (.....)

2. B.Sc. in Nursing (.....)

3. Master or higher, specify (.....)

Experience in nursing (in years): (.....)

Experience in intensive therapy nursing (in years and months): (.....)

Length of work in the current position (in years and months): (.....)

The current position: 1- Staff nurse: (.....)

2. Head nurse: (.....)

3. Nurse supervisor: (.....)

4. Nurse manager: (.....)

The research student Mohammed
Almahrouk

Appendix VI

The questionnaire

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
1	I feel that I did my best, even when my critical ill patient died.					
2	I feel angry when my patient died.					
3	I feel anxious when a patient died in ITU.					
4	I feel anxious when called to cardiac arrest.					
5	I feel busy during cardiac arrest resuscitation.					
6	I feel self competent even if the patient died. (because I did my best to save his life)					
7	I feel more active after my break and /or prayer time.					
8	I feel busy when I relieve my colleagues for a break.					
9	I feel more close to the patient during break time.					
10	I feel comfortable and happy during my break and/or prayer time.					
11	I feel self competent, when I relieve my colleagues for a break.					
12	I feel my attention and concentration are more after I finish my break and/or prayer time.					
13	I feel cooperative when I relieve my colleagues for a break.					
14	I feel that I give rest to my colleagues during their break.					
15	I feel guilty, when I miss any prayer.					
16	I feel that I am not relaxed during break time, because I am preoccupied with my patient's condition.					
17	I feel high self esteem when I relieve my colleagues during break time					
18	I feel my attention and concentration are more when I receive ITU patient.					
19	I feel that I appreciate myself, when I care for critical ill patient.					
20	I feel busy during the admission of a critical ill patient.					

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
21	I feel more close to the patient who has complications.					
22	I feel my colleagues' competence during patient's admission.					
23	I feel self competent when I transfer a patient out of ITU.					
24	I feel self competent when I leave the unit without mistakes.					
25	I feel self competent to care for ITU patients.					
26	I feel of empathy with the patient when I care for him as a member of my family.					
27	I feel high self esteem when I care for critically ill patient.					
28	I feel fear when I care for critically ill patient.					
29	I feel that I give the patient something when I provide him with morning care.					
30	I feel happy when I transfer the patient out of ITU.					
31	I feel happy when I care for critically ill patient.					
32	I feel hopeful that the critically ill patient will survive.					
33	I feel tense when I receive an ITU patient.					
34	I feel proud of myself when I provide nursing care to ITU patient.					
35	I feel tense when I care for critically ill patient.					
36	I feel respect myself when I care for critically ill patient.					
37	I feel respect the patient's rights and humanity.					
38	I feel self responsible to care for a critically ill patient when I receive him.					
39	I feel self satisfaction after admitting a patient to ITU.					
40	I feel satisfied when I transfer a patient out of ITU.					
41	I feel sensitive to ITU patient's needs.					
42	I feel that I suffer when I care for critically ill patients.					
43	I feel angry due to improper (attention to a poor prognosis patient) by the medical team.					

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
44	I feel frustrated because of poor prognosis of chronically ill patients					
45	I feel more attached to chronically ill patients.					
46	I feel more cooperative with the relatives of chronically ill patients.					
47	I feel empathetic with chronically ill patient.					
48	I feel powerlessness when caring for patient with a very poor prognoses.					
49	I feel sad towards chronically ill patient with poor prognoses.					
50	I feel sorry towards the relatives of patients with complications.					
51	I feel able to do my work when I arrive on duty.					
52	I feel I am coming to routine work in ITU.					
53	I feel happy when I arrive on duty.					
54	I am feeling powerful when I arrive on duty.					
55	I feel upset to work during holidays.					
56	I feel upset because I attend ITU unit meeting in my own time.					
57	I feel a sense of achievement when I prepare and give narcotics and other medications.					
58	I feel anxious when I prepare and give narcotics and other medications.					
59	I feel self competent when I deal with narcotics and other medications.					
60	I feel lack of self confidence when a problem occurs with a patient's medication.					
61	I feel guilty if any medication mistakes happen.					
62	I feel happy to release a patient's pain when I give him narcotics.					
63	I feel that I hate to relate to narcotics.					
64	I feel lack of safety when narcotics and /or medication problems occur.					
65	I feel sympathy towards a patient with pain.					
66	I feel self trust when I give medication.					
67	I feel my attention and concentration are more when I prepare and give narcotics.					

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
68	I feel that I appreciate my colleague's efforts during handover (endorsement).					
69	I feel self competent during handover (endorsement).					
70	I feel my attention and concentration are more during hand over (endorsement).					
71	I feel self competent when I leave the unit without mistakes.					
72	I feel happy during endorsement.					
73	I feel powerful during handover (endorsement).					
74	I feel anxious when there is a heavy workload in ITU.					
75	I feel that I appreciate my colleagues' efforts during heavy workload.					
76	I feel my attention and concentration are more during light duty.					
77	I feel that I control the work when the load is heavy.					
78	I feel afraid of making mistakes due to heavy workload.					
79	I feel unhappy to arrive on a long night duty.					
80	I feel that the patients need more care when there is a heavy workload.					
81	I feel I am powerful when there is a heavy work load.					
82	I feel tension due to heavy workload.					
83	I feel relaxed to work in light duty.					
84	I feel that I respect my colleagues during heavy work load.					
85	I feel unsatisfied due to heavy workload.					
86	I feel the suffering of my colleagues due to heavy workload.					
87	I feel tired during night duty.					
88	I feel close to my colleagues when there is an open communication.					
89	I feel that my colleagues are cooperative.					
90	I feel happy when interacting with my colleagues.					
91	I feel unhappy to interact with my colleagues.					

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
92	I feel relaxed when there is an open communication.					
93	I feel upset due to poor communication in ITU.					
94	I feel empathetic towards the medical team who did their best to save patient's life.					
95	I feel happy when interacting with doctors.					
96	I feel happy when the medical team do their job completely.					
97	I feel that I hate doctors when they fail to do their job.					
98	I feel relaxed during doctor's rounds when it is smooth and quiet.					
99	I feel upset during doctors' rounds when it is crowded and noisy.					
100	I feel angry and sad for slow responses of health care professionals (X-ray, lab, ...etc).					
101	I feel that I appreciate the quick response of health care professionals (X-ray, lab, ...etc)					
102	I feel competent when I deal with health care professionals (X-ray, lab,...,etc).					
103	I feel that I control my work when I deal with health care professionals (X-ray, lab....,etc).					
104	I feel high self esteem and confidence, when I interact with health care professionals.					
105	I feel that I suffer when the health care professionals are slow (X-ray, lab, ...etc)					
106	I feel self competent when I interact with patient's relatives.					
107	I feel that I try to change the relatives feelings of sadness and anxiety.					
108	I feel high self esteem when I interact with patient's relatives.					
109	I feel happy to interact with patient's relatives.					
110	I feel that I help the patient's relatives when I interact with them.					
111	I feel knowledgeable when I interact with patient's relatives.					
112	I feel sad towards the relatives of a patient with complications.					

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
113	I feel that I do not accept the bad performance of my colleagues.					
114	I feel that I do not accept the bad performance of ITU doctors.					
115	I feel anxious when I remove an invasive line. (C.V.P, Arterial line).					
116	I feel self appreciation post patient intubation and extubation.					
117	I feel that I do not appreciate doctor's poor intubation skills.					
118	I feel my attention and concentration are more during patient intubation and extubation.					
119	I feel self confident during patient intubation and extubation					
120	I feel empathetic towards the relatives of intubated patients.					
121	I feel high self esteem during patient intubation and extubation.					
122	I feel afraid of instrument failure when intubating critical ill patient.					
123	I feel happy when the patient is extubated.					
124	I feel happy for the patient when I remove the invasive lines. (prior transfer out of ITU).					
125	I feel that I pray for successful intubation					
126	I feel I am observed during patient intubation.					
127	I feel patient's pain during insertion of invasive line. (C.V.P, Arterial line).					
128	I feel proud in a successful intubation.					
129	I feel proud when I remove the invasive lines.(C.V.P, Arterial line).					
130	I feel I am well prepared for patient intubation.					
131	I feel relaxed post patient intubation.					
132	I feel satisfied when I remove the invasive line. (C.V.P , Arterial line).					
133	I feel full of courage to resuscitate a cardiac arrest patient.					
134	I feel fear when I called for cardiac arrest.					
135	I feel happy due to a successful cardiac arrest.					

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
136	I feel that I am involved and attached to the patient who has a cardiac arrest.					
137	I feel that I am involved with the relative's of a cardiac arrest patient.					
138	I feel that I am sad towards the death of a patient following cardiac arrest in ITU.					
139	I feel the suffering of the cardiac arrest team during resuscitation.					
140	I feel tension when a patient die in ITU.					
141	I feel self appreciation when I relieve my colleagues during break time.					
142	I feel self competent when I attend my supervisor's round.					
143	I feel high self esteem during nursing supervisor rounds.					
144	I feel self competent to deal with highly technical equipment.					
145	I feel happy to deal with high technical equipment in ITU.					
146	I feel anxious due to unit assignments. (such as doing duty roster, lab.store,etc).					
147	I feel competent when I do the unit assignment (staff roster)					
148	I feel busy with my assignment which reduces my direct patient care.					
149	I feel that I control my work when I finish my unit assignment.					
150	I feel of empathy with my colleagues when I do the unit rosters.					
151	I feel happy to finish my unit assignment (roster, stores).					
152	I feel isolated when I do the unit assignment. (roster, stores,)					
153	I feel responsible when I do the unit roster.					
154	I feel not satisfied with patient care because I am busy with unit assignment. (roster, stores).					
155	I feel I am gaining knowledge by attending in-service education activities.					
156	I feel that I appreciate the lecturer's efforts in up-dating my knowledge and skills.					
157	I feel self confident when I am updating my knowledge and skills.					

SN	Questionnaire Item	0	1	2	3	4
		NA	No	Low	Moderate	High
158	I feel the technology in ITU encourages me to up-to-date myself.					
159	I feel high self esteem because of attending in-service education updates.					
160	I feel high self esteem when teaching nursing students.					
161	I feel happy when I update my knowledge and skills.					
162	I feel responsible to teach nursing students.					
163	I feel responsible to attend in-service education updates.					
164	I feel self confident when I relieve my colleagues for a break.					
165	I feel self confident when I transfer a patient out of ITU.					
166	I feel self confident, when I leave the unit without mistakes.					
167	I feel self confident to care for ITU patients.					
168	I feel self confident when I deal with narcotics and medications.					
169	I feel self confident during handover (endorsement).					
170	I feel self confident when I leave the unit without mistakes.					
171	I feel self confident when I interact with patient's relatives.					
172	I feel tense when the health care professionals are slow (X-ray, lab, ...etc)					
173	I feel responsible when I attend my supervisor's round.					
174	I feel self confident to deal with technological equipment.					

Appendix VII

Interview Guide

		Emotional Group	
SN	G1	Physical	Feeling situation
1	A	Ability	When I arrive to duty.
2	B	Active	After my break and \or prayer time.
	G2	Professional	
3	C	Attentive & concentrative	When I prepare and give narcotics.
4	C		When I receive ITU patient.
5	C		During patient intubation and extubation.
6	C		After I finish my break and\or prayer time.
7	D	Competent	When I leave the unit without mistakes.
8	D		When I transfer a patient out of ITU.
9	D		To care for ITU patients
10	D		Even if the patient died. (because I did my best to save his life)
11	E	Confident	When I leave the unit without mistakes.
12	E		When I am updating my knowledge and skills.
13	E		To deal with high technological equipment.
14	F	Control	When I deal with health care professionals (X-ray, lab.,...,etc).
15	G	Courage	To resuscitate a cardiac arrest patient.
37	Q	Self-esteem	For teaching nursing students.
38	R		Because of attending in-service education updates.

16	H	Encourage	The high technology in ITU encourages me to update myself.
17	I	Responsibility	To care for to critically ill patient when I receive him.
18	I		To teach nursing student.
19	J	Trust	When I give medication.
	G3	Self-worth	Feeling situation
20	K	Appreciate	When I care for critically ill patient.
21	K		The quick response of health care professionals (X-ray, lab, ...etc)
22	K		my colleagues efforts during heavy workload.
23	L	Happy	When I transfer the patient out of ITU.
24	L		When the patient is extubated.
25	L		When I update my knowledge and skills.
26	L		When the medical team do their job completely.
27	L		To deal with high technological equipment in ITU.
28	L		Due to successful cardiac arrest.
29	L		For the patient, when I remove the invasive lines. (prior transfer out of ITU).
30	L		To release patient's pain, when I give him narcotics.
40	T		Relaxed
41	T	To work in light duty.	
32	N	Proud	When I provide nursing care to ITU patient.
33	O	Respect	When I care for critically ill patient.
34	O		The patient's rights and humanity.
35	O		My colleagues during heavy work load.

36	P	Satisfaction	When I transfer a patient out of ITU.
	G4	Mutual	Feeling situation
39	S	Close	To the patient who has complications.
42	U	Empathy	Toward a patient with pain.
	G5	Disparagement	Feeling situation
43	V	Angry+ Sad	For slow response of health care professionals (X-ray, lab, ...etc).
44	W	Busy	During cardiac arrest resuscitation.
45	X	Guilt	When I miss any prayer.
46	X		If any medication mistake happened.
47	Y	Sad	To come for a long night duty.
48	Y		Toward chronically ill patient with poor prognosis.
31	M	Not accept	The bad performance of ITU doctors.
49	Z	Sorry	Toward the relatives of a patient with complications.
50	ZZ	Suffer	When the health care professionals are slow (X-ray, lab, ...etc)

Appendix VIII

An Example of the first phase data collection and analysis

<p>Researcher: Mr. R.B. what is your feeling while assisting in intubation of the new admission?</p>	<p>Feelings</p>
<p>Mr.R.B. answer:</p>	
<p>First, during patient intubation there is feeling, then after intubation there is another feeling. First, before intubation, once they decide to intubate the patient or the patient's condition to be intubated, there is a level of anxiety. There is stress, itself this procedure is a sensitive procedure I can call it, because it is critical procedure. I will be highly concentrated and highly anxious. There is feeling of fear any defect or any deficit will affect the procedure. I am going to prepare for this procedure like laryngoscope and laryngoscope blades, if there is any defect or malfunctioning during the procedure it will affect the procedure, finally it will affect the patient.</p>	<p>Feeling of anxiety</p> <p>Feeling of concentration.</p> <p>Fear feeling</p>
<p>While intubation there are many people around, I have to keep them under control, many times patient deteriorates or deteriorates really at that time I feel high pressure if any small mistake happened from any staff it cost the life of the patient and the</p>	<p>Feel of high pressure</p>
<p>patient is suffering. Specially during such procedures. There are staff nurses my</p>	

<p>colleagues, doctors and preceptees are around. Especially for the preceptees, it is my duty to explain such procedures for this...a nurse,or...I should be highly skilled and competent then only one can teach the new staff or the preceptees. I also feel that while assisting in these procedures the doctors are observing my skills, so I feel that I have to be accurate and if any mistake from me I am not appreciated for this and it is not an acceptable also. Because of that I will be highly concentrating trying to be accurate in my assistance to the procedure. Another feeling towards the doctors as colleagues. I feel towards the doctor that I should provide high collaboration and in my mind I feel that it should be successful intubation. Patient condition is affected by this procedure. If a doctor fails to do these critical procedures, there will be bad feeling towards the person; like he is not an expert and less competent in such procedures.</p>	<p>I feel I have to be accurate</p> <p>Feeling of concentration</p> <p>Feeling of high collaboration</p>
<p>Once the intubation is over. The tube is fixed well, this is the time you feel relaxed. Another thing towards the family who was there outside the curtains, after washing my hands, as a human, I felt I should give them a brief information about the condition of the patient. And also I felt proud that we have done the procedure successfully and saved his life. And also, I have done my job</p>	<p>Bad feeling toward the doctor</p> <p>Feeling relaxed</p>

<p>perfectly. There is a humanistic feeling I felt with them, after explanation, feeling of relaxation and also I am comfortable and self appreciation.</p>	<p>Feeling proud</p> <p>humanistic feeling</p> <p>Feeling of relaxation</p>
<p>Researcher: I did not get your feeling towards the patient himself?</p>	<p>Feeling of comfort</p> <p>Feeling of self appreciation</p>
<p>Mr. R.B. Answer:</p> <p>Towards the patient, I am concentrating on preparation of the procedure. And as he is sedated and paralysed only after intubation I feel that we have saved his life. Once we complete the procedure I feel that this man if he is conscious he will say 'thank you'.</p>	<p>Feeling of concentration</p>
<p>Researcher: Ok, about your interaction with your colleagues. How do you feel during interaction process?</p>	<p>Feeling we saved his life</p>
<p>Mr.R.B. answer:</p> <p>About the interaction, we are not talking so much. We are interacting with simple words like, ok, give, take, yes, no, etc. The concentration is 100% in looking at the instruments and not looking at my colleague's face, we are looking to the hands, patient's head position, and the help given by other nurses.</p>	
<p>Researcher: Ok, thank you very much</p>	

Appendix IX (The 50 highly meaningful emotions)

			NA	No	Low	mod	High
			0	1	2	3	4
SN	Item N	Items of the Questionnaire	%	%	%	%	%
1	24	I feel self competent when I leave the unit without mistakes.	1.4	3	4.1	21.9	69
2	30	I feel happy, when I transfer the patient out of ITU.	4.1	6	6.8	20.5	63
3	123	I feel happy when the patient is extubated.	1.4	6	14	24.7	55
4	166	I feel self confident when I leave the unit without mistakes.	1.4	7	6.8	30.1	53
5	7	I feel more active after my break and/or prayer time.	0.0	4.1	11	32.9	52.1
6	23	I feel self competent, when I transfer a patient out of ITU.	5.5	6	5.5	31.5	52
7	38	I feel self responsible to care for a critically ill patient when I receive him.	1.4	8	9.7	27.8	53
8	51	I feel able to do my work, when I arrive on duty.	0.0	3	11	33	52.8
9	19	I feel that I appreciate myself when I care for a critically ill patient.	0.0	7	13	28.2	52
10	25	I feel that self competent to care for ITU patients.	1.4	1	18	27.4	51
11	101	I feel that I appreciate the quick response of health care professionals (X-ray, lab, ...etc)	0.0	6	15	27.8	51
12	158	I feel the technology in ITU encourages me to up-to-date myself.	0.0	8	6.8	34.2	51
13	161	I feel happy when I update my knowledge and skills.	5.6	6	9.7	27.8	51
14	5	I feel busy during cardiac arrest resuscitation.	2.8	8.3	13.9	25.0	50
15	67	I feel my attention and concentration is more when I prepare and give narcotics.	2.8	10	14	23.6	50
16	18	I feel, my attention and concentration is more when I receive ITU patient.	1.4	8	5.5	37.0	48
17	66	I feel self trust when I give medication.	0.0	8	16	27.4	48
18	96	I feel happy when the medical team do their job completely.	0.0	3	14	33.8	49
19	79	I feel unhappy to arrive on a long night duty	0.0	8	14	30.6	47

20	157	I feel self confident when I am updating my knowledge and skills.	4.1	3	6.8	39.7	47
21	15	I feel guilty when I miss any prayer.	5.7	9	16	22.9	47
22	75	I feel that I appreciate my colleagues efforts during heavy workload.	1.4	7	8.5	36.6	47
23	118	I feel my attention and concentration are more during patient intubation and extubation.	0.0	4	5.5	45.2	45
24	12	I feel my attention and concentration are more after I finish my break and/or prayer time.	2.7	4	9.6	38.4	44
25	21	I feel more close to the patient who has complications.	0.0	8	11	37.0	44
26	36	I feel that I respect myself when I care for a critically ill patient.	4.1	14	9.6	28.8	44
27	135	I feel happy due to a successful cardiac arrest resuscitation	2.7	3	12	38.4	44
28	145	I feel happy to deal with highly technical equipment	0.0	6	18	32.9	44
29	98	I feel relaxed during doctors rounds when it is smooth and quiet.	0.0	4	17	35.2	44
30	100	I feel angry and sad for slow response of health care professionals (X-ray, lab, ...etc).	0.0	3	16	38.0	44
31	124	I feel happy for the patient when I remove the invasive lines. (prior transfer out of ICU).	4.1	3	18	32.9	43
32	159	I feel high self esteem because of attending in-service education updates.	2.8	3	19	31.9	43
33	160	I feel high self esteem when teaching nursing students.	8.3	7	8.3	33.3	43
34	162	I feel responsible to teach nursing students.	1.4	6	16	34.2	43
35	6	I feel self competent even if the patient died. (because I did my best to save his life)	2.8	5.6	14.1	35.2	42.3
36	34	I feel proud of myself when I provide nursing care to ITU patient.	2.8	14	13	28.2	42
37	40	I feel satisfied when I transfer a patient out of ITU.	2.8	10	11	33.8	42
38	49	I feel sad towards chronically ill patients with poor prognosis.	1.4	7	15	35.6	41
39	62	I feel happy to relieve a patient's pain when I give him narcotics.	2.7	6	22	28.8	41
40	114	I feel that I do not accept the bad performance of ITU doctors.	1.4	6	13	38.9	42
41	37	I feel that I respect the patient's rights and humanity.	1.4	4	13	40.8	41

42	61	I feel guilty if any medication mistakes happen.	9.6	6	14	31.5	40
43	84	I feel that I respect my colleagues during heavy work load.	2.8	4	14	38.9	40
44	103	I feel that I control my work when I deal with health care professionals (X-ray, lab...,etc).	2.9	9	14	32.9	41
45	105	I feel that I suffer when the health care professionals are slow (X-ray, lab, ...etc)	0.0	10	14	36.1	40
46	133	I feel of full courage to resuscitate a cardiac arrest patient.	2.8	4	18	35.6	40
47	174	I feel self confident to deal with technological equipment.	2.8	6	15	36.1	40
48	65	I feel of sympathy towards a patient with pain.	5.5	18	18	23.3	38
49	50	I feel sorry towards the relatives of patients with complications.	4.2	4	22	33.3	36
50	83	I feel relaxed to work in light duty.	4.2	6	21	33.3	36