COMPARING JOB SATISFCATION AMONG REGISTERED NURSES IN AN IRANIAN HOSPITAL AND A MALAYSIAN HOSPITAL

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ABSTRACT

Job satisfaction is a critical factor in health care. Strong empirical evidence supports a causal relationship between job satisfaction, patient safety and quality of care. A sequential explanatory mixed-methodology based on Herzberg's motivation-hygiene theory was employed to identify the factors which influence job satisfaction among Malaysian and Iranian nurses. Proportionate samples of 416 nurses from one large hospital in Malaysia and 397 nurses from a large hospital in Iran were recruited in the initial quantitative phase. A Modified Index of Work Satisfaction (MIOWS) questionnaire consisting of nine components (autonomy, task requirement, work interaction, professional development, supportive nursing management, decision-making, professional status, salary, and work conditions) was used to measure the nurses' job satisfaction. In order to achieve a deeper understanding, 15 focus group discussions (FGDs) with 118 nurses were also conducted in Iran and Malaysia. The Malaysian nurses had a significantly higher proportion than the Iranian nurses in all the components of MIWOS except for work conditions. Of the nine components of MIOWS, both the Iranian and Malaysian nurses had higher scores than their respective midpoints on three components, namely: autonomy, task requirement and work interaction, although Malaysian nurses also scored higher in terms of professional development, supportive nursing management, decision-making and professional status.

The results also indicated that only 87 Iranian nurses (28.7%), compared to 290 Malaysian nurses (88.7%), had an overall job satisfaction score which was above the midpoint score of 201. The overall job satisfaction score was significant different between gender, age, marital status and years of working experience for the Iranian nurses although in addition for Malaysian nurses work units were found significant.

In multiple analyses, young age, being female and being married were significantly associated with a overall job satisfaction score for the Iranian nurses while work unit namely Malaysian nurses working in surgical and critical care units were more likely to have a lower overall job satisfaction score. The adjusted R^2 for the model for the Iranian nurses and Malaysian nurses was 0.14 and 0.05, indicating a 14% and 5% variability respectively. The results of the regression model for the Iranian and Malaysian nurses were highly significant at F (4,299) =13.19, $P<0.001$ and F (5,322) =4.37, $p<0.001$ respectively.

Purposive sampling was used in the qualitative phase. Three themes were identified from the FGDs, two of which influenced both Iranian and Malaysian nurses' job satisfaction. These were environment and organization factors. Spiritual feelings were reported by the Iranian nurses, while the Malaysian nurses highlighted their ability to help people as the third factor that influenced their job satisfaction. Similar subthemes were reported by both Iranian and Malaysian nurses with regard to environment factors: team cohesion, benefits and rewards, a lack of clarity over nurses' responsibilities for working conditions and organizational factors: task requirements, professional status, professional development and a lack of clinical autonomy. These supplemented the quantitative findings, as both Malaysian and Iranian nurses scored lower on salary and work conditions components in the MIOWS but higher on task requirements and autonomy.

Efforts to increase clinical autonomy, improved teamwork and communication to promote team cohesions and improved working conditions to ensure a conducive and safe practice environment should be considered when developing strategic planning that could effectively improve nurses' job satisfaction in Iran and Malaysia.

There is also, a need to ensure that in the future nurses will be provided with clear job description, appropriate rewards and professional development programmes which will help improve their professional status.

ABSTRAK

Kepuasan kerja adalah faktor kritikal dalam penjagaan kesihatan. Bukti empirikal yang kukuh menyokong hubungan bersifat sebab dan akibat antara kepuasan kerja, keselamatan pesakit dan kualiti penjagaan.

Metodologi campuran yang berbentuk penjelasan berurutan berdasarkan teori motivasi-kebersihan Herzberg telah digunakan untuk mengenal pasti faktor-faktor yang mempengaruhi kepuasan kerja dalam kalangan jururawat di Malaysia dan Iran. Dengan persampelan berkadar, 416 orang jururawat dari sebuah hospital yang besar di Malaysia dan 397 orang jururawat dari sebuah hospital yang besar di Iran telah direkrut pada fasa awal kuantitatif. Satu soal selidik Indeks Kepuasan Kerja yang telah diubah suai (MIOWS) dan terdiri daripada sembilan komponen (autonomi, keperluan tugas, interaksi kerja, pembangunan profesional, sokongan pengurusan kejururawatan, membuat keputusan, status profesional, gaji, dan suasana kerja) digunakan untuk mengukur kepuasan kerja jururawat. Dalam usaha untuk mendapatkan pemahaman yang lebih dalam, sebanyak 15 perbincangan kumpulan berfokus (FGDs) dengan 118 orang jururawat telah dijalankan di Iran dan Malaysia.

Jururawat Malaysia mencatatkan skor yang lebih tinggi daripada jururawat Iran dalam semua komponen MIOWS kecuali komponen suasana kerja. Daripada sembilan komponen MIOWS, jururawat Malaysia dan Iran mencatatkan skor yang lebih tinggi daripada titik tengah bagi tiga komponen, iaitu: autonomi, keperluan tugas dan interaksi kerja, walaupun jururawat Malaysia juga mencatatkan skor tinggi bagi komponen pembangunan profesional, sokongan pengurusan kejururawatan, membuat keputusan dan status profesional.

Keputusan kajian juga menunjukkan bahawa hanya 87 jururawat Iran (28.7 %) berbanding dengan 290 jururawat Malaysia (88.7%) mencatatkan jumlah skor min

kepuasan kerja melebihi skor titik tengah 201. Jumlah skor min kepuasan kerja menunjukkan perbezaan yang signifikan antara jantina, kumpulan umur, taraf perkahwinan dan tahun pengalaman bekerja untuk jururawat Iran, manakala untuk jururawat Malaysia unit kerja juga didapati ketara. Dalam analisis multipel, usia muda, jantina perempuan dan taraf berkahwin berkait secara signifikan dengan skor min keseluruhan kepuasan kerja bagi jururawat Iran manakala, unit kerja bagi jururawat Malaysia khususnya yang bekerja di unit surgikal dan penjagaan rapi adalah lebih bercenderung untuk mempunyai jumlah min skor kepuasan kerja yang lebih rendah. R^2 yang diselaraskan untuk model ini bagi jururawat Iran dan jururawat Malaysia adalah 0.14 dan 0.05, yang menunjukkan variasi masing-masing 14% dan 5%. Model regresi bagi jururawat Iran dan jururawat Malaysia adalah sangat signifikan, masing-masing pada $F(4,299)=13.19$, $P<0.001$ dan $F(5,322)=4.37$, $p<0.001$.

Pensampelan bertujuan telah digunakan dalam fasa kualitatif. Tiga tema telah dikenal pasti daripada FGD, di mana dua daripada tema tersebut mempengaruhi kepuasan kerja kedua-dua, jururawat Iran dan Malaysia: faktor alam sekitar dan organisasi. Perasaan rohani telah dilaporkan oleh jururawat Iran manakala jururawat Malaysia mengutarakan keupayaan untuk membantu orang ramai (faktor jururawat) sebagai tema ketiga yang mempengaruhi kepuasan kerja mereka. Subtema yang sama telah dilaporkan oleh kedua-dua, jururawat Iran dan Malaysia untuk faktor-faktor alam sekitar (permuafakatan pasukan, manfaat dan ganjaran, suasana kerja dan tanggungjawab jururawat yang tidak jelas) dan faktor-faktor organisasi (keperluan tugas, status profesional, pembangunan profesional dan kekurangan autonomi klinikal).

Dapatan kajian ini menambah hasil dapatan kuantitatif kerana kedua-dua jururawat Iran dan Malaysia mencatatkan skor yang rendah bagi komponen gaji dan suasana kerja dalam MIOW tetapi telah memperolehi skor yang lebih tinggi bagi keperluan tugas dan autonomi.

Usaha untuk meningkatkan autonomi klinikal, kerja berpasukan dan komunikasi yang lebih baik untuk menggalakkan permuafakatan pasukan serta penambahbaikan keadaan tempat kerja bagi memastikan persekitaran yang kondusif dan selamat perlu dipertimbangkan semasa merancang perancangan strategik yang boleh meningkatkan secara efektif kepuasan kerja jururawat di Iran dan Malaysia. Tanggungjawab kerja, ganjaran yang bersesuaian dan program pembangunan profesional harus dirancang yang akan menyumbang secara tidak langsung kepada peningkatan taraf profesional jururawat.

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DEDICATION

This dissertation is first dedicated to God. Without Him, none of this could have been possible. I thank Him for knowing the desires of my heart and for granting me those desires because of my true love for Him. Most important, I dedicate this dissertation to my loving family. Without their encouragement, I could not have made it. I appreciate every sacrifice they have made for me.

Narges Atefi

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LIST OF SYMBOLS AND ABBREVIATIONS

ANOVA	One-Way Between-Groups Analysis of Variance
CCM	Collaborative Care Model
CI	Confidence Interval
CINAHL	Online Cumulative Index of Nursing and Allied Literature
FGD	Focus Group Discussions
IWS	Index of Work Satisfaction
MIOWS	A Modified Index of Work Satisfaction
OR	Odd Ratio
SPSS	Statistical Package for the Social Sciences
UMMC	University of Malaya Medical Centre
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

1.1 Background

The shortage of nursing staff is a frequent challenge that the nursing industry has to face and overcome (Abualrub, 2007; Omar, Majid, & Johari, 2013). This shortage remains a major concern both in developed and developing countries because it influences the efficiency and effectiveness of affected healthcare delivery systems (Li et al., 2010; Ruggiero, 2005; Siela, Twibel, & Keller, 2008; Upenieks, 2003; Wang, Tao, Ellenbecker, & Liu, 2012). It has been reported that the burden of these shortages are more severe in middle income countries as these countries have to deal with poor health indicators (El-Jardali et al., 2013). The nursing shortage in developing countries is often further exacerbated by the same factors including relatively low pay, poor career structures and the lack of opportunity for further education, which results in the loss of thousands of trained nurses yearly due to the migration of nurses to developed countries (Khaliq et al., 2009; Omar, Majid, & Johari, 2013). The shortage of nurses has tremendously impacted the quality and safety of hospital care worldwide (Khowaja, Merchant, & Hirani, 2005).

According to World Health Organization reports (WHO, 2011) countries with widespread nurse shortages often do not have health systems with the capacity to contain vector-borne illnesses, nor are they able to control the spread of contagious diseases. Treatments administered cannot be monitored and waiting times for treatment are often prolonged, while patient education is undelivered, leading to the spread of diseases and a heightened incidence of preventable disease. There is therefore an urgent need for hospital leaders and nurse managers globally to implement new strategies which can promote the retention of registered nurses in the workforce (Attree et al., 2011).

The definition, measures and methods of addressing the nursing shortage varies by country. For example, the United States has a nurse-to-population ratio of approximately 700:10 000, while in African Countries like Uganda the ratio is 6:10 000. Yet both countries report nursing shortages (Buchan & Calman, 2006). From a national policy perspective, a shortage is often measured in relation to that country's own historical nurse staffing levels, human resources and the demand for health services (Zarea, Negarandeh, Dehghan−Nayeri, & Rezaei−Adaryani, 2009).

A number of studies have found that nursing shortages result in the loss of knowledge and motivation, exhaustion, burnout, and rapid employment turnover in nurses (Dehghan Nayeri, Nazari, Salsali, & Ahmadi, 2005; Zarea et al., 2009).

The nursing shortage is a critical issue since the evidence strongly suggests that the availability of sufficient and properly trained health workers can save lives (WHO, 2006). Numerous studies have found that a higher number of registered nurses is associated with lower patient mortality rates, and lower rates of adverse outcomes in hospital patients (El-Jardali, Dimassi, Dumit, Jamal, & Mouro, 2009; West, Mays, Rafferty, Rowan, & Sanderson, 2009). Therefore, it has been suggested that a higher number of working nursing staff in a hospital per day can reduce the risk of patient death and also improve patient satisfaction (Aiken, Clarke, Sloane, & Sochalski, 2001).

The current nursing shortage is the result of a combination of factors, such as the increasing demand and better job opportunities for nurses in developed nations, declining nursing school enrolment, increase in demand for nurses due to longer life expectancies, and an increase in the incidence of chronic disease. Poor working conditions, low nursing satisfaction, and a poor image of nursing also contribute greatly to the shortage (Coomber & Barriball, 2007; Heinen et al., 2013; Kuhar, Miller, Spear, Ulreich, & Mion, 2004; Lu, While, & Barriball, 2005). It has also been reported that

male nurses, younger and more highly qualified nurses were more likely to leave the profession (Heinen et al., 2013).

Buchan and Aiken (2008) have reported that that there is not so much a shortage of nurses, however, there is a shortage of nurses willing to work in the present conditions. There are many graduate nurses who choose to engage in other types of work or to be without employment. An in depth understanding of the factors that motivate a nurse to work in a given environment is critical to solving this nursing shortage and improving global health care.

Job satisfaction among nurses is an international concern (Gui, Barriball, & While, 2009) that has been identified as the main contributing factor leading to nursing shortages (Watts, 2010). Many have reported that job satisfaction plays an important role in their decision to leave the nursing profession (Brewer, Kovner, Green, & Cheng, 2009; Camerino et al., 2010; Ruggiero, 2005). Satisfied nurses are more likely to stay in the field of nursing (Gurková et al., 2013; Hayes et al., 2012).

Recently, Hayes et al. (2012) reported that in a comprehensive review of the results of 50 studies which examined determinants of organisation, career advancement, the benefits and individual characteristics of nurse turnover, job satisfaction had greater significance in nurse turn over than other predictors.

The evidence suggests that when nurses' job satisfaction is low, the retention of staff is also lowered and staff absenteeism and turnover increases (Lu, While, & Barriball, 2005). This combination of events results in significantly lower standards in healthcare delivery (Cowin, 2002). Best and Thurston (2006) found that the hospitals reporting the highest quality care and better patient outcomes employ nurses who report the highest job satisfaction compared with other hospitals.

Job satisfaction for nurses is a phenomenon that consists of inclusion in decision making, administrative support, carrier opportunities, salary and benefits, and work conditions (Archibald, 2006). In order to increase job satisfaction the focus should be on opportunities for nurses to develop professionally, to gain autonomy and to participate in decision making, be fairly rewarded, receive professional support, have adequate material resources and a good physical work environment (Duffield et al., 2009; Khowaja et al., 2005; Seo, Ko, & Price, 2004; Smith, Hood, Waldman, & Smith, 2005). Emphasis should also be on professional development opportunities and improved scheduling, team work, leadership style, providing a higher salary, and good communication (Cortese, Colombo, & Ghislieri, 2010; Duffield et al., 2009; Mirzabeigi, Salemi, Sanjari, Shirazi, & Heidari, 2009).

Personality traits, an organisation's characteristics and an individual's work activities are crucial in determining their level of job satisfaction (Cortese, Colombo, & Ghislieri, 2010). An individual's job satisfaction varies by duration of employment and location, between countries, geographical regions, hospitals, and wards within the same hospitals (Cortese et al., 2010).

Like many other professions, nursing is comprised of a diverse group of individuals that varies in gender, age, and educational background. The effect of personal characteristics such as age (Cortese, 2007; Norman et al., 2005), gender (Kalist & Okoye, 2011), marital status (Al-Enezi, Chowdhury, Shah, & Al-Otabi, 2009; Monjamed et al., 2004), education level (Al-Hussami, 2008; Dunn, Wilson, & Esterman, 2005; Mogharab, MadarShahian, AliAbadi, Rezaei, & Mohammadi, 2006; Rambur, Mcintosh, Palumbo, & Reinier, 2005) and length of working employment (Mogharab et al., 2006; Pillay, 2009) on nursing job satisfaction must be considered when exploring recruitment and retention.

1.2 Problem Statement

1.2.1 Iran Context

The shortage of nursing personnel is a major issue in health care organisation in Iran, as in many other countries. However, the causal factors of this issue may differ from those of other countries. One important factor influencing the nursing shortage in western countries is the decline in enrolments for registered nursing programmes over recent years in western countries (Zarea et al., 2009). In Iran, the average number of annual graduations from nursing schools is more than 6400 (Nasrabadi & Emami, 2006; Zarea et al., 2009). A host of factors have been determined as potential underlying causes of the nursing shortage in Iran, including job dissatisfaction, and organisational and sociocultural factors (Farsi, Dehghan–Nayeri, Negarandeh, & Broomand, 2010; Nasrabadi & Emami, 2006).The country faces issues with regard to nursing graduates who do not choose nursing as a career and many nurses who migrate to other countries (Zarea et al., 2009). Although health-care facilities in Iran need 220,000 nurses in order to deliver optimal nursing care (Zarea et al., 2009), it is estimated that the workforce numbers about 98,020 registered nurses (RN), less than 50% of the required 220,000 nurses (WHO, 2012).

Based on our knowledge, there is no concrete evidence of the number of nursing turnover in Iran however, in recent years, nursing shortages in Iran has become a major challenge for healthcare system managers (Ebbadi & Khalili 2013). Dissatisfaction, low salary, workload and lack of clinical autonomy have been identified as the main contributing factors for nurses leaving their profession (Ebbadi & Khalili 2013).

Numerous studies have reported that the effect of the nursing shortage has been that nurses work more than the maximum recommended shift of 192 hours per month, with as much as 150 hours of overtime in some parts of Iran (Farsi et al., 2010; Varaei,

Vaismoradi, Jasper, & Faghihzade, 2012). However, despite the high number of ordinary working hours and mandatory overtime work to cover the increased need for more working nurses, the shortage of nursing staff in Iran has still not been relieved (Nasrabadi & Emami, 2006). A number of studies have found that when nurses worked more than 12 hours per day or more than 40 hours per week the risk of making medical errors increased, and that long work hours were also significantly related to patient mortality (Rogers, Hwang, Scott, Aiken, & Dinges, 2004; Trinkoff et al., 2011).

Previous studies have shown that Iranian nurses perceived themselves as in a lower social status and with a poor public image which contributed to nurse perceptions that their work is not appreciated or respected compared to that of other health professionals with similar educational backgrounds (Farsi et al., 2010; Varaei et al., 2012; Zarea et al., 2009). It has also been reported that nurses have few opportunities for promotion compared to other health professionals, such as physicians, in most hospitals in Iran (Farsi et al., 2010; Varaei et al., 2012; Zarea et al., 2009). Additionally, lack of opportunities for promotion and continued education have contributed to major dissatisfaction among nurses and resulted in a poor quality of nursing care in hospitals (Farsi et al., 2010; Zarea et al., 2009).

Several studies in Iran (Mirzabeigi, Salemi, Sanjari, Shirazi, & Heidari, 2009; Mogharab et al., 2006) have shown that the majority of nurses have a low level of job satisfaction. Findings from these studies cumulatively show that only about one third of nurses reported being “satisfied” or “very satisfied” with their jobs, while 34% of nurses reported being “neither satisfied nor dissatisfied”. A further 27% of nurses reported “complete dissatisfaction” with their jobs. They also reported feeling unhappy with a variety of issues including: inadequate staffing, low wages, heavy workloads, low levels of participation in decision-making, limited clinical autonomy and authority, conflict with physicians, poor leadership and lack of managerial support (Mirzabeigi et al.,

2009; Mogharab et al., 2006; Monjamed et al., 2004; Nasrabadi & Emami, 2006; Varaei et al., 2012).

1.2.2 Malaysian Context

The nursing shortage is a worldwide phenomenon and Malaysia is not excepted (Omar, Majid, & Johari, 2013). Malaysia like many other countries is facing nursing shortages. The demand for nurses and social care has increased in response to an ageing population and increasing levels of chronic ill health. The number of qualified nurses has decreased because of increasing alternative job opportunities for nurses, and the workforce is aging with an average age of 40.5 (International Council of Nurses, 2012).

Malaysian nurses comprise 2-3% of the female workforce and a large proportion of the health care workforce. Approximately two-thirds of nurses work fulltime in the public sector and they are generally required to retire upon reaching the age of 55 (Barnett, Namasivayam, & Narudin, 2010). According to Ministry of Health in Malaysia (2011) 109 universities and colleges in Malaysia offer nursing training programmes and about 9,000 nurses graduate from nursing colleges nationwide and enter the workforce each year, but this number needs to increase by 30 per cent in order to even begin addressing the nation's healthcare needs.

The total number of registered nurses has increased every year from 31,129 in 2000 to 72,847 nurses in 2012. The nurse-patient ratio improved as well, from 1:747 in 2000 to 1:410 in 2012. This shows that Malaysia has taken the initiative to improve its healthcare industry (WHO, 2012). Malaysia needs 174,000 nurses by 2020 to achieve a ratio of 1 nurse to 200 members of the public, as required by the World Health Organisation (Barnett et al., 2010).

The turnover rate of nurses in Malaysia has been approximately 50% from the 2005 to 2010 with an increased number from 400 to 1049 nurses leaving their jobs (Siew, Chitpakdee, & Chontawan, 2011). Malaysia also faces migration of around 400 nurses per year and there are currently approximately 25,000 Malaysian nurses working in other countries (Siew et al., 2011) such as the United Kingdom and United States.

The loss of nurses, especially experienced nurses, affects many areas in health care organisations (Omar, Majid, & Johari, 2013). These areas include costs to hospitals, and patient care outcomes. When there is high nurse turnover, the work environment is disrupted. Losing experienced nurses causes stress to the social structure of the work environment (Jones, 2005). This stress has been shown to lead to additional nurses leaving. This is labelled "secondary nurse turnover" (Jones, 2005) and is described as when "the work environment may be adversely affected by the turnover, and conditions may be created such that nurse turnover actually induces additional turnover."

Numerous studies have reported two approaches to addressing the issue of nurse turnover. The first approach is focussed on recruitment and establishes more colleges of nursing that will produce more nursing graduates. This approach will help to reduce the shortage of nursing in the short term (Siew et al., 2011). The Malaysian government encourages and is actively involved in establishing more colleges that specialise in providing more professional nursing graduates, however, the majority of newly graduated nurses are not ready to commit themselves to the profession, or else the reality of a nursing job is not within their expectations (Barnett et al., 2010). Instead, many decide to leave the organisation or move to other profession.

The second approach is to focus on the retention of more dedicated and quality professional nursing staff (Leiter & Maslach, 2009). This can be done by providing

sustainable careers for nurses. The nurse managers and supervisors in healthcare organisations should ensure that nurses are satisfied with their job.

Leiter and Maslach (2009) stated that the second approach might be a better strategy than the first approach. Retaining nurses will help to decrease the shortage of experienced nurses. It is necessary to have experienced staff available to offer guidance, answer, and assist junior nurses in difficult or unfamiliar situations. Mentoring can also lead to better retention of new nurses, increased job satisfaction among new nurses, and improved quality of patient care.

Similarly, nurse shortages in Malaysia could be due to nurses turnover, low job satisfaction, poor management, heavy workload and lack of organisational support (Barnett et al., 2010). The national licensure examination in Malaysia is conducted both in Malay and English, and thus offers Malaysian nurses access to overseas employment opportunities in English speaking countries.

Attractive overseas employment opportunities, and better opportunities for further education with a focus on clinical practice in developed countries are constant threats to the supply of nurses in the domestic market (Barnett et al., 2010; Omar, Majid, & Husna Johari, 2013). In addition, many professional issues also influence nurse migration, such as a lack of emphasis on independent nursing practice, non-supportive nurse mangers, working conditions, little opportunity for advancement and an inability to influence decision-making.

There is an abundance of international research on nurses' job satisfaction and intentions to leave. However, little is known about the reasons for Malaysian nursing turnover (Mohammad & Fakir, 2010) and few studies have focused on nurses' job satisfaction. The lack of research addressing the factors that influence nurses' job

satisfaction is a problem, because if nurse administrators do not know what their nurses want, they cannot make changes to better satisfy those nurses.

It is important for the nurse administrator to understand which aspects of a nurse's job are best correlated with satisfaction and therefore which aspects the administrator should focus on when trying to increase job satisfaction among nurses. Understanding nurse satisfaction and its associated factors via a larger study is essential.

1.3 Significance of the Study

Nurse turnover has ramifications for both the individual and the health care organisation in terms of a compromise in the quality of patient care and an increase in organisational costs. Recognition and understanding of the factors related to nurse job satisfaction are important to alleviate the seriousness of the nursing shortage. Despite extensive researches on nurses' job satisfaction; few comparative researches among countries have actually been conducted to find out the factors related to the nurses' job satisfaction in different health care systems. It is believed that determinants of job satisfaction may differ within different healthcare systems (Hwang et al., 2009). The International Council of Nurses also encourages international studies reflecting diversity among countries and cultures as a basis for establishing professional standards and to improve nursing practice (Hwang et al., 2009).

In Iran nurses' job promotion is mostly based on nurses' qualification while in Malaysia nurses' job promotion is based on their years of working experince. Prior to work as a nurse, participants should obtain a four year baccalaureate in nursing in Iran and 3-year diploma level qualification in Malaysia. This shows the differece between educational system in Iran and Malaysia that could make a good opportunity to find out the relationship between different educational level and nurses job satisfaction.

Aforementioned examples are a part of differences in health care system between Iran and Malaysia, which individual and comparison analysis would be useful to find out the clear and up-to-date picture of the factors related to the nurses' job satisfaction. With increasing globalisation and cross cultural exchanges, a comprehensive study was carried out in Iran and Malaysia to discover the important factors related to nurses' job satisfaction. The identification of these factors will allow policy makers in both countries to better understand and enhance factors that contribute to nurses' job satisfaction. When nurse satisfaction improves, it will also ultimately improve patient satisfaction, both of which will better benefit organisations. These are two countries that stand to benefit from improved professional skills in nursing.

1.4 Purpose of Statement

The objective of this study is to identify factors related to the job satisfaction of nurses in Iran and Malaysia. An explanatory mixed methods design was used. This involved a quantitative phase, followed by collecting qualitative data to explain and follow-up the quantitative data in greater depth. The Modified Index of Work Satisfaction (MIOWS) questionnaire was used to explain how task requirements, work interaction, decision making, autonomy, professional development, professional status, work conditions, and salary were associated with nursing job satisfaction in Iran and Malaysia. This is a combination of Part A of the original Index of Work Satisfaction (44 items) and another 23 items adapted from the Modified Index of Work Satisfaction (Ramoo, 2006). The second, qualitative phase was conducted to provide a better and more detailed understanding of the problem. The reason for the qualitative phase was to gain in-depth understanding of the quantitative results. The study hoped to provide information for hospital administrators in planning effective and efficient policies to improve nursing job satisfaction in order to increase the quality of patient care and decrease nursing turnover.

The research study also included an examination of the demographic variables of age, gender, marital status, years of employment in nursing, and level of education in nursing. A thorough understanding of nurses' job satisfaction is extremely important to nursing administration. If nurse managers comprehend what makes nurses satisfied, they can make changes to facilitate nurse satisfaction and therefore improve patient satisfaction and also employee retention, both of which could lead to increased profits for the organisation which will contribute to maintaining adequate and safe staffing levels. The retention of nursing staff is vital during a nursing shortage.

This study consists of two phases: quantitative followed by qualitative.

1.4.1 Aims of the Study (Quantitative Phase I)

The specific objectives of the quantitative study are to determine and compare, among the Iranian and Malaysian nurses, the following:

a. The level of overall job satisfaction score

b. The level of the nine components of the Modified Index of Work Satisfaction (MIOWS)

c. The differences in overall job satisfaction score across the demographic characteristics of nurses.

d. To determine the demographic correlates of overall job satisfaction score

The aims of the qualitative study are:

a. To explore the factors related to a feeling of job satisfaction experienced by nurses in Iran.

b. To explore the factors related to a feeling of job satisfaction experienced by nurses in Malaysia.

1.5 Research Questions

1. What are the levels and differences in the levels of overall job satisfaction among Iranian and Malaysian nurses?

2. What are the levels and differences in the levels of the nine components of the MIOWS among Iranian and Malaysian nurses?

3. Is there any difference between demographic characteristics for overall job satisfaction scores among Iranian and Malaysian nurses?

4. What are the demographic correlates of the overall job satisfaction scores of Iranian and Malaysian nurses?

5. What factors influence job satisfaction for nurses in Iran and Malaysia?

1.6 Definition of Terms

For the purposes of this study, the following definition is defined to clarify the research questions presented.

1.6.1 Conceptual Definition

Job satisfaction, various definitions on job satisfaction exist. Price (2002) explained job satisfaction as the affective orientation an employee has toward their work. Job satisfaction can also be considered a global effect of the job or a related constellation of attitudes about different parts or factors affecting the job (Lu et al., 2005).

Task requirement is the tasks or activities that form a regular part of the job in nursing.

Work interaction is the opportunities available for both formal and informal social and professional interaction during work hours.

Autonomy is the amount of work related independence, initiative, and freedom permitted or required in the nurse's daily work activities.

Decision making refers to the thought process of selecting a logical choice from the available options.

Professional development refers to the knowledge and skills needed for both personal development and carrier advancement.

Professional status is overall importance or significance perceived by the individual on his or her job, or as perceived by others.

Supportive nursing management is management policies and procedures put in place by the hospital or nursing administration of the hospital.

Work conditions include workload, shift work, the physical working environment, supplies and equipment, work scheduling and flexibility.

Salary is the dollar remuneration and fringe benefits received for work done (Stamps, 1997).

Registered Nurse (Malaysia) refers to an individual who has undergone and passed a formal course of a 3-year diploma, or a 4-year baccalaureate degree in any approved nursing school and is registered as a member of the Malaysian nursing broad and licensed to practice.

Registered Nurse (Iran) refers to an individual who has undergone and past three years of theoretical education in a nursing course and one year of clinical practice in a hospital. Nurses have to pass the nursing examinations under the supervision of the Ministry of Health and Medical Education. Nursing practice approval in Iran is based on successfully passing the examinations.

Years of working experience refers to the number of years of nursing experience.

1.6.2 Operational Definition

Overall job satisfaction score is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 67 items, which yields a minimum score of 67 and a maximum score of 335 per case. Job satisfaction is represented by the sum of nine components scores representing extrinsic and intrinsic factors.

Task requirement is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 7 items, which yields a minimum score of 7 and a maximum score of 35 per case.

Work interaction is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 12 items, yielding a minimum score of 12 and a maximum score of 60 per case.

Autonomy is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 6 items, which yields a minimum score of 6 and a maximum score of 30 per case.

Decision-making is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 7 items, which yields a minimum score of 7 and a maximum score of 35 per case.

Professional development is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 6 items, which yields a minimum score of 6 and a maximum score of 30 per case.

Professional status is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 8 items, which yields a minimum score of 8 and a maximum score of 40 per case.

Supportive nursing management is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 8 items, which yields a minimum score of 7 and a maximum score of 35 per case.

Work condition is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 8 items, which yields a minimum score of 8 and a maximum score of 40 per case.

Salary is operationally defined as the sum of 5-point Likert scores ranging from 1 point ("Strongly Disagree") to 5 points ("Strongly Agree") for 6 items, which yields a minimum score of 6 and a maximum score of 30 per case.

1.7 Research Protocol

The research protocol in Figure 1.1 links together the different research components which were taken into consideration for the study. These include the problem statement, the research questions, the study design, data collection and analysis of both quantitative and qualitative part and discussion.

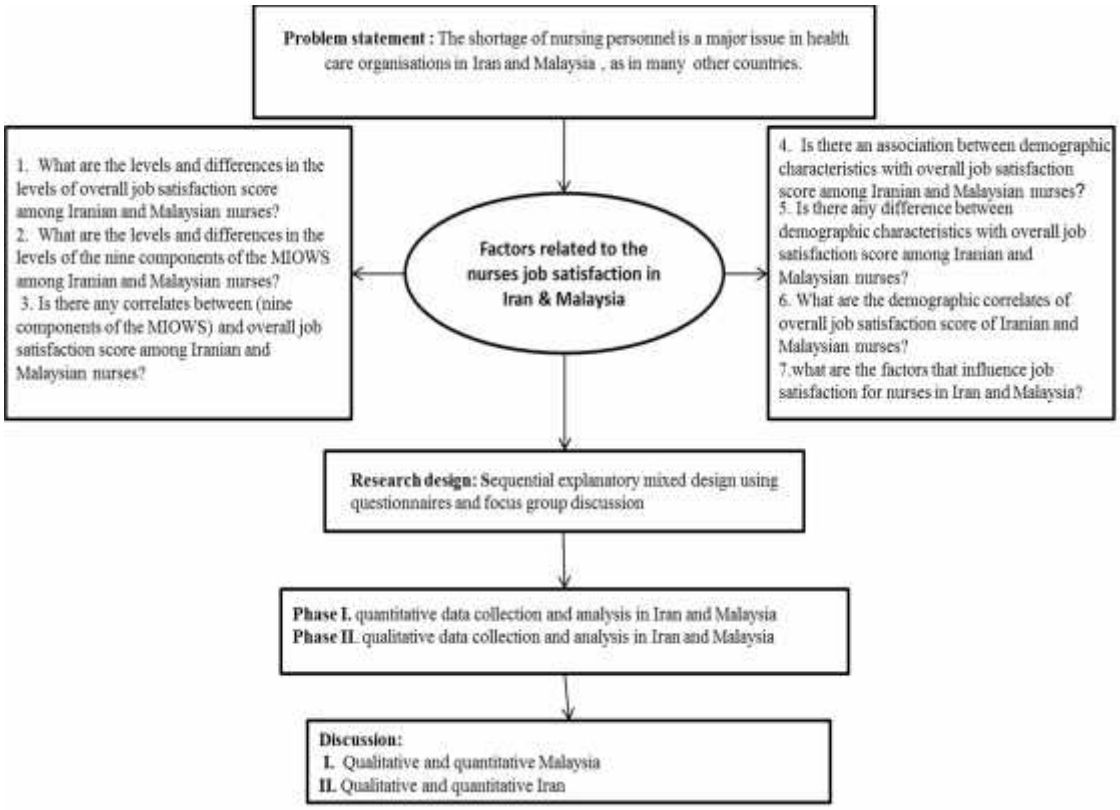

Figure 1.1: Research Protocol

1.8 The Focus and Organization of the Thesis

This thesis is structured into six chapters to facilitate clarity and understanding of the study.

In this present introduction chapter, the area the study belongs to is established. Previous research is outlined in order to provide further background to the study, to define the research problem and to indicate the gap in research for a study of the topic area. The research questions which guide the study and research objectives are made clear. Research context and the significance of the study are elaborated.

Chapter Two is a critical review of literature which includes previous studies carried out in the area of the research to identify a gap in the exciting literature, and to demonstrate

the need for a new study with enhanced study design. Consequently, it enables a more comprehensive analysis and discussion of the data in the later chapters.

Chapter Three presents the sequential explanatory mixed method which was used for the study. The pragmatic knowledge claims associated with the use of mixed method research are outlined. Procedure activities involved in the study, which include ethical considerations, outcome of pilot study, data collection and data management, are described. An outline of Braun and Clarks's six steps of data analysis (Braun & Clarks, 2006) which guided the qualitative data analysis is also included.

Chapter Four presents the findings from quantitative part of the study, which was to examine the factors related to nurse job satisfaction in Malaysia and Iran, followed by Chapter Five, where the results of the qualitative part from the analysis of the textual data are detailed.

In Chapter Six, discussions of findings are conducted in three sections.
The first section discusses the factors related to the job satisfaction of Iranian nurses as represented in the three themes and their subthemes. The second section discusses the factors related to job satisfaction among Malaysian nurses, as represented in the three themes and their subthemes. The third section discusses the differences in the level of nine components of the MIOWS among Iranian and Malaysian nurses. The last chapter draws conclusions from the study, considers the implications and makes various recommendations for further study.

1.9 Limitations of Study

There were few significant limitations in this study. The sample consisted of registered nurses from just one hospital in both Malaysia and Iran, thus the findings may not be representative of the views of nurses on job satisfaction in general. Caution must

therefore be exercised when drawing conclusions beyond the sample assessed in the present study. Secondly, the analysis and interpretation of the Phase II Qualitative Data was subjective and descriptive. Thirdly, the data collected was based on self-reporting methods, therefore may be subject to bias, which can be influenced by a number of uncontrollable factors in completing the questionnaires, so the generalisation of findings is limited by self-report bias. However, the sample was sampled proportionately to ensure representation of the nurses' views, and all relevant information about the nature of the study was given to those who consented to participate in the study to minimise bias. A detailed audit trail for both the quantitative and qualitative data is described in Chapter Three to ensure the quality of the data.

1.10 Summary

Nursing staff shortages are one of the key challenges that nursing as an industry has to face. It remains a major concern both in developed and in developing countries. Due to current nursing shortages, hospitals worldwide are facing serious challenges in their ability to provide high-quality care.

This chapter has identified relevant studies and information that justifies the need for this study. The aim and objectives of this study were included to guide the study. Conceptual and operational definitions and the study limitations concluded this chapter. The following chapter will discuss related studies and the theoretical framework that influences the study.

CHAPTER 2: LITERATIRE REVIEW

2.1 Introduction

In this chapter, reviews of previous studies were made. Several electronic and printed reference sources were selected in conducting research for the related literature. Relevant studies were retrieved based on a search strategy. Findings from the retrieved studies were compared and critiqued to help to identify the gap in the literature. The theoretical framework underpinning the study is also discussed.

2.2 Search Strategy

The literature review involved professional publications including books, internet sources, and peer-reviewed journal articles. The reviewed databases are as follows: CINAHL (online Cumulative Index of Nursing and Allied Literature), MEDLINE, Ovid, Full-Text Collection and Science Direct databases. Keywords used included "nurses", "job satisfaction", "retention"," attrition ", "nurses' turnover" and "nurses' turnover" to filter relevant databases in English and Persian.

The criteria for the studies included:

- Factors that influence job satisfaction and or nurse turnover and or nurse shortages.
- Nurses working in hospitals.
- The most recent and high-quality publications.

The studies included were mostly published between 2000 and 2013. Article selection focused on finding new original studies of high scientific quality describing factors with a positive influence on the job satisfaction of nurses working in hospitals.

2.2.1 Results

Relevant full text articles were reviewed and pertinent information extracted from the main articles, including the study aims, methodology and findings. Key studies using quantitative, qualitative and mixed method research approaches which were considered relevant to nurse job satisfaction were retrieved and critically reviewed. Critique and the findings related to nurses' job satisfaction which are identified from the previous studies and categorised into the nine components of the MIOWS questionnaire are presented in the next few sections.

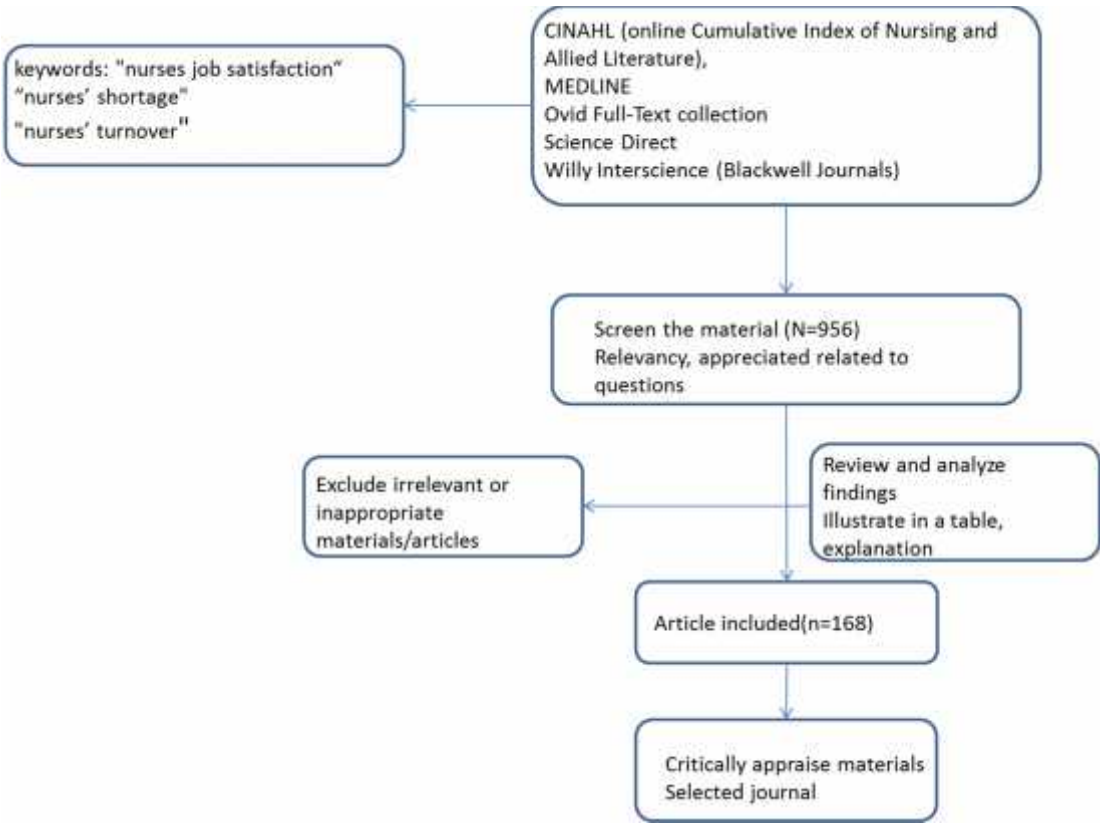

Figure 2.1: Search Outcomes and Databases and Keywords Used

2.3 Overview

2.3.1 Nursing Shortage

Nurses are an important part of today's healthcare system and constitute the majority of positions in any hospital. Nurses also play an influential role in the success and quality

of care given to a patient (Zarea et al., 2009). Numerous factors affect the shortage of nurses including recruitment, retention, turnover, retirement and an increasingly older generation of working nurses (Peterson, 2001).

Nursing shortages and turnovers can have an adverse effect on the health care system both in terms of organisation and the outcome of services provided by the institution. All these will result in poorer quality patient care (Aiken, Clarke , Sloane , Sochalsk, & Silber, 2002; Curtis, 2007). Job satisfaction has been reported as a strong element related to nurse turnover or intention to leave (El-Jardali et al., 2013; Lu, While, & Barriball, 2008).

The literature shows that nurse retention is directly related to job satisfaction. Dissatisfied nurses have a 65% lower probability of indicating intent to stay when surveyed compared to satisfied nurses (Adrian, Petridesa, Chris, Jackson, & Tim 2002; Ingersoll, Olsan, Drew-Cates, DeVinney, & Davies, 2002; Larrabee et al., 2003; Lu et al., 2005). Nurse dissatisfaction contributes to the nursing shortage and higher nurse-patient ratios, longer patient waiting lists and nursing staff burnout (Ma, Samuels, & Alexander, 2003).

Employees who were more satisfied with their job were happier and stayed in their organisations longer (Siew et al., 2011). Job satisfaction is a critical factor in health care settings. Health care industries have attempted to identify factors contributing to job satisfaction among nurses (Hart, 2005). Effort is on-going in using identified factors to implement effective strategies to promote nursing, improve job satisfaction and improve the quality of services (Archibald, 2006; Hirschfeld, 2009; Zarea et al., 2009).

Job satisfaction is an important research topic as most individuals spend a large portion of their lives at work. Understanding the elements that contribute to job satisfaction is important to increase organisational productivity (Greenberg & Abaron, 2003).

2.4 Definition of Job Satisfaction

Nurse job satisfaction is becoming an important concern for many health care providers and in nursing management. In order to understand the reason for this concern, one must first comprehend the meaning of job satisfaction. Job satisfaction has been defined in several different ways. Hoppock (1953) identified job satisfaction as a combination of psychological, physiological and environmental circumstances which lead the individual to express satisfaction with their job. Kuhlen (1963) defines it as the individual matching of personal needs to the perceived potential of the occupation for satisfying those needs. In addition, according to Herzberg (1974), job satisfaction is a function of satisfaction with various factors of the job. Locke (1976) believed that job satisfaction resulted from an employee's ability to have their needs met while not offending their values; however dissatisfaction would result from a violation of personal values, resulting in stress.

Hackman and Oldham (1980) presented a theory about job characteristics that positively correlated job satisfaction with the five cores attributes of variety, personal significance, responsibility, autonomy, and feedback. Vroom (1982) defined job satisfaction as a worker's affective orientation toward their current job roles. Similarly, Schultz (1982) described job satisfaction as the psychological disposition of individuals toward their work. Conrad and Parker (1985) defined job satisfaction as a match between what individuals perceive they need and the rewards received from their job.

Price (2002) explained job satisfaction as the affective orientation an employee has toward their work. Job satisfaction can also be considered a global effect of the job or a related constellation of attitudes about different parts or factors affecting the job (Lu et al., 2005).

Job satisfaction is the collection of feelings and beliefs that people have about their current job. People's levels of job satisfaction can range from extreme satisfaction to extreme dissatisfaction. In addition to having attitudes about their jobs as a whole, people can also have attitudes about various aspects of their jobs such as the kind of work they do, their co-workers, supervisors or subordinates and their pay (George & Jones, 2008). Job satisfaction is a multidimensional concept, which involves individual abilities, attitudes, beliefs and value systems (Ravari, Mirzaei, Kazemi, & Jamalizadeh, 2012).

2.5 Theories of Job Satisfaction

Different theories have been constructed to find ways to increase employee satisfaction with jobs and to learn what makes employees dissatisfied. Based on reviews of previous papers, the most important theories for understanding job satisfaction in nursing are Maslow's Hierarchy of Needs and Herzberg's Two-Factor Theory.

2.5.1 Maslow's Hierarchy of Needs

Abraham Maslow (1943) developed the Hierarchy of Needs model in the USA in the 1940-50s, as illustrated in Figure 2.1. The hierarchy of needs theory is valid and supports understanding of human motivation, management training, and personal development. Maslow's hierarchy of needs model delineates five orders of human needs including needs on a physiological level, the need for safety, the need for belongingness and love as well as self- esteem and actualisation.

Maslow explains needs as the core for satisfaction and motivation. The lowest order of need is the individual's basic physiological needs; once this need is satisfied, they move to the next order of needs. It is important to understand that different employees may be at a different levels of need at a different times (Maslow, 1943). Physiological needs in

this context constitute meal breaks, rest breaks, and wages that are sufficient to purchase the essentials of life. Safety needs comprise a safe working environment, retirement benefits and job security. Social needs may be fulfilled by a sense of community as a result of team-based projects and social events. Esteem needs may be fostered through the recognition of achievements to make employees feel appreciated and valued. In order to achieve self-actualisation, employees require adequate challenges and the opportunity to reach their full career potential (Maslow, 1943).

However, Maslow fails to provide clear-cut measures of his concepts, and his theory has not received much empirical support (John, Wagner, & John, 2005). It is of interest to us primarily because of its place in history as one of the earliest motivation models and as a precursor to more modern theories of motivation (John et al., 2005). To address the limitations attached to Maslow's Hierarchy of Need Theory, Alderfe (1969) proposed the ERG theory. Alderfe describes need as a hierarchy categorised into three levels of need: existence, relatedness and growth (Luthans, 2002).

Alderfer categorises lower order needs (physiological and safety needs) under an existential category (Luthans, 2002). He also fits Maslow's interpersonal love and esteem needs under a relatedness category while self-actualisation and self-esteem needs are categorised under the growth category. This theory reduces Maslow's original theory to just three categories (Luthans, 2002), and allows different levels of need to be pursued at the same time. In this theory, the order for levels of need varies according to individual. If the first level of need remains unfulfilled, the person may move to a lower level of need that is easier to satisfy (Luthans, 2002).

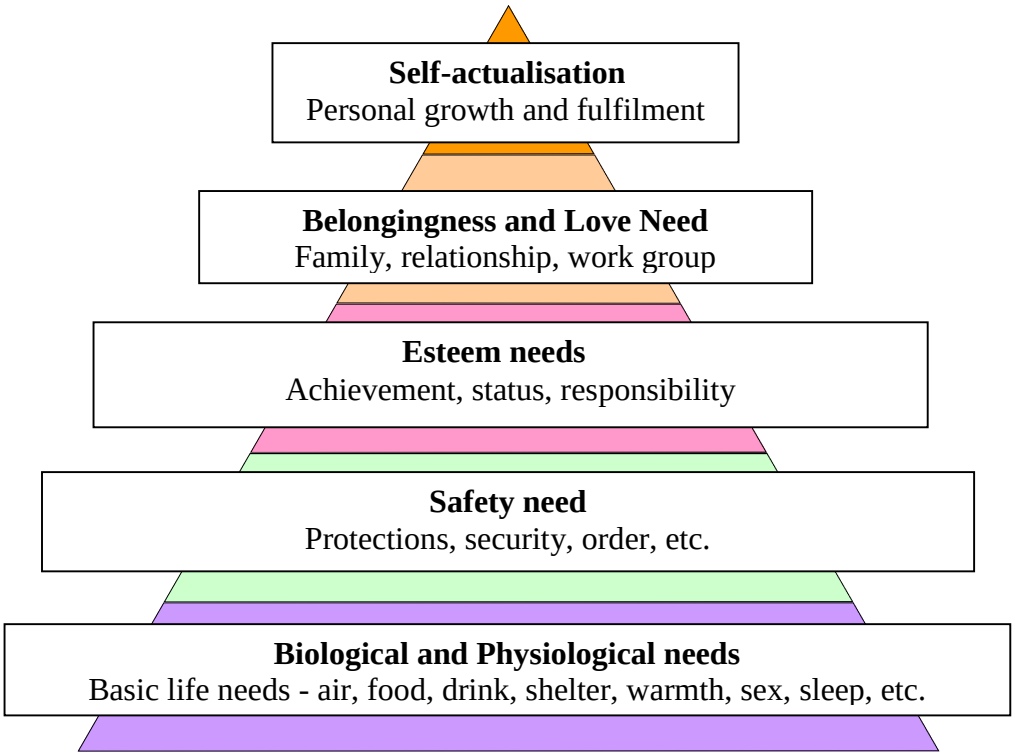

Figure 2.2: Model of Maslows Hierarchy of Needs (Adapted from Maslow (1954).

2.5.2 Herzberg Two-Factor Theory

The Two-Factor Theory was first proposed by psychologist Frederick Herzberg in 1959. Herzberg investigated the question of what people wanted from their jobs by asking people to describe in detail the situations in which they felt exceptionally good or bad about their jobs (Stephen, 2005). Herzberg (1959) hypothesised that employee job satisfaction or dissatisfaction can be determined by two sets of variables. The first set of factors is the motivation factors, which include tasks, autonomy, and professional development, as well as professional status in the job. He suggested that the opposite of satisfaction is not dissatisfaction as is traditionally believed (Herzberg, 1959). Removing the source of dissatisfaction from a job does not necessarily make the job satisfying. The second set of factors is hygiene factors, or work interaction, decision making, supportive nursing management, working conditions and salary.

None of these factors guarantee long term satisfaction, but may prevent dissatisfaction if addressed. If there are sufficient challenges and interests in the job, there will be satisfaction and the employee will work better, hence productivity will be increased in these organisations (Greenberg & Abaron, 2003). The Two-Factor theory is closely related to Maslow's Hierarchy of Needs Theory. The hygiene factors are preventive and environmental in nature, and similar to Maslow's lower-level needs (Stephen, 2005). The Two-Factor theory is however not without detractors.

Some of the criticisms of Herzberg's theory relate to its methodological limitations (Stephen, 2005). First of all, an overall measure of satisfaction was not used; a person may dislike part of their job, yet believe the job is acceptable. Although Herzberg discusses the relationship between job satisfaction and productivity, his research methodology focuses only on select aspects of satisfaction, with no attention to productivity and other job factors such as wages which could independently lead to both satisfaction and dissatisfaction (Stephen, 2005).

Despite these limitations, Herzberg's theory (1959) has been widely read and most managers are familiar with it (Luthans, 2002). Over the past 40 years or so, the most popular jobs are those which allow employees to be more responsible in planning and controlling, which is largely in line with Herzberg's theory (Stephan, 2002).

2.5.3 Rationale for the Use of Herzberg's Motivation-Hygiene Theory

This section will justify the reasons behind the selection of Herzberg's theory for this study. According to the literature, Equity theory, Maslow's need-hierarchy theory, and Herzberg's two-factor theory, all have substantial implications for understanding job satisfaction (Murrells et al., 2008). However, Herzberg's theory is especially important as it distinguished between general types of work motivations, namely, intrinsic motivators and extrinsic motivators. These two groups of motivators were associated

with job satisfaction and dissatisfaction, respectively. Moreover, unlike Herzberg Theory, Maslow Theory did not provide enough empirical evidence for this research questions. Recently, a number of studies in cross-cultural situations have used Herzberg Theory, such as a study on hospital nursing staff job satisfaction in Greece (Pietersen, 2005), a study done among nurses in Canada (kimberley et al., 2009), and a study on medical and surgical nurses job satisfaction in Cyprus (Lambrou et al., 2010).

In addition, Herzberg's Motivation-Hygiene theory relates work practice circumstances with job satisfaction and can be readily adapted to the nursing situation. It was thus chosen as the basis for the theoretical framework of this study. Herzberg's theory has contributed greatly to the understanding of the importance of manipulating the work environment to increase job satisfaction. The Two-Factor Theory has important implications for managing organisations. (Greenberg & Abaron, 2003).

2.6 Factors Affecting Nurse's Job Satisfaction

Job satisfaction is a multidimensional concept which is related to, and influenced by, many variables including both independent and dependent variables (Sengin, 2003). As an independent variable itself, job satisfaction is recognised as the cause of job turnover, absenteeism, retention and productivity. Job satisfaction is also considered a dependent variable because it depends on multiple independent factors such as employee salary, employee involvement and training (Arab, Pourreza, Akbari, & Ramesh, 2007).

One of the earliest research studies of job satisfaction was undertaken by Taylor (1911), who investigated job satisfaction among steel plant workers. He described how scientific methods applied to the management of workers can provide productivity. Taylor also delineated how managers could scientifically increase productivity by setting standards of production. Taylor's research and principles of scientific

management led to the industrial division of jobs, and piece-rate incentive plans with rigid rules which are still applied today (Taylor, 1911).

The earliest study on nurses' job satisfaction was conducted by Nahm (1940). Nahm carried out a survey of 275 private, institutional and public health nurses in Minnesota, which showed that 78% of nurses were satisfied. Nahm reported that work hours, attitudes at work, relationships with managers, income, and advancement opportunities had an impact on the level of job satisfaction among nurses.

Hackman and Oldahm (1980) proposed a job characteristic model which examined job factors that helped employees feel that their work was meaningful and valuable. The five critical dimensions identified as core job dimensions that needed to be fulfilled in order to satisfy and motivate employees were task identification, autonomy, task significance, skill variety and feedback.

In 1992, Cavanagh conducted a quantitative study among 221 female nurses working full-time in urban hospitals in the United States. The variables found to be positively associated with job satisfaction (in order of strengths) were benefits, autonomy, routine, communication, salary and promotion. Variables that emerged as negatively associated with job satisfaction (in order of strength) were educational status, opportunity, integration and justice. Consequently, higher levels of education were strongly related to overall job satisfaction. However, the generalizability of the study findings was limited by the use of convenience sampling; a different type of sampling would have strengthened further research in this area, as convenience sampling provides little opportunity for all members of the population to be included.

One study comparing job satisfaction among nurses in five countries (Aiken et al., 2001) found that job dissatisfaction among nurses was highest in the United States (41%) followed by Scotland (38%), England (36%), Canada (33%) and Germany

(17%). Recognition, salary and relationships with co-workers were major factors associated with job satisfaction for nurses (Aiken et al., 2001).

Price (2002) conducted a study among 141 nurses in England. It was found that most nurses believed in extrinsic rewards and good co-workers while the most dissatisfaction was related to professional opportunity, amount of control, and responsibility. Price (2002) found that 58% of the participants were generally satisfied with their job while 42% were not. The result demonstrated that the highest satisfaction was related to co-workers and extrinsic reward (mean=3.8 and 3.5, respectively). Nurses were dissatisfied with the amount of control and responsibility they had, as well as the lack of professional opportunities (mean=2.7 and 2.6, respectively). However, the findings of this particular study could not be generalised as the sample size was small and restricted only to E-grade (a particular salary grade) nurses in one particular hospital (Price, 2002). It is also possible that extraneous variables, such as individual characteristics, influenced the results of the study.

Wilson's (2006) qualitative study examined a sample of ten registered nurses from three different medical wards in England. The main objective of this qualitative research study was to identify the reasons nurses stayed on in the nursing profession. Semi-structured interviews were undertaken to permit subjects to describe in their own words their motives for staying. The factors recognised in the study included the variety of daily work, the opportunity for promotion and educational advancement, as well as the support of and relationships with, colleagues (Wilson, 2006). This study had some limitations and one of which was that the data collection was done by qualitative means only. A combination of quantitative and qualitative research would have been a better option to address the limitations found in qualitative approaches.

Kovner et al., (2006) used a cross sectional survey to examine the level of job satisfaction among 1,538 (48%) registered nurses in the United States. The results of this study showed that autonomy (4.09±0.73), supervisor support (3.59±1.03), outside job opportunities (3.09±1.15) and work-group cohesion (3.81±0.83) were factors related to nurses' job satisfaction. The advantage of the present study is its large sample size. On the other hand, the disadvantage of the cross sectional design meant that a causal relationship could not be established, and only a snapshot of registered nurses' job satisfaction was examined without taking into account how it would evolve over time.

A qualitative study performed by Archibald (2006) examined eight neonatal intensive care nurses with an average of 11 working years, to access the impact of job satisfaction in the United States. Patient outcomes, monetary compensation, team spirit, advocacy and physician support were found to be the most influential factors of job satisfaction. The limitations of this study mostly evolve around the sample. All nurses sampled worked night shifts with no other nursing shift duties. Day shift workloads may differ to those of night shifts and thus findings apply to nurses working night shifts only. The findings provided additional information about neonatal nurses' job satisfaction and the large amount of experience they had in nursing; however this cannot be generalised to other specialities with different work and patient characteristics.

In a study conducted by Cynthia and Frank (2008), it was reported that among 331 transplant nurses, around 47% were satisfied with their pay, and 62% with fringe benefits and supervision. Transplant staff nurses were more satisfied than transplant coordinators with general feedback from their supervisor/co-workers ($P= 0.02$), support and guidance ($P = 0.05$), promotion opportunities ($P <0.001$), continuing educational support ($P = 0.02$), attention paid to career development ($P=0.01$), and mentoring ($P<0.001$). However, this study has several significant limitations. Results are not easily generalisable due to the low response rate (26%). Response bias is also a potential

limitation. Employees may fear retaliation from hospital administration for low levels of satisfaction. The main instrument used received only local validation. Nurses from other countries may have had other job satisfaction issues not addressed by the measurement tool used.

Gradulf et al. (2008) conducted a quantitative study among 833 nurses to identify factors important to work satisfaction at a university hospital in Sweden. The Quality Work Competence questionnaire was mailed to the home addresses of 1633 nurses. A total of 833 of nurses (50% response rate) answered the mailed questionnaires. Multiple linear regression analysis was used to identify factors of importance for nurse work satisfaction. The results showed that 85% of nurses were satisfied with the communication and in discussion with their supervisor. In addition, it was found that many nurses were dissatisfied with their work situation and the lack of support given towards their professional development. There were few significant limitations of this study. Findings, which were based on the investigation of only one university hospital, may be of limited value if generalised to other hospitals which may have different work environments. Response bias is also a potential limitation. Employees may fear retaliation from hospital administration for low levels of satisfaction.

In a study conducted by Kimberley et al. (2009) in Canada, nurses were found to be highly satisfied (74.9±22.5) with their job. Nurses were mostly satisfied with autonomy (4.5±0.09), professional growth (3.8±1.1), professional social interaction (4.2±0.09) and work benefits (4.1±1.2). However, as the author noted, the findings of this study had poor generalisability, as 95% of the participants were female. Secondly, since this survey was carried out online, the number of nurses who may have chosen not to complete the online survey could not be determined.

Lu et al. (2008) examined the level of job satisfaction in a cross sectional survey of 632 staff nurses working in the medical and surgical departments in two teaching hospitals in Beijing. The nurses were found to be dissatisfied with their salary ($p > 0.05$). Moreover, nurses with bachelor degrees reported lower levels of satisfaction compared to those with an associate degree or diploma (Lu et al., 2008). However, findings of this local questionnaire survey are limited to nurses from the two teaching hospitals in Beijing and cannot be generalised to all hospitals in China.

A number of studies have found that collaborative relationships between nurses and co-workers/ supervisors, collaboration with physicians in decision-making for patient care, and teamwork are important correlates of nurses' job satisfaction (Gardulf et al., 2008; Wyatt & Harrison, 2010). Cortese et al. (2010) highlight a close relationship between job satisfaction and work performance, patient satisfaction, and service quality. Nurses' job satisfaction can change and evolve throughout their career depending on the different circumstances, departments, relationships between nurses and co-workers/ supervisors, supportive management, and duties, etc. that they progressively encounter.

Chang et al. (2009) and Kalisch et al. (2010) reported that collaborative interdisciplinary relationships and team work were the most important predictors of job satisfaction for all healthcare providers. In addition, a focus group methodology was used by Tourangeau et al. (2010) to identify nurse reported determinants of intention to remain employed. Nurse assessments of satisfaction within eight thematic categories were found to influence intentions to remain employed: relationships with co-workers, conditions of the work environment, relationship with and support from one's manager, work rewards, organisational support and practices, physical and psychological responses to work, patient relationships and other job content, and external factors.

In a separate study by Liu et al. in 2011, a cross sectional survey was conducted to examine the level of job satisfaction among 2850 staff nurses working in 19 large hospitals in Shanghai. Nurse characteristics were found to impact job satisfaction. Results additionally showed that age, marital status and work experience were related to a nurse's overall job satisfaction. The hospital nurses sampled were satisfied with their co-workers, interaction, recognition and responsibility. The nurses were, however, found to be dissatisfied with their extrinsic rewards and scheduling. The most important limitation was related to the study sample. Generalisation of finding is limited due to the non-randomised convenience sample of practitioners, who was already self-selected.

McGlynn et al. (2012) conducted a quantitative study among 182 nurses for the initial assessment of job satisfaction and satisfaction with the professional practice environment of registered nurses working on units where a professional practice model, Collaborative Care Model (CCM) was implemented. In this CCM all nursing staff members are encouraged to participate in unit governance, share best practices, foster autonomy and advocate for the patients, their co-workers and themselves. In this study nurse were moderately satisfied with the professional practice environment but had overall low job satisfaction. However, the generalisation of these study findings is limited due to small sample size.

Lack of educational opportunities and opportunities for advancement, salary and heavy workload were reported as major factors associated with job dissatisfaction for nurses in a study comparing job satisfaction among nurses in Belgium, England, Finland, Germany, Greece, Ireland, the Netherlands, Norway, Poland, Spain, Sweden, and Switzerland (Aiken et al., 2012).

Tao et al. (2012) conducted a comparative study among 1420 registered nurses at 12 hospitals in southern and northern China. The result of this descriptive study showed

that the nurses in northern hospitals were more satisfied than nurses in southern hospitals with respect to administration ($p < 0.001$), workloads ($p < 0.001$), co-workers ($p < 0.001$), the work itself ($p < 0.001$), pay ($p < 0.003$) praise/recognition ($p < 0.001$), and family/work balance ($p < 0.001$). Nurses in southern hospitals were more satisfied with professional opportunities than nurses in northern hospitals ($p< 0.003$).There are several limitations to this study. First, this study used convenience sampling, which limited the generalisation of the results. The study was conducted only in two hospitals; a larger sample from a broader scope of hospitals should be included in further research using a randomised sampling technique.

Al-Dossary et al. (2012) used a cross sectional survey to examine the level of job satisfaction among 189 registered nurses in Saudi Arabia. The results of this descriptive study showed that nurses were neither satisfied nor dissatisfied with their jobs. Nurses indicated satisfaction with supervision, co-workers and the nature of their work. Sources of dissatisfaction involved components such as salary, fringe benefits, contingent rewards and operating conditions. The findings of this study indicate that there is a need to increase nursing salaries and bonuses for extra duties. However, the generalisation of these study findings is limited due to sample size.

In Iran, Khani and Jaafarpour (2008) conducted a quantitative study among 120 nurses to identify factors important to work satisfaction at a university hospital in Iran. The result of this study indicated that many of the nurses were dissatisfied with the heavy workload, inadequate salary, lack of clinical autonomy, lack of managerial support and low level of participation in decision making. However, the generalisation of these study findings is again limited due to sample size. The study was conducted in only one hospital. A larger sample from a broader scope of hospitals should be included in further research.

Mirzabeigi et al. (2009) used a cross sectional survey to examine the level of job satisfaction among 1058 registered nurses in Iran. The results of this study showed that only about one third of Iranian nurses were satisfied with their jobs (34.30%). The main factors in job satisfaction were job safety (44.5%), working environment and facilities (44.26%). Nurses were dissatisfied with their job because of the described job duties (74.75%), manager communication (70%), and their social position (70.3%). However, the generalisation of these study findings is again limited by self-report bias. Secondly, this study used a cross sectional research design that provides only a snapshot of nurse satisfaction.

In Malaysia, Ahmad and Oranye (2009) conducted a comparative study among 556 registered nurses at two teaching hospitals in Malaysia and England. The result of this descriptive study showed that the Malaysian nurses felt more empowered and committed to their organisation, while the English nurses were more satisfied with their job.

A quantitative study with 153 samples in a public hospital in Malaysia found that nurses were satisfied with the support given by their supervisors, job variety, relationships with co-workers, closure, nursing management policies and compensation (Mohammad & Fakir, 2010). The small sample size of this study significantly limited its ability to obtain significant findings that could be generalised to the entire target population. The results of the study are also difficult to generalise because the sample is limited to nurses from only one hospital.

Ramoo et al. (2013) used a cross sectional survey to examine the level of job satisfaction among 114 nurses in a teaching hospital in Malaysia. This study found that nurses had a moderate level of job satisfaction. Nurses were more satisfied with professional development, task requirements, autonomy and professional status

subscales and were dissatisfied with their salaries. About 40% of the nurses indicated that they intended to leave their current employment. However, the results of this study had a few limitations. First, the results were from a single institution and the sample size was small. This study had a possible response bias, as the questionnaires were distributed and collected by the nurse managers of the various wards and units from which the participants were selected.

A total of nine attributes that were found to influence the job satisfaction of registered nurses were identified based on their frequency and consistent appearance in the literature. These attributes include task requirements, work interaction, autonomy, decision making, professional development, professional status, nursing management/administration practices, work conditions and salary. Table 2.1 illustrates summarises some studies on source of nurse job satisfaction.

Table 2.1: Summary of Studies on Source of Nurses' Job Satisfaction

Code study	Location	Samples and responder rate	Instruments	Key findings	Limitations
Adams and Bond (2000)	England	Sample of 843 nurses in England, response rate of 57%	Adams et al's (1995) ward organizational scales	A weak association was found between grade and job satisfaction. Individual nurses characteristic were not found associated with job satisfaction.	Generalisability of study finding limited due to study design (cross sectional).
Kudo et al., (2006)	Japan	168 registered nurse, response rate (57.3%)	Self- Administered Questionnaire	Result of this study showed that turnover was significantly higher for those with low satisfaction with salary, welfare, and poor cooperation among nurses.	Study findings may have some limitations in generalizing to other hospitals due to small sample size.
Curtis, (2007)	Ireland	610 registered nurses, response rate 30.5%	Index of work satisfaction (IWS) questionnaire Stamps (1997)	The finding of this study showed that autonomy, pay, interaction were the most important factors related to nursing job satisfaction.	The study finding is limited due to non-respond bias.
Mrayyan, (2007)	Jordan	433 nurses participated in the study, response rate 71%, 336(78%) nurses were recruited from teaching hospitals and 97(22%) were recruited from non-teaching hospitals	McGloskey / Mueller Satisfaction Scale (1990) McCloskey and McCain (1987)	Nurses who were working in non-teaching hospitals reported higher satisfaction and intent to stay compare to those working in non-teaching hospitals.	The study findings are limited by the use of convenience sampling and data collection only from three states, A different type of sampling would strengthen further research in this area, because convenience sampling provides little opportunity for all members of the population to be included. To use recently develop instrument may be useful.

Saifuddin (2008)	Indonesia	215 registered nurses, response rate 68.37%	A self-administered questionnaires	There was a significant association between recognition, salary and benefit and nurses job satisfaction ($p<0.005$)	Questionnaires used not well explained. Small sample size
Abushaikha , (2009)	Palestinian	152 nurses, a response rate of 59.6%	Maslach burnout inventoryand Minnesota satisfaction questionnaire	Nurses reported moderate level of job satisfaction and burnout.	Small sample size.
El-Jardali (2009)	Lebanon	1,793 nurses employed in 69 hospitals were surveyed	McCloskey Mueller Satisfaction Scale (1990)	Nurses were least satisfied with extrinsic rewards (2.29±0.61) but most satisfied with co-workers (3.17±0.53).	Convenience sampling provides little opportunity for all members of the population to be included.
Hwang et al.(2009)	China, Korea	The participants comprised of 693 nurses at three general hospitals in Republic of China and 593 nurses at two general hospitals in Seoul, Korea	Self- Administered Questionnaire	Professionalism was positively related to job satisfaction in both groups.	This study used a cross sectional research design that might provide only a snapshot of nurses' satisfaction.
Pillay (2009)	South Africa	569 registered nurses, response rate 62.7%	A self -administered questionnaire	Private-sector nurses were generally satisfied, while public-sector nurses were generally dissatisfied. Public-sector nurses were satisfied only with the social context of the work. Nurses in public and private sector were dissatisfied with pay.	
Al-Enzi et al. (2009)	Kuwait	500 staff nurses, response rate (87.2%)	McCloskey–Mueller Satisfaction Scale	The result of this study showed that nurses were satisfied with professional opportunities, praise and recognition, scheduling of duty control and responsibility. Nurses were found to be dissatisfied with professional opportunities and extrinsic rewards.	This study used a cross sectional research design that might provide only a snapshot of nurses satisfaction

Gurkova et al., (2012)	Slovak and Czech	1200 nurses from 12 hospitals in Slovak and Czech, response rate 81.5%	McCloskey–Mueller Satisfaction Scale	Slovak and Czech nurses were similarly most satisfied with their relationship with co-workers, autonomy, recognition and dissatisfied with benefit and rewards	This study used a cross sectional research design that might provide only a snapshot of nurses satisfaction
Moneke and Umeh (2013)	USA	137(67.15%) critical care nurses responded	Leadership Practices Inventory instrument	The results of this study showed that there were statistically significant association between leadership and job satisfaction; organizational commitment and job satisfaction. There were no significant relationships were found among critical care nurses' demographic variables and job satisfaction. Organizational commitment was the strongest predictor of job satisfaction. Encourage the heart (B = 0.116, P = 0.035) and organizational commitment (B = 0.353, P = .000) were found to be significantly associated with job satisfaction.	Since findings of this study are based on the investigation of only one hospital and due to small sample size it may have some limitations in generalizing to other hospitals. A different type of sampling would strengthen further research in this area, because convenience sampling provides little opportunity for all members of the population to be included.

2.6.1 Demographic Characteristics and Job Satisfaction

Demographic characteristics found to frequently impact job satisfaction were the level of education, length of work experience, age, gender and marital status. It is quite possible that some of these personal characteristics predispose some individuals to be satisfied or dissatisfied with their jobs irrespective of the actual work environment.

Greenberg (2003) believed that older people tend to be generally more satisfied with their jobs than younger people. According to Stephen (2005), satisfaction tends to increase continually among professionals as they age, although it falls among non-professionals during middle age, rising again in the later years. Moreover, as workers become older, they are less likely to resign their jobs, as they have fewer alternative job opportunities. In addition, compared to younger employees, older workers are less likely to resign because long tenure tends to provide them with higher wage rates, longer paid vacations and benefits (Stephen, 2005).

In relation to age, a number of studies have found age to be positively related to nurses' job satisfaction (Berg, Rodriguez, Kading, & De Guzman, 2004; Shah, Al-Enezi, Chowdhury, & Al Otabi, 2004; Yamashita, 1995). Wilson et al., (2008) reported that baby boomers (nurses born between 1946 and 1964) were generally more satisfied with their pay and flexible scheduling than both generation X (born between 1965 and 1979) and Y (born 1980 onwards). This view is supported by Curtis (2007) who reported that total job satisfaction in Ireland was lowest among nurses in the 18-25 and 26-35 age groups, and highest among nurses in the 36-45 and 46-55 age range. According to Robinson et al., (2006) and El-Jardai (2009) job dissatisfaction is often higher among younger generation nurses, and nurses who intended to leave were more likely to be younger than 30 years of age (60.9% vs. 55.5%, p-value < 0.001).

Wieck et al. (2010) reported that in the United States younger nurses were less satisfied than those over the age of 40. One third of the nurses who participated in the study planned to leave their job within two years of the survey date; over two thirds expected to leave within five years. Sixty one per cent of this group stated that they planned to leave their current jobs within ten years. Similarly, Toa et al. (2012) indicated that in China older nurses were more satisfied with their jobs, and with each additional year of age, a nurse's job satisfaction improved about 0.06. Higher levels of satisfaction have also been linked to working longer in a specific unit or hospital (Bjørk, Samdal, Hansen, Tørstad, & GA., 2007) which may also be related to the age of the nurse and years of experience of nursing. Significantly, Moneke and Umeh (2013) and Penz et al. (2008) concluded that age did not predict job satisfaction.

Gender also received a great deal of attention in job satisfaction. Several studies have reported no significant difference between gender and job satisfaction (Kinanee, 2009; Meade, Brown, & Trevan-Hawke, 2005). Other studies have found that gender affects job satisfaction with the data indicating either males or females to be generally more satisfied with their job (Clark, 1997). Hsiu-Yueh et al. (2010) used a cross sectional survey to examine predictors of occupational burnout among registered nurses in Taiwan. Hsiu-Yueh et al. (2010) found that the turnover rate for male nurses in Taiwan was twice that of female nurses. The nursing profession has long been recognised as a female profession.

Nursing education is one of the most frequently examined biographical variables in studies investigating job satisfaction. Numerous studies have found that there was no statistically significant difference between nurses with diplomas and those with Bachelor's degrees in Overall job satisfaction score (AL-Dossary, Vail, & Macfarlane, 2012; Dunn et al., 2005; Tao, Zhang, Hu, & Zhang, 2012; Wang, Tao, Ellenbecker, &

Liu, 2012). In contrast, some studies have found a positive association between nurses' educational levels and job satisfaction (Al-Hussami, 2008; Mogharab et al., 2006; Monjamed et al., 2004; Rambur et al., 2005), while others have reported a negative association (Blegen, 1993; Robinson, Murrells, & Clinton, 2006).

A study by Liu et al. (2011) examined how job satisfaction levels impacted nurses' intention to leave their current job. The results indicate that level of education (bachelors versus master's degrees) influences the likelihood that a nurse will experience levels of dissatisfaction. The researchers observed a negative correlation between level of education and presence of dissatisfaction. Among nurses who had a low level of job satisfaction, 68% had intentions to leave the organisation. The researchers make a strong argument that there is currently a nursing shortage and hospitals and medical offices cannot afford to have such high turnover rates. Tourangeau and Cranley (2006) also reported that intent to stay was greater for nurses holding a diploma degree than for those with a baccalaureate degree.

Findings on marital status and job satisfaction are mixed. Berg et al. (2004), Toa et al. (2012) and Wang et al. (2012) reported no association between marital status and job satisfaction among nurses. In contrast, Al-Enezi et al. (2009), Monjamed et al. (2004) and Yaktin (2003), and found that married nurses reported higher Overall job satisfaction scores as well as most satisfaction components, except for professional status, compared to unmarried nurses.

Another variable often included in job satisfaction studies relates to the length of working experience. Ma et al. (2003) studied factors influencing nurse job satisfaction in South Carolina hospitals. The results of the cross-sectional study showed that experienced nurses with more than two years of experience had lower levels of job satisfaction than new graduates with less than two years of experience.

Hu and Liu (2004) conducted a study among 403 nurses employed at hospitals in 16 provinces in China. The findings indicated that nurses with more years of experience, higher professional titles, and more opportunities to attend further education programmes were more likely to have a higher level of job satisfaction than others. In contrast, Wang et al. (2012) reported that in a study among 560 nurses working in four hospitals in China, there was no statistically significant association between employment years of working experience with total job satisfaction.

Curtis (2007) conducted a mixed method study to determine the effect of biographical variables on job satisfaction among nurses in Italy. The findings of this study demonstrated no significant differences in job satisfaction for female and male nurses. Nurses below 35 years of age were less satisfied than those over the age of 36 years. Nurses with degrees were less satisfied than those without, while nurses in senior positions were found to be more satisfied than their junior counterparts. However, the findings of this study are not easily generalised to other hospitals due to low response rates (31%).

Lorber and Skela (2012) indicated that job satisfaction for nurses in Slovenian hospitals was related to the number of years nurses had worked at the current hospital (β = 0.193; P = 0.033). Similarly, Al-Dossary et al. (2012) reported that there was a statistically significant correlation (r=0. 137, p=0. 006) between the number of years of nursing experience and total job satisfaction.

2.6.2 Task Requirement

Task requirement refers to job content or type of work. This includes the number and type of hours required as well as the type of tasks. Stamps et al. (1978) suggests that low levels of satisfaction are significantly related to jobs with repetitive forms of tasks or in which an employee has little choice.

Herzberg (1974) reports task requirements as related to job satisfaction but with little influence on dissatisfaction. Lee (1998) indicated work requirements, especially work overload, as one of the significant sources of job dissatisfaction. Mills and Blaesing (2000) found that the higher the percentage of time a nurse worked on shifts, the less likely they would remain in nursing. Nurse job satisfaction was also influenced by the extent of repetitiveness of a task. The reutilisation of health care was a negative factor (Zangaro & Johantgen, 2009) and a variety of employment opportunities and more challenges were highlighted as being positive factors contributing to nurse satisfaction (Kovner, Brewer, Wu, Cheng, & Suzuki, 2006). Wang et al. (2012) conducted a cross sectional method study to identify the level of nurses' job satisfaction and examined correlations between demographic variables and nurse job satisfaction. The results of this study found that nurses scored lower on task requirement compare to relationships with co-workers, recognition and professional opportunities.

2.6.3 Work Interaction

Work interaction includes relationships between nurses and supervisors, physicians, managers and co-workers. Effective communication among caregivers is noted throughout the literature as a variable of importance in relation to nursing job satisfaction: as suggested by Lee et al. (2003) the most important reason that Korean nurses intended to leave their job was conflict in interpersonal relationship. Following this line of support for collegial relationships, Maonnojlovic (2005) studied the relationships of nurse-physician communication and its effect on job satisfaction. The survey was completed through a random sampling of acute care nurses from hospitals throughout Michigan which represented a homogenous sampling of nurses from a variety of institutions. The results showed that communication between registered nurses and physicians was a meaningful indicator of nurse job satisfaction.

A number of studies have found that collaborative relationships between nurses, co-workers and supervisors, as well as collaboration with physicians in decision-making about patient care and teamwork, were important as they correlate with nurse job satisfaction (Foley, Kee, Minick, Harvey, & Jennings, 2002; Gardulf, Unden, & Arntez, 2008; Makinen, Kivimaki, Elovainio, Virtanen, & Bond, 2003; Parsons, Simmons, Penn, & Furlough, 2003; Schmalenberg & Kramer, 2009; Zangaro & Soeken, 2007; Wyatt & Harrison, 2010). Interpersonal factors such as employee interaction have been found to be the most significant element related to job satisfaction satisfaction (Wilson et al., 2008; Worrell, Skaggs, & Brown, 2006). According to Best and Thurston (2006), nurses' job satisfaction was related to relationships with patients and their families, coordinators, with other professionals such as medical doctors, and role management style.

Bjoke et al. (2007) reported that professional relationships were the most important factors affecting Norwegian nurses' job satisfaction. Pillay (2009) conducted a cross sectional study among 569 professional nurses in South Africa to determine the extent of work satisfaction among nurses and to examine variables influencing 13 aspects of job satisfaction. The results of this study found that African nurses expressed greatest satisfaction over their relationship with patients, the gratification they obtained from patient care, and the relationship with their nursing colleagues and physicians.

In addition, a nursing practice environment that provides good support at the front line, from both peers and supervisors, has repeatedly been shown to positively affect nurse job satisfaction and nurse job retention (Choi et al., 2011; Cortese et al., 2010; Tyler et al., 2012).

Moneke and Umeh (2013) indicated that positive work interaction and support from nurse managers and positive interpersonal relationships among nurses increased overall job satisfaction.

2.6.4 Autonomy and Decision Making

There is a large volume of published studies describing the role of autonomy in job satisfaction (Best & Thurston 2006; Cortese et al., 2007; Dunn et al., 2005; Kovner et al., 2006; Zangaro & Johantgen, 2009; Zurmehly, 2008). Nurses who are allowed to practice autonomously, using independent judgment and critical thinking skills, have a greater sense of job satisfaction.

Finn (2001) conducted a quantitative pilot study with 178 samples in a large teaching hospital in Australia. It was concluded that autonomy is the most important part of a job in the satisfaction of registered nurses. The other dimension is participation in decision making, as illustrated by managers who allow their employees to participate in decisions that affect their own jobs. This approach was found to be related to higher satisfaction in most cases (Luthans, 2002), however the small sample size and the use of only one hospital limited generalisation of the findings.

The findings of Laschinger et al. (2001), based on the Nursing Work Index, suggested that high levels of autonomy, control, and collaboration were associated with high levels of trust in management (r = 0.56), which in turn was associated with higher job satisfaction (r = 0.17). At the same time, in a large study of 10,022 staff nurses from 32 hospitals, Rafferty et al. (2001) found that nurses' clinical autonomy, control over resources, and decision-making were correlated with nurse satisfaction. This study, in comparison with several previous studies in this field, had a large sample size.

Ma et al. (2003) compared the job satisfaction of nurses from different hospital and non-hospital settings and found that autonomy was the second most significant predictor of job satisfaction for hospital nurses. Similarly, Larrabee et al. (2003) and Kacel et al. (2005) reported that nurses were most satisfied with the following: a sense of accomplishment, work challenge, a level of autonomy, patient mix, and ability to deliver quality care.

According to Smith et al. (2005), Magnet Hospitals in the United States of America (USA) have a reputation for successfully retaining nursing staff through enhanced autonomy, professional levels of responsibility, supportive management and investment in education. Curtis (2007) indicated that nurses in Ireland ranked autonomy as the main contributor to satisfaction, while autonomy was ranked third by Norwegian nurses (Bjørk, Samdal, Hansen, Tørstad, & Hamilton, 2007).

Cynthia and Frank (2008) indicated that autonomy had a moderately positive correlation with job satisfaction. Zurmehly (2008) conducted a descriptive correlational study with a convenience sample of 140 registered nurses to explore factors influencing job satisfaction in nurses in the US. Results indicated that the chance to work alone on the job was ranked first by medical–surgical nurses as the main factors related to their job satisfaction followed by freedom to use their own judgement in decision making. Li and Lambert (2008) noted that nurses in China do not exercise autonomous practice and expect all direction for patient care to be provided by medical staff. A recent study conducted by Iliopoulou and While (2010), however, has reported a moderately positive association between autonomy and nurse job satisfaction.

2.6.5 Professional Development

Previous studies have reported that responsibility and professional opportunity impacts nurse job satisfaction and retention (Adams & Bond, 2000; Tourangeau & Cranley, 2006). Seo et al. (2004) reported that the effect of job opportunity on nursing job satisfaction is based on the assumption that an employee is free to look for employment elsewhere. He also believed that employees will become dissatisfied if they realise that other co-workers are getting more opportunities and rewards. In his study, three reasons for future study to be conducted were identified. Findings were however based on the investigation of only two hospitals; which may have limited value in generalising to other hospitals in Korea. Secondly, nearly all studies of job satisfaction are subject to the criticism of common-method variance. Other study methods, such as mixed method studies, are needed to obtain richer data. Thirdly, a longitudinal design is required to establish causal order among the variables.

Khowaja et al. (2005) conducted descriptive qualitative research on nurses' perception of job satisfaction in Pakistan. In this study, a lack of respect and clinical autonomy was highlighted by nurses as contributing to job dissatisfaction and turnover. Ward and Cowman (2007) conducted a mixed method study among psychiatric nurses working in Ireland. The main aim of this study was to describe the importance of work location on levels of nursing job satisfaction. Methodological triangulation was used in the study. A total of 800 questionnaires were distributed to the population of psychiatric nurses and 346 (43%) nurses respondent to this study. In the qualitative phase of the study, a focus group discussion was conducted. Data was analysed using SPSS (version 11). This study indicated that nurses were most satisfied with achievement, professional development, growth ($t=5.37$, $p=0.001$) and work itself ($t=4.88$, $p=0.001$). However, one of the limitations of this study was a low response rate.

Focus group discussions concentrating on the greatest area of dissatisfaction could have provided greater insights into satisfaction. According to Cortese (2007), Italian nurses reported that educational opportunities, professional growth, opportunities to seek advancement, participate in research, take on higher or increasing responsibilities and being able to contribute to decision making at the ward level all contributed to increasing nurse job satisfaction.

A recent study by Kwak et al. (2010) established a multiple model to identify predictors of job satisfaction among South Korean nurses. This model explained 43% of variance in nurses' job satisfaction. Specifically, satisfaction with profession (OR = 11.93, $p < 0.001$), opportunity for promotion (OR = 2.27, $p < 0.05$) and organisational support (OR = 1.04, $p < 0.05$) had positive effects on job satisfaction, while negative effects were associated with burnout (OR = 0.92, $p < 0.05$).

Zhang et al. (2012) conducted a cross-sectional study of critical care nurses (n = 446) and general ward nurses (n = 1118) in nine general hospitals to explore the level of nurse job satisfaction and compare the differences between critical care nurses and general ward nurses in mainland China. The result of this study showed that Chinese nurses were satisfied with co-workers and family/work balance; and dissatisfied with pay and professional promotion.

2.6.6 Professional Status

Professional status refers to the overall importance or perceived significance of a job, both from the individual's viewpoint and the viewpoint of others (Stamp, 1997). Curtise et al. (2007) conducted a study to determine the level of job satisfaction among nurses in the Ireland. The result of this study showed that professional status, interaction and autonomy made the greatest contribution to nurse job satisfaction.

These findings are similar to those reported in the literature (Cowin, 2002; Stamps, 1997).

Similarly, professional status or the overall importance or significance felt about a job from the viewpoint of others consistently ranked in the top three factors contributing to nurse job satisfaction using the IWS (Best & Thurston 2006). Bjork et al. (2007), who conducted a quantitative study among hospital nurses in Norway, found that nurses were most satisfied with professional status (M = 5.50), interaction (M = 5.48) and autonomy (M = 5.05), and most dissatisfied with their pay (M = 2.62).

2.6.7 Nursing Management / Administration Practices

Nursing management refers to organisational and management practice related to leadership style, supervision and the staff support systems. Previous research findings show a positive relationship between job security, leadership styles and organisational policy with nurses' job satisfaction (Lee, 1998; Price, 2002). It is important to be aware of the strong relationship between leadership behaviour and work climate, because of the strong correlation between work climate and job satisfaction. This means that the manager, in their leadership role, is key to nurse retention (McNeese-Smith,1996; Taunton, Boyle, Woods, Hansen, & Bott, 1997)

Managers who use leadership behaviours in guiding their hospital departments or organisations have employees with significantly higher levels of job satisfaction and productivity (Bratt, Broome, Kelber, & Lostocco, 2000; Loke, 2001; McNeese-Smith, 1996). A number of studies have found nurse managers contribute to job satisfaction through flexible scheduling, rostering and ensuring that there are adequate human and other resources. Generally nurses wanted respect from administrators (Dunn, et al., 2005; Penz, et al., 2008; Wilson, et al., 2008) and good social support from their supervisors (Bartram , Joiner, & Stanton, 2004; Zangaro & Johantgen, 2009).

Cortese (2007) identified a number of areas where nurses believed that supervisors contributed to job dissatisfaction, including failing to recognise work accomplishments, providing insufficient communication, being absent when difficult clinical events arose and being indifferent to personal needs.

Abualrub et al. (2009) investigated the relationship between social support from supervisors/co-workers, job satisfaction and intent to stay, among Jordanian hospital nurses. They found the correlation between social support from supervisors and job satisfaction to be moderately positive ($r = 0.35$, $p < 0.001$), while the correlation between social support from co-workers and job satisfaction was not significant. There was also a significantly positive relationship ($p < 0.001$) between intent to stay at work and social support from both supervisors and co-workers ($r = 0.37$, $r = 0.25$, respectively).

Some research suggests that turnover intention is influenced more by supervisors or managers than by co-workers (Delobelle et al., 2011; Zurmehly, 2008). It is important for nursing administrators to understand what is valued most by their nurses. Empowering nursing employees promoted job satisfaction (Walker, 2008). Leaders can enhance employee job satisfaction by taking the time to recognise individual value and contribution to the unit. Abualrab et al. (2012) found that Saudi nurses who were more satisfied with managers who demonstrated transformational leadership styles, and were more satisfied with their managerial support, intended to stay at work.

2.6.8 Work Conditions

Work conditions include all work load, shift work, physical environment, supplies and equipment, work scheduling and flexibility (Sengin, 2003). Working conditions have been found to have a modest effect on job satisfaction. If work conditions are good, employees will find it easier to carry out their job. On the other hand, when work

conditions are poor, personnel find it more difficult to get things done (Luthans, 2002).

Previous studies have noted a positive relationship between job satisfaction and flexibility in work scheduling (Arafa, Nazel, Ibrahim, & Attia, 2003; Yaktin, Azoury, & Doumit, 2003). Based on studies by Lee (1998) and Price (2002), work load, scheduling, and challenging work were related to job satisfaction. Kovner et al. (2007) found that nurses were more dissatisfied with a heavy workload. Most of the nurses (more than 80%) reported that their jobs required them to work fast or hard for at least one to two days per week.

Another study identified dissatisfaction with working conditions as a determining factor in a nurse's decision to work in a non-nursing field (Black, Spetz, & Harrington, 2008). Empirical research provided data on the need to reduce nurse workloads to improve job satisfaction and promote higher retention (Rountree & Porter, 2009).

In a study examining nursing turnover from a generational perspective, nearly half the nurses in each of the three generations identified excessive workloads and issues in interpersonal relationships as reasons why nurses consider leaving their jobs (Takase, Oba, &Yamashita, 2009). Delobelle et al. (2011), reported that African nurses were frustrated with work conditions due to structural constraints, inadequate staffing, lack of equipment and supplies, inadequate security, high workload, and time spent on non-nursing activities.

2.6.9 Salary

Salary is defined as the money an individual receives as payment from the organisation they work for. Wages and salaries are recognised as significant but

cognitively complex and multidimensional factors in job satisfaction. Money not only helps people attain their basic needs but is also instrumental in providing upper-level need satisfaction (Luthans, 2002). It would be reasonable to think that pay is an important indicator of job satisfaction.

Research evidence which relates the importance of nurse salary to job satisfaction and retention has produced inconsistent results(O'Brien-Pallas, Duffield, & Hayes, 2006). Pay was found to be of greater importance to younger nurses (categorised as those 36 years and below) in a study by Kuhar et al. (2004).

The relationship between pay and job satisfaction has been widely investigated, *with* previous studies reporting pay and benefits as factors that positively relate to nurses' job satisfaction(Coomber & Barriball, 2007; Cowin, 2002; Daehlen, 2008; Mocharab & Madarshahian, 2006; Williamsa, McDaniela, & Nguyena, 2006).

2.6.10 Effect of Job Satisfaction on Turnover

Hospitals are facing a serious challenge to provide high quality care with the current nursing shortage, particularly in relation to nursing turnover. Turnover is the voluntary and involuntary permanent withdrawal of the employee from an organisation. High turnover rate results in increased recruitment, selection, and training costs (Stephen, 2005). In both developed and developing countries the widespread nursing shortage and nurses' high turnover has become a global issue (Cavanaugh, 1992; Lee, 1998; Lu et al., 2005).

The average annual replacement cost of a registered nurse is estimated to be $64,000.00 and the average replacement cost for a critical care nurse is estimated to be $80,000.00. Health care organisations need to give priority to retaining skilled nurses

and focus on improving their job satisfaction to avoid these financial concerns (Murrow& Nowak, 2005).

Furthermore, turnover often causes disruption for existing members of an organisation as it may result in delays in important projects and can cause problems when employees who quit are also members of teams. While many factors have been linked to nurse turnover, job satisfaction is the most frequently cited and therefore requires urgent attention (Cavanagh, 1992). Job satisfaction has been shown to have a weak to moderate negative relationship to turnover. Conversely, high satisfaction leads to low turnover (George & Jones, 2008).

Coomber (2007) reported that nurses who are less satisfied are less likely to remain employed in their current health care organisation. Shortages and inadequate nurse staffing translate into delays in patient care, the holding of patients in the emergency department for longer periods and the shifting of care to a patient's family members (Ma et al., 2003).

According to Tzeng (2002) nurses' dissatisfaction has a major impact on nurses' turnover. Nurses' job satisfaction and levels of burnout are most important in the current context of nurses' shortages as they have high impact on the quality of patient care and patient outcomes (Aiken et al., 2001).

In addition, one of the main reasons for nurses' turnover is increasing market demand while some of the main causes cited include job dissatisfaction and relationships with nursing supervisors. The second most important factor for high turnovers relates to workload. Nurses were highly dissatisfied with their jobs as they felt that their workload increased due to inadequate staffing.

A number of studies have demonstrated job satisfaction to be an important factor because of its relationship to turnover (Bratt, et al., 2000; Simon, Müller, & Hasselhorn, 2010; Winter-Collins & McDaniel, 2000).

Findings from the literature also suggest that nurses' job satisfaction has a direct relationship with turnover and patient outcomes. Factors such as autonomy, inadequate staffing, high workload, supervisors, and supportive communication from peers were source of nurses' job satisfaction, exhaustion and burnout leading to job dissatisfaction. Improvement in nurses' job satisfaction can result in retention and therefore an increase in patient satisfaction (Khowaja et al., 2005).

The number of nurses with turnover intent was higher among nurses with low satisfaction with salary, low satisfaction with welfare, and poorer cooperation among teams (Kudo et al., 2006). Nurses who reported a high level of job satisfaction were more likely to show greater intention to stay in their current work (Abualrub et al., 2009; McCarthy, Tyrrell, & Lehane, 2007; Tourangeau & Carnley, 2006; Zaghloul, Al-Hussaini, & Al-Bassam, 2008).

Heinen et al. (2013), in a cross sectional survey, examined the level of job satisfaction among 2025 staff nurses working in the medical and surgical departments in 380 hospitals in ten European countries. Seven factors were associated with intention to leave the profession at European level: nurse-physician relationship (OR 0.86; 95%CI 0.79–0.93), leadership (OR 0.78; 95% CI 0.70–0.86), participation in hospital affairs (0.68; 95%CI 0.61-0.76), older age (OR 1.13; 95%CI 1.07-1.20), female gender (OR 0.67; 95%CI 0.55-0.80), working fulltime (OR 0.76; 95%CI 0.66–0.86) and burnout (OR 2.02; 95%CI 1.91-2.14). The relevance of these factors differed for the individual countries.

The current nursing shortages and higher nurse turnover in Malaysia and Iran highlighted the importance of understanding nurses' views and experiences regarding job satisfaction and intention to leave so health care organisation can implement effective interventions to improve the retention of their nursing workforce. This research study will complement existing literature, which shows that researchers have previously discovered factors that affect nurses' job satisfaction. Previous studies have examined nurses' demographics characteristics and overall job satisfaction. However, there was a gap in the literature, in which very few studies investigated the relationship between demographic data and the six individual components identified by Stamps (1997). In this study, researchers investigated the relationship between demographic data with task requirements, work interaction, decision making, autonomy, professional development, professional status, supportive nursing management, work conditions and salary.

Compared to the number of quantitative studies and qualitative studies fewer studies used mixed methods to provide a better understanding of research problems than either approach alone. In the existing literature, most job satisfaction data derived from small scale surveys in a single country. There are few job satisfaction studies comparing different countries. The researcher, by conducting a mixed method study in two countries, contributes to existing research literature and at the same time provides nurse managers and policy makers, with relevant information on factors related to nurses' job satisfaction.

2.7 Conceptual Framework of the Study

There were two types of variables in the study, dependent and independent variables. The dependent variables were task requirement, work interaction, autonomy, decision making, professional status, professional development, supportive management, work

condition, salary, overall job satisfaction while the independent variables were demographic factors (age, gender, marital status, level of education, ethnicity) and employment related questions (years of working experience and working unit). The relationship between independent and dependent variables is shown in Figure 2.3.

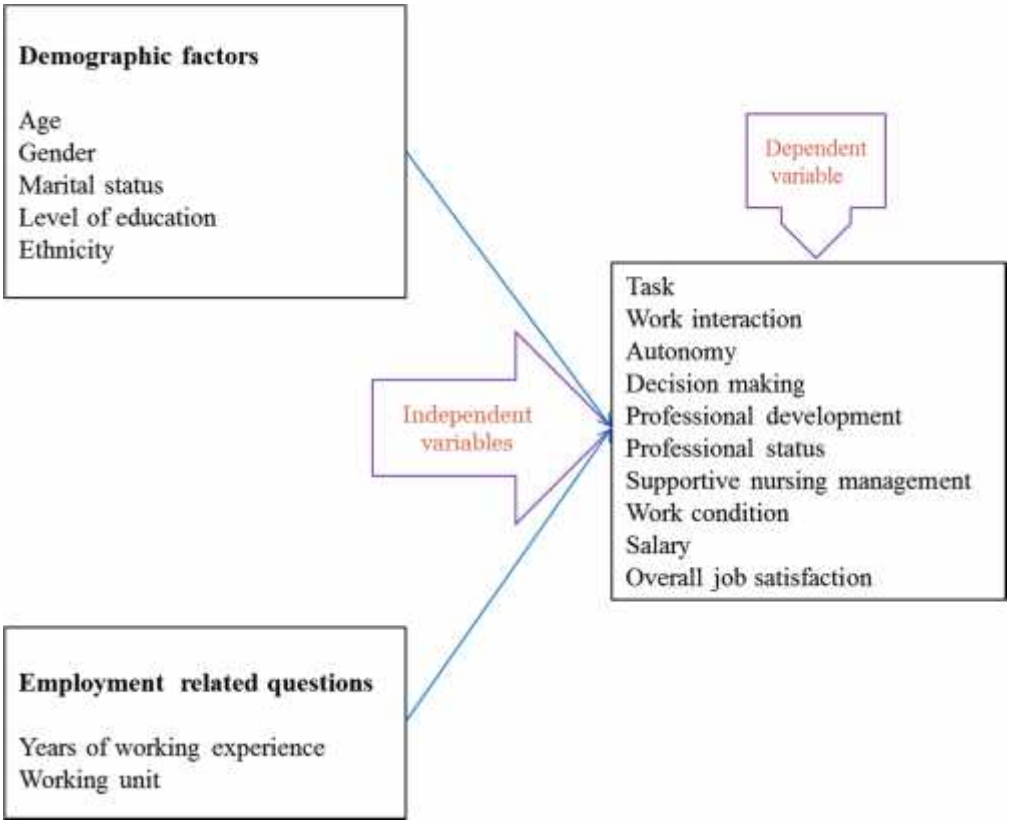

Figure 2.3: Relationship between Independent and Dependent Variables

2.8 Summary

This chapter reviewed the literature for relevant studies pertaining to job satisfaction. Based on the extensive literature about nurses' job satisfaction in different countries, there are many variables which play a role in the job satisfaction of registered nurses. Nurse age, gender, length of time at an institution, educational preparation, task requirements, work interaction, autonomy, decision making, professional development, professional status, supportive nursing management, work conditions and salary have all been found to influence nurse job satisfaction.

However, very few studies utilises both qualitative and quantitative approaches to identify factors that influence nurse job satisfaction in different countries.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter introduced the study design that influences the study. In the rationale for the mixed method approach, sequential explanatory design is explained before detailing sample recruitment, data collection and data analysis for both the quantitative and qualitative phase. An explanation of the ethics approval for both countries, and the research instrument used is given. Details about the pilot study are reported.

3.2 Mixed Methods Study

A mixed methods research design is a procedure for collecting, analysing, and "mixing" both quantitative and qualitative research and methods in a single study to understand a research problem (Creswell & Clark, 2007).

3.2.1 Rationale for Mixed Methods Approach

The focus of the study was to investigate job satisfaction levels among registered nurses in Iran and Malaysia, and subsequently to compare job satisfaction levels of registered nurses in Iran and Malaysia. The study also attempts to establish the factors related to job satisfaction of nurses in both countries.

The reason for mixing both quantitative and qualitative methods within a single study was to obtain quantitative results from a sample and then follow up with a qualitative focus group discussion to probe or explain those results in more depth and capture an in-depth understanding of the individual experiences that are difficult to measure using straightforward quantitative approaches. The mixing of both quantitative and qualitative data sources provided a more robust analysis because the two data

collection and analysis methods supported each other, while compensating for each other's weaknesses (Creswell & Clark, 2007).

In this study, the quantitative data utilised a survey (the Modified Index of Work Satisfaction) and a demographic data questionnaire were collected and analysed first. In the second phase, qualitative focus group interviews were used to expand on the variables found to be significant correlates of the overall job satisfaction score (see Figure 3.1).

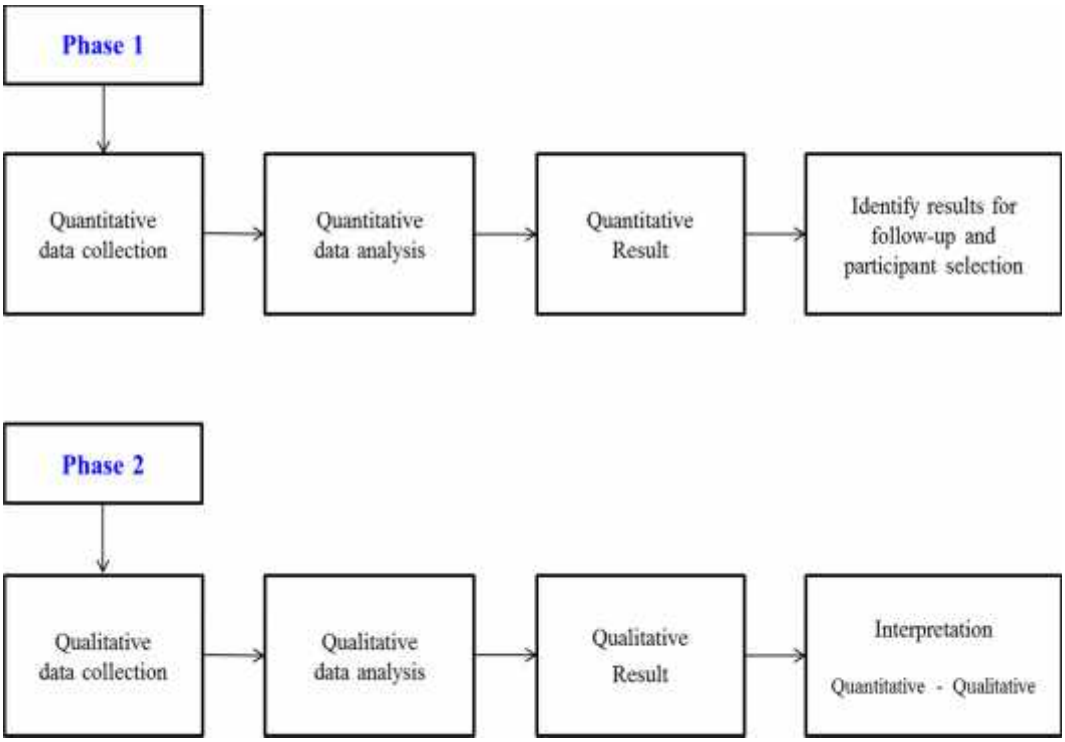

Figure 3.1: Mixed Methods Sequential Explanatory Design (Modified from Creswell & Clark, 2007)

3.2.2 Sequential Explanatory Design Advantages and Challenges

The sequential explanatory design is considered the most straightforward of the mixed methods designs (Creswell & Clark, 2007).The advantages and challenges of using the sequential explanatory mixed methods design have been widely discussed in the literature.

3.2.2.1 Advantages of Using a Sequential Explanatory Mixed Methods Design

Firstly, implementation of the design is straightforward, because one type of data is collected and analysed at a time. Secondly, reporting of the research findings is straightforward and the final report is written in two separate phases. In addition, quantitative findings are elaborated on by the qualitative data.

3.2.2.2 Researcher Challenges in Using the Sequential Explanatory Design

First of all, the collection of two types of data increased the overall research budgets. Secondly, the researcher needed to complete courses to gain a basic knowledge and understanding of qualitative and mixed method research approaches. In addition, collaboration and support from expert supervisors in mixed methods, and a statistician, was obtained in the study process. Finally, the researcher spent a lengthy amount of time completing and analysing the qualitative data from two countries.

3.3 Research Paradigm

As a worldview, pragmatism is "typically associated with mixed methods research" (Creswell & Clark, 2007). The characteristics of pragmatism include a focus on the consequences of the research, the importance of the question asked rather than the methods, and multiple methods of data collection to tell the story of the problem. It is pluralistic, and oriented to real-world practice (Creswell & Clark, 2007).

Tashkori and Teddeli (2003) reported that at least 13 different authors embraced pragmatism as a paradigm for mixed methods research. In this paradigm both quantitative and qualitative research may be used in a single study, the forced-choice dichotomy between post positivism and constructivism is abandoned and the use of metaphysical concepts such as truth and reality should also be abandoned. For explanatory and exploratory design, pragmatism can be an umbrella paradigm.

The paradigm for explanatory design due to quantitative emphasis is usually post-positivist (Creswell & Clark, 2007). Post-positivism is also known as post-empiricism and is characterised as a modified version of positivism. Historically, post-positivism has developed, matured and evolved over the 20th century, and post-positivism research has further evolved at the beginning of the 21st century. It involves six basic steps: a) find an idea you want to research; b) develop or select a theory about the area you want to research; c) develop specific, testable hypotheses; d) design a scientific study; e) analyse the data; f) report your work.

In post-positivism, the idea for research can come from anywhere; it can come from an individual's own experiences, from qualitative data or from previous studies. A post-positivist develops or selects a theory. They may also develop or select the area of research interest derived from theory and establish hypotheses or research questions. A scientific study is traditionally designed to objectively gather quantitative data under controlled conditions that allow one to draw conclusions about the hypotheses.

The data is analysed using standard statistical techniques, and results are interpreted using guidelines of the scientific method. Finally, the work is reported in an objective manner. Post-positivism is the philosophical foundation of the worldview presented in this current study.

3.4 Quantitative Methodology (Phase I)

3.4.1 Study Design

The first phase of the study involved a quantitative survey using a self-administered questionnaire.

3.4.2 Study Area

The study took place in a single large hospital in each of the two countries.

The large hospital was selected based on the recommendation by the supervisor in Iran. It is also one of the largest teaching hospitals in Iran.

A single large hospital in Malaysia, the University of Malaya Medical Centre (no. of beds = 895) was selected from Kuala Lumpur, as this was logistically feasible and considered ideal to obtain a heterogeneous sample for the purposes of this study.

3.4.3 Study Sample

A sample size was chosen that was proportionate to the total number of nurses working in the medical, surgical and critical care units of the large hospital in Mashhad-Iran and of the large hospital in Kuala Lumpur-Malaysia. Inclusion criteria for participation included being a registered nurse, and at least two years of working experience in different wards of the study centres during the study period. This is because Iranian nurses after completion of their nursing education are required to work for 2 years internship in the hospitals in order to be recognized as a registered nurse in Iran. Non-nursing personnel (e.g. midwives and nursing aid) and administrative staff (head nurses and supervisors) were excluded.

3.4.4 Samptle Size Estimation

The sample size was calculated using the formula for a single proportion, with an assumption of 95% CI, a 5% margin error, and prevalence of job satisfaction as 50%. An additional 30% was added to the sample size calculated to account for potential missing values and invalid responses. Based on a population of 1650 registered nurses in the University of Malaya Medical Centre (UMMC), and 1250 in the Emam Reza hospital, the final sample size calculated was 416 and 397, respectively.

- **Sample Size Estimation for UMMC**

Sample size was calculated based on a prevalence of 50% in the population, margin error of 5% and 95% CI.

- N = In which n = Z * Z [P (1-P)/(D*D)]
- N = 1.960 * 1.960 [0.5(1 - 0.5) / (0.05 * 0.05)
- N = 1.960 * 1.960 [0.5(0.5) / (0.0025)] = 384

[Adjustment for the size of the population]

- S = n / [1 + (n / population)
- S = 384 / [1 + (384 / 1616] = 384/1.23 = 312

An additional of 30% = 416

- **Sample Size Estimation for Emam Reza Hospital**

- N= In which n = Z * Z [P (1-P)/(D*D)]
- N = 1.960 * 1.960 [0.5(1 - 0.5) / (0.05 * 0.05)
- N = 1.960 * 1.960 [0.5(0.5) / (0.0025)] = 384

[Adjustment for the size of the population]

- S = n / [1 + (n / population)
- S = 384 / [1 + (384 / 1250] = 384/1.30 = 297

An additional of 30% = 397

3.4.5 Research Variables

3.4.5.1 Dependent Variables

Dependent variables are characteristics that vary due to the influence of the independent variables (Creswell, 2003). In the quantitative phase of this study, task requirement, work interaction, decision-making, autonomy, professional development,

professional status, supportive nursing management, work condition and overall job satisfaction score were the dependent variable.

3.4.5.2 Independent Variables

Independent variables are factors that can influence the dependent variables.

Researchers study independent variables to see how they affect outcomes (Creswell, 2003). The independent variables used in this study were participant demographic characteristics (age, gender, marital status, ethnicity, level of nursing education), and employment related questions were questions about years of employment and current working ward units.

3.4.6 Study Instrument

An introduction letter which detailed the purpose of the study, participation benefits, and the amount of time required was given to the participants (Appendix B). Participants were told that their responses would remain anonymous and confidential, and that participation in the study was voluntary. Nurses were asked to sign an informed consent form and to indicate willingness to participate in focus group discussion on the consent form (Appendix C). A demographic data questionnaire and a study instrument were used for this study. Research questions for the mixed-method study were framed both quantitatively and qualitatively.

Questionnaire

The questionnaire (Appendix A) consists of two sections.

Section I: The first section assessed the demographic and employment data of the participants. Demographic questions include: age, gender, marital status, ethnicity, and level of nursing education. Employment related questions were those on years of

employment and current working ward unit. Based on the literature review, these are the variables that affect nurses' job satisfaction.

Section II: This section assesses the overall job satisfaction score of the participants. The MIOWS questionnaire was used for the assessment. The MIOWS questionnaire is derived from the index work satisfaction (IWS) questionnaire developed by Stamps (1997). The IWS questionnaire is a two-part instrument designed to determine nurses' levels of satisfaction with their work through questions measuring six components of satisfaction (task requirement, autonomy, pay, organisational policies, professional status and interaction). In this study, the MIOWS questionnaire was used, which is a combination of Part A of the original IWS (44 items) and another 23 items adapted from the Modified Index of Work Satisfaction (Ramoo, 2006). The MIOWS contains nine components; task requirement (7 items), work interaction (12 items), decision-making (6 items), autonomy (6 items), professional development (6 items), professional status (8 items), supportive nursing management (7 items), work condition (8 items) and salary (6 items).

Scores for the components vary according to the number of items, with higher scores denoting greater satisfaction. Each item on the MIOWS is measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Four negatively worded items were reversed and re-coded during the data analysis process, with 'strongly agree' receiving a score of 1 and 'strongly disagree' receiving a score of 5. There are a total of 67 items (questions) in all the components. Total scores are calculated by adding the scores of all nine sections, giving a total score that ranges between 67 and 335. At midpoint on the Likert scale, a score of 3 represented neither disagree nor agree, and scores of 4 and 5 represented agree and strongly agree. A respondent who obtained an overall score of 201 (67 × 3) was treated as midpoint

(Al-Enezi et al., 2009). Scores falling above the midpoint of the scale indicate a positive level of satisfaction.

Validity and Reliability

Measures included in a research study should be valid and reliable (Creswell, 2008). Validity refers to the ability to "draw meaningful and justifiable inferences from scores about a sample or population" (Creswell, 2008). The use of a reliable instrument in a research study increases the likelihood that consistent and error-free results may be obtained upon further administration of the instrument. Research studies that are both valid and reliable are more likely to generate results that can be generalised to a larger population.

The measure of internal validity for a research study is determined by examining how closely the research conclusions match reality. According to Creswell (2003), "internal validity is the extent to which one can draw valid conclusions about the causal effect of one variable on another. It depends on the extent to which extraneous variables have been controlled by the researcher". External validity, according to Creswell (2003), "is the generalizability or the extent to which the findings in the study are relevant to participants and settings beyond the study". A research study must be conducted in a manner that ensures that the research conclusions can be generalised to other similar populations.

The MIOWS questionnaire was developed specifically for this study. In accordance with the criteria for questionnaire validation, it was designed to be acceptable to the population under study, to be easily completed, and to be of value or use when complete. As the first step in instrument validation and to avoid the problems inherent in translation, two bilingual experts translated the instruments from English into

Bahasa Malaysia and Farsi following which two different bilingual experts translated them back and forward blindly for each country.

3.5 Pilot Study

A pilot study was carried out in both countries to check the validity and reliability of the instrument. In addition the pilot study will also help to determine whether the language used in the questionnaire is suitable and understandable.

To ensure the accuracy of the instrument translation, the draft questionnaire was submitted to three supervisors for expert scrutiny. The second step of the validation process involved the assessment of face validity for the MIOWS, which was established through the first draft given to a panel of experts consisting of ten professional nurses in Iran and Malaysia.

The reliability of the nine components of the MIOWS was measured using Cronbach's coefficient alpha test through a pilot test of 150 Iranian and 150 Malaysian nurses.

3.5.1 Results of the Pilot Study

The factor loading for all items was positive, ranging from 0.50 to 0.90. In Iran, the average factor loading for each components were as follows: task requirement 0.63, work interaction 0.80, decision making 0.80, autonomy 0.65, professional development 0.57, professional status 0.76, supportive nursing management 0.77, work condition 0.78 and salary 0.80. In Malaysia, the average factor loading for each item were as follows in: task requirement 0.63, work interaction 0.73, decision making 0.78, autonomy 0.64, professional development 0.55, professional status 0.70, supportive nursing management 0.75, work condition 0.73 and salary 0.96.
This analysis suggested that the 67-item instrument measured the job satisfaction of nurses as a single construct.

The overall Cronbach's Alpha coefficient for the modified MIOWS questionnaire was 0.90 in Iran and 0.89 in Malaysia (Table 3.1). The mean reliability of scores on the IWS for the 14 studies included in the meta-analysis done by Zangaro & Soeken (2007) was 0.78. Given the findings from the meta-analysis, scores on Part B of the IWS appear to be reliable when used with registered staff nurses. The participants did not express any concerns about the instrument thus there was no change in the format or the language used.

Table 3.1: Factor Analysis, Factor Loadings, and Cronbach's α Values for Iran and Malaysia

			Iran		Malaysia	
Components	**Number of Item**	**Nutral Score**	**Factor Loading**	**Cronbach Alph**	**Factor Loading**	**Cronbach Alph**
Task Requirment	7	21		0.75		0.88
Opportunities to use skills effectively			0.58		0.59	
Satisfied with the types of activities			0.56		0.57	
Like my work			0.76		0.76	
Satisfied with the nursing care			0.7		0.72	
Time spent on paperwork is reasonable.			0.71		0.67	
Enough time to give direct patient care			0.66		0.5	
Time and opportunity to discuss patient's problems			0.5		0.63	
Work Interaction	12	36		0.88		0.72
Good deal of teamwork and cooperation			0.86		0.7	
Nurses support each other			0.85		0.73	
Easy for new nurses to feel "at home"			0.76		0.76	
Nursing staff help each other			0.9		0.61	
Satisfied with the interactions			0.78		0.79	
"Rank consciousness" on my unit			0.82		0.54	
Doctors are general cooperative with nursing			0.9		0.76	
Teamwork between nurses and doctors			0.87		0.76	
Doctors and nurses have good working relationship.			0.83		0.9	

The doctors in this hospital generally appreciate nursing staffs			0.72	0.56	
Satisfied withinteractions with doctors			0.51	0.9	
Physicians here would show more respect nursing staff			0.9	0.81	
Decision Making	7	21		0.7	0.76
Opportunity for nursing staff to participate in decision-making			0.8	90	
Satisfied with level of nurse's participation in decision-making			0.9	0.84	
I have all the voice I want in planning policies			0.83	0.72	
Freedom to make important decisions			0.72	0.69	
Nursing administrators generally consult with the staffs			0.68	0.85	
Count on nursing administrators to back me up			0.85	0.88	
Administrative decisions at this hospital interfere too much with patient care.			0.88	0.63	
Autonomy	6	18		0.71	0.72
Good control over my own work			0.62	0.82	
Freedom to make important patient care			0.82	0.55	
Sufficient information regarding my patient care plan.			0.55	0.86	
Free to adjust my daily practice			0.85	0.61	
Actively participate in developing my work schedules			0.5	0.53	
Not being placed in a position of do things that are against my nursing judgment			0.61	0.5	
Professional Development	6	18		0.82	0.73
Access for continuing professional education			0.51	0.61	
Opportunities for career development			0.73	0.52	
Fair opportunity to attend seminar			0.51	0.5	
Opportunity to learn new skills.			0.57	0.57	
Quality preceptor program for newly qualified nurses.			0.58	0.64	
The opportunity for promotion or career advancement			0.52	0.5	

Professional Status	8	24		0.79		0.77
I had the choice again, still choose nursing			0.58		0.51	
People do not sufficiently appreciate the nursing care			0.74		0.5	
Staffs in other departments appreciate nursing.			0.86		0.59	
Patients and their family acknowledge nurses' contribution to their care			0.77		0.75	
I am proud to talk to other people about my job			0.75		0.87	
I am satisfied with the status of nursing in the hospital.			0.74		0.74	
My work contributes to a sense of personal achievement.			0.78		0.87	
What I do on my job does not add up to anything really significant			0.9		0.78	
Supportive Nursing	7	21		0.82		0.7
My nurse manager is a good manager and leader.			0.9		0.76	
My nurse manager is supportive of nurses.			0.83		0.75	
My nurse manager backs up the nursing staff in decision making			0.72		0.78	
My nurse manager frequently supervises and guides nurses in their work.			0.68		0.84	
My nurse manager often praise and recognize the good job			0.85		0.78	
My hospital administration often listens and responds to employee's concerns			0.88		0.63	
I am satisfied with my nurse manager			0.58		0.71	
Working Conditions	8	24		0.9		0.86
Staff have sufficient control over scheduling			0.9		0.68	
My work environment is pleasant			0.83		0.82	
Nurses do not need to float to another unit so often			0.72		0.6	
Adequate amount of staffs to give good patient care			0.68		0.79	
Availability of equipment and facilities is satisfactory.			0.85		0.59	
Discrimination and unfairness practices do not happen in my ward.			0.88		0.88	
The workload in my ward is reasonable			0.58		0.72	

Knowledge of nurses working in my ward is satisfactory			0.8		0.77	
Pay	6	30		0.76		0.72
My present salary is satisfactory			0.87		0.9	
The latest salary scheme for nursing is satisfactory.			0.8		0.66	
An up grading of pay scheme for registered nurse is not needed			0.71		0.76	
The pay and benefit I am getting for my level of responsibility is fairy good			0.7		0.5	
A lot of nursing staffs in this hospital are satisfied with their pay and benefits			0.87		0.65	
The present salary increment system that has been practiced in my hospital is fair			0.88		0.71	

3.6 Data Collection

In Phase One of the study (the quantitative part) an information letter explaining the purpose and confidential nature of the of the study (Appendix B), together with the demographic survey and the MIOWS questionnaire were distributed among 416 nurses from the surgical, medical and critical care units in a large hospital in Malaysia between February 2010 and March 2011, and 397 nurses in Iran from mid-November 2011 to the end of December 2011. After a week, two reminders were given to increase response rates. A total of 303 and 327 completed questionnaires were returned, yielding a response rate of 76% and 78% in Iran and Malaysia respectively. The majority of non-respondents in Malaysia were working in medical wards, and in Iran were working in surgical wards. For assessing non-response bias we compared the results of early and late respondent groups on key variables (age, gender, education) and found no significant difference between early and late respondents, so we statistically concluded that non-respondents were perhaps similar to late respondents, and that thus there is no limitation to generalising the findings to the population.

3.6.1 Data Management

As the surveys were returned, their identifying code numbers were logged into an Excel database. Once logged, items from each of the questionnaires were entered into SPSS database.

Data was checked for accuracy, missing data, and outliers before statistical analyses were conducted, and the SPSS data was printed and checked against the questionnaires for accuracy of data entry. Only rare errors were found and corrected.

3.7 Data Analysis

The data collected from the surveys was coded and entered into the Statistical Package for the Social Sciences (SPSS), version 16.00 (SPSS Inc.; Chicago, IL, USA) for analysis. Data distribution was checked for normality using the Kolmogorov-Smirnov test. The Kolmogorov-Smirnov statistic for each variable indicated that all variables have a significance value of more than 0.05 which shows that all of them follow a normal distribution. Therefore, parametric tests were used to analyse the data to evaluate differences between the demographic characteristics of the nine components of the MIOWS (task requirements, work interaction, decision-making, autonomy, professional development, professional status, supportive nursing management, work conditions, salary) and overall job satisfaction score.

Comparisons of overall job satisfaction scores for demographic variables were performed using a one-sample *t* test and one-way between-groups analysis of variance (ANOVA). Multiple linear regression analysis was further conducted to identify the factors associated with mean total job satisfaction score. Comparisons of scores on nine components of MIOWS and mean total job satisfaction scores among Iranian and Malaysian nurses were performed using a general linear regression and Chi−Square test.

3.8 Ethical Considerations

In conducting studies, a researcher needs to gain access to research sites and research participants. This process requires obtaining permission from individuals who oversee the sites as well as from the proposed participants (Creswell & Clark, 2007). The rationale for this is based on the need for privacy and confidentiality for the site and participants. Application for ethic approval for all the teaching hospitals in Mashhad and Kuala Lumpur was done. However, only ethical approval from the Medical Ethics

Committee, University of Malaya (Ref. No.782.7) and Mashhad University of Medical Science (Ref. No. 90295976) was obtained. There were no known risks or potential harm to the participants.

All participants were informed about the objectives of the study and written consent was obtained. All registered nurses participating were voluntary and were aware that they could withdraw consent at any time during the interview. Participants were informed that any evaluation report and subsequent publication would respect their confidentiality and anonymity. Confidentiality will continue to be maintained by keeping all records in a secure location.

3.9 Qualitative Methodology (Phase II)

The second phase of the study consisted of a qualitative enquiry using focus group discussions. Qualitative data was collected to identify additional issues that could not be understood from the quantitative survey and to obtain an in-depth understanding of the problem. Key assumptions related to the methodology used in this study include the followings:

Ontology, is "a philosophical belief system about the nature of social reality what can be known and how. For example, is the social world patterned and predictable, or is the social world continually being constructed through human interactions and rituals? These assumptions represent two very different ontological perspectives. A researcher's ontological assumptions impact topic selection, the formulation of research questions, and strategies for conducting the research (Cresswell, 2003)."

During my work experience as a registered nurse at a hospital in Mashhad, I felt that nurses' job satisfaction is very important as it is a key factor in nurses' recruitment and retention. Nurses' job satisfaction could also affect the quality of patients care.

Epistemologically, a researcher can “attain knowledge through direct social interaction indeed, the primary instrument for data collection and analysis is the researcher (Cresswell, 2003). The researcher remains flexible and responsive to the context of the study, responds and adapts to the circumstances and evolving nature of the study, and is able to explain and summarize as the study progresses (Cresswell, 2003).

In terms of epistemiology assumptions in this study, I belived that, in order to study job satisfaction among nurses, making an indepth study and being involved in the field is very important to obtain knowledge about the phonemonon. Using a survey alone, for example would not be a good method to obtain aduqute knowledge, so I favour the mixed method approach.

3.9.1 Reflexivity

Research is a joint product of participants, the researcher and the relationship between the participants and research. The research can influence the research in multiple ways; choice of the topic, the focus and the methodology used in the research (Khatijah Abdullah, 2007). Thus the entire process should be made transparent for the reader and the researcher must be truly aware of, and take into account, the possible impact of self in all aspects of the research, although this may not be totally achievable.”

The role of the researcher is subject to the same critical analysis and scrutiny as the research itself. I concluded, therefore, that reflexivity was really about how I, as researcher, impacted on the data I was gathering and the critical analysis of that role. Realistically I am not sure I could acknowledge or be aware of all the values and prejudices that influence me as a researcher, and in turn the research.

Throughout the study, a study journal was kept to Record personal experiences of interview with the nurses and to assist in recognising the influence and personal biases and feeling on the research. This was done so that my personal interpretation of events could be more fully recognised.

Reflection was undertaken throughout the process in order to understand my cultural view of the phenomenon and how I came to understand it in the way that I did. Iam aware that my background as a nurse with my philosophical stance, values and feeling, has undeniably contributed to the interest I have developed in nurses' job satisfaction and also to the way I view job satisfaction.

3.9.2 Research Site

The study took place in a single large hospital in each of the two countries.

The hospital was selected based on the recommendation by the supervisor in Iran. It is also one of the largest teaching hospitals in Iran.

A single large hospital in Malaysia, the University of Malaya Medical Centre (no. of beds = 895) was selected from Kuala Lumpur, as this was logistically feasible and considered ideal to obtain a heterogeneous sample for the purposes of this study.

3.9.3 Study Sample, Inclusion Criteria and Exclusion Criteria

Purposive sampling is a common method for selecting research participants in qualitative research (Creswell, 2003). Purposive sampling was used in this study to ensure that participants provided answers that were rich in detail and contextual information. Inclusion criteria for participation included being a registered nurse with at least two years working experience in different wards of the hospital during the study period. Non-nursing personnel (e.g. midwives and nursing aides) and

administrative staff (head nurses and supervisors) were excluded. All the participants who completed the survey in the quantitative phase were invited to participate in the second phase.

3.9.4 Sample Size Estimation

Sample size for the discussion was not predetermined but was conducted until the point of theoretical saturation. According to Finch and Lewis (2003), focus group discussion typically needs to involve around six to eight participants per session for effective discussion to occur. Data saturation was determined when three researchers agreed that data categories were established and any new data fit into categories already devised.

Theoretical saturation was achieved in the seventh focus group discussions (FGD) conducted in Malaysia and in the eighth FGD conducted in Iran, leading to a total of 46 Malaysian registered nurses and 72 Iranian registered nurses from surgical, medical and critical care units.

3.9.5 Study Instrument

3.9.5.1 Focus Group Discussion

The focus group sessions were initiated after the survey data was collected. Focus group interviews were used to provide richer, in-depth information regarding a participant's thoughts, beliefs and a more personal account of the experiences of registered nurses with regards to factors that relate to job satisfaction.

A second reason for using qualitative methods in this study was to gain an in-depth understanding of how each construct impacts on nurses' job satisfaction.

3.10 Pilot Study and Results

A pilot study was carried out with one FGD in both countries to ensure the interview guide was adequate and relevant, in addition to identifying the best way to conduct the FGD. It was found that the best time to conduct the FGD was after a nurse's shift duty, and that refreshments helped to relax them prior to the discussions. The interview guide was found to be useful to guide the discussion.

3.11 Data Collection

The FGD participants met at a safe venue that provided a comfortable ambience and privacy away from the hospitals. The groups ranged in size from six to ten participants per session. The duration of each discussion was generally between 60 and 90 minutes. Both the researcher and note-taker were registered nurses, which gave the added advantage of access and an inside knowledge of the study setting.

The FGD guide used in Malaysia comprised three open-ended questions (Table 3.2) and that used in Iran comprised seven open-ended questions (Table 3.3) based on the significant results of the quantitative phase of the study. It was considered important to allow the respondents themselves to identify factors which contributed to nurses' job satisfaction. The main components of study questions included: the factors nurses thought were related to job satisfaction, opinions on the support given by nurse managers, opinions on professional development, professional status, opinions on decision making, nurse salaries and benefits, as well as workplace conditions. In order to conduct FGD on a more conversational line, several follow up questions were asked, such as "What do you mean?" "or "Can you make a clarification please"?

Data was collected through audio tapes and note taking. Notes taken by the note-taker were supplemented with audiotapes to obtain full details from the FGD. The

anonymity of participants was maintained by not referring to them by their names, participants were instead identified by numbers. Seven FGD comprised of six to ten participants per group in Malaysia were conducted between April 2011 and October 2011, and eight FGD comprised of six to ten participants per group in Iran were conducted between March and June 2012.

Table 3.2: Focus Group Guideline Used in Malaysia

A Study of Factors Identification Related to the Nursing Job Satisfaction
1. What do you think are factors related to your job satisfaction? 2. What are your opinions on your salary? 3. What are your opinions on your work condition?

Table 3.3: Focus Group Guideline Used in Iran

A Study of Factors Identification Related to the Nursing Job Satisfaction
1. What do you think are factors related to your job satisfaction? 2. What are your opinions on your participation in clinical decision making? 3. What are your opinions on professional development? 4. What are your opinions on professional status? 5. What are your opinions on the support given by nurse managers? 6. What are your opinions on your salary? 7. What are your opinions on your work condition?

3.12 Data Management and Data Analysis

Data analysis was done simultaneously with data collection. By end of each FGD digital recording was transcribed to create verbatim writing account. Transcripts were converted to rich text format and imported into MAXQ 2007 (qualitative) software.

Thematic analysis guided by Braun and Clark's (2006) six steps of data analysis was undertaken to identify themes related to nurses' job satisfaction.

- Becoming familiar with the data, which related to immersion in the data by way of collecting, transcribing and reading the material collected in an interview. The transcriptions were read and reread by the researcher to obtain the general sense and meaning of the information.

- Generating initial codes refers to collecting features of interest from data in a systematic way. Each part that related to the research questions was underlined and coded. Then the codes were read and compared to the context.

- Searching for themes, whereby codes are then sorted and combined into potential themes.

- Reviewing themes, whereby all themes are checked to ensure that they accurately illustrate the coded data. Themes at this stage should fit together and accurately tell the story from the data.

- Theme definition and naming, whereby continual analysis creates clear definition and names for each theme. Each theme may contain several sub-themes.

- Producing the report, whereby the thematic analysis is written up, telling the story from the data by way of examples from the participant narratives.

For the analysis I started with reading through all the interviews to get an overview, whereupon I went back to each interview transcript and read them carefully. In this second reading a line-by-line coding was done ascribing each sentence in the interviews a code that described the main essence of it. In this study the initial codes

were inductive, which means that they originated from the respondent themselves. In this study, the coding of the material was based on the principles described by Braun and Clarke (2006).

After the initial coding, codes were merged into larger units organizing those that were similar in meaning content. This merging of codes into larger units persisted until there remained only a few. However, the next step in the analysis was integrating codes into themes. A theme was defined as the smallest unit that in a meaningful way could express the codes that were included in it. For instance, a theme could represent an underlying concept that the included codes could be seen as an expression of, or it could give meaning to "similar" codes with divergent content by pointing directly to the inconsistency. At the end, six major themes were formed for Iranian and Malaysian nurses.

Table 3.4: Examples for Coding of Theme

Quotes	Sub-theme	Theme
"When I help the patients and they feel good and pray for me, I believe that their prayers are real and I feel satisfy. I think it is their prayers that give us more energy to do our work." (Surgical ward nurse, bachelor's degree, aged 32).	Helping Sick People	Spiritual Feeling
"When I help my patients with their needs and problems, I feel happy and this makes me feel satisfied."(Medical ward nurse, bachelor's degree, aged 41).	Involvement in Patient Care	

3.12.1 Trustworthiness

Credibility requires adequate submersion in the research setting to enable recurrent patterns to be identified and verified. Thus, an important strategy is to spend an extended period of time with informants (Lincoln & Guba, 1985) which allows the researcher to check perspectives and allows the informants to become accustomed to the researcher. Central to the credibility of qualitative research is the ability of informants to recognise their experiences in the research findings. Member checking is a technique that consists of continually testing the researcher's data, analytic categories, interpretations, and conclusions with informants (Lincoln & Guba, 1985; Teddlie & Tashakkori, 2009).

This strategy of revealing research materials to the informants ensures that the researcher has accurately translated the informant's viewpoints into data. The researcher has decided to determine credibility through member checks.

After finishing the data analysis, call was made to all nurses participate to the FGDs in Iran and Malaysia. A total of 49 nurses were successfully contacted in Iran and 36 in Malaysia. Twenty six of nurses in Iran and seventeen of nurses in Malaysia were agreed to check the overarching themes. The overarching themes were returned to twenty six of nurses in Iran and seventeen of nurses in Malaysia to check whether the identified themes reflected their opinion and the representative account of the focus groups. The nurses all verified that the identified themes were reflected their opinion (Bagharie et al., 2012).

Lincoln and Guba (1985) noted that transferability is more the responsibility of the person wanting to transfer the findings to another situation or population than that of the researcher of the original study. They argued that as long as the original researcher presents sufficient descriptive data to allow comparison, they have addressed the

problem of applicability. One strategy used to address transferability in a sample selection is the use of a panel of judges to help in the selection of informants' representative of the phenomenon under study.

To facilitate transferability selection and characteristics of participants, data collection, and the process of data analysis, an audit trial was documented and relevant quotes were used to ensure that the findings fit the data.

The use of colleagues and methodological experts (peer examination) to check the research plan and implementation is another means of ensuring dependability (Lincoln & Guba, 1985). Three external researchers were requested to view the data for dependability in this study. The use of the audio tape and a note-taker ensured the accuracy of the data collected. All FDG were based on semi-structured interview questions.

Braun and Clarke's (2006) six step framework for analysis provides a logical and accurate interpretation of the data to address conformability. Another way that one can enhance conformability is to use a team of researchers familiar with qualitative methods rather than a single researcher (Lincoln & Guba, 1985; Creswell & Clark, 2007). The three lecturers are experienced, as supervisors, in qualitative research, and reviewed, scrutinised and verified the study findings as represented in themes which were supported by a selection of the participants' own quotes. Validity was enriched by checking generated themes with two colleagues and some of the participants. The entire process was checked by three supervisors. The research team examined the data throughout the analysis process to foster multiple perspectives of the interview data and make sure that the researcher own value and belief was not affect the results of the study.

3.13 Summary

This chapter has outlined the methods used in this study. The study involves a mixed methods sequential explanatory design with two phases of data collection and analysis: a quantitative phase followed by a qualitative phase (Creswell & Clark, 2007). The rationale for this type of design lies in the potential for the second qualitative phase to be used to build on and to gain in-depth knowledge of the results of the first quantitative phase of the study. In this study, the quantitative data analysis was performed first, followed by the collection and analysis of the qualitative data.

In the quantitative analysis, the MIOWS questionnaires and a demographic survey were given to 813 registered nurses from medical, surgical and critical care units in a large hospital in Iran and in Malaysia. A total of fifteen focus group discussions represented registered nurses working in critical care, medical and surgical units in both countries.

The data was analysed using descriptive and inferential statistics. According to Creswell and Clark (2007), the information obtained in the qualitative phase can be used to develop themes and trends for explaining the results of the quantitative phase of the study. The next chapter will discuss the study results.

CHAPTER 4: QUANTITATIVE RESULTS (PHASE I)

4.1 Introduction

As a mixed methods research design (mixed methods sequential explanatory design), both quantitative and qualitative data were collected and analysed. This chapter outlines the results of phase I (quantitative results) of this study. The quantitative results will be presented through descriptive and inferential methods to allow readers an understanding of the constructs of interest.

In the first part of the study (quantitative part), Sections 4.2.2.1 to 4.2.2.5 will describe the overall job satisfaction score of Iranian nurses, the level of Iranian nurse satisfaction on nine components of the MIOWS, correlates between the nine components of the MIOWS, Iranian nurse demographic characteristics and overall job satisfaction scores and demographic correlates of overall job satisfaction scores.

The second part of the quantitative study, from Sections 4.3.2.1 to 4.3.2.5, will look at the overall job satisfaction scores of Malaysian nurses, level of Malaysian nurse satisfaction on nine components of the MIOWS, correlates between the nine components of the MIOWS, Malaysian nurse demographic characteristics and overall job satisfaction scores and demographic correlates of overall job satisfaction scores.

The third part of the quantitative study, Section 4.4, will compare the level of nine components of the MIOWS and overall job satisfaction scores of Iranian and Malaysian nurses.

4.2 Quantitative Results: Iran Part

4.2.1 Sample Characteristics (Iran Part)

Details of the demographic characteristics for the entire sample are summarized in Table 4.1. There were more females than male respondents in this study. The age ranges for the Iranian nurses were between 25 and 53 years old, with a mean age of 34.2 years (SD±5.0). The majority of Iranian nurses were married (79.5%, n = 241). Most of the Iranian nurses possessed bachelor's degrees (93.7%, n = 284). Nearly three-quarters (74.9%, n = 227) of the Iranian nurses had a working experience of six years or longer. Less than half of the Iranian nurses were from critical care units (40.3%, n= 122).

Table 4.1: Distribution of Socio-demographic Characteristics of Iranian Nurses (n=303)

	Frequency	%
Gender		
Male	57	18.8
Female	246	81.2
Age		
25-29	53	17.5
30-34	99	32.7
35-39	120	39.6
40 and above	31	10.2
Marital status		
Single	62	20.5
Married	241	79.5
Level of education		
Diploma	19	6.3
Bachelors	284	93.7
Years of experience		
≤6 years	76	25.1
>6 years	227	74.9
Work unit		
Medical ward	103	34
Critical care units	122	40.3
Surgical unit	78	25.7

Iranian nurses

4.2.2 Analysis of Finding

This section consists of the research questions that guided this study. Each question is followed by a description of the analysis used and a review of the findings of the particular question.

4.2.2.1 Level of Iranian Nurses Overall job satisfaction Score

In order to answer the first question, an overall measure of Iranian nurses overall job satisfaction score was determined by calculating a total score for all the 67 questions in the Modified – Index of Work Satisfaction (MIOWS). The overall job satisfaction score for Iranian nurses are shown in Table 4.2. The Iranian nurses had an overall job satisfaction score 183.53 out of possible 335score. A total of 87 Iranian nurses (28.7%) had an overall job satisfaction score above the midpoint score of 201, while 216 nurses (71.3%) scored below the midpoint score.

Table 4.2: Level of Iranian Nurses Overall job satisfaction Score (n = 303)

Interpretation	**Score**	**Frequency (n)**	**Percentage (%)**
Dissatisfied	67-201	216	71.3
Satisfied	202-335	87	28.7
Total		**303**	**100**

Iranian nurses

4.2.2.2 Level of Iranian Nurses Satisfaction on Nine Components of the MIOWS

The analysis in this section examines the level of satisfaction of Iranian nurses on nine components of the MIOWS. The nine components of the MIOWS comprise of task requirement, work interaction, decision-making, autonomy, professional development, professional status, supportive nursing management, work condition and salary.

Table 4.3 to Table 4.11 show the result of the analysis related to the Iranian nurses' satisfaction levels on the nine components of MIOWS.

4.2.2.2.1 Task Requirement

This components of MIOWS, evaluated Iranian nurses' satisfaction on seven items regarding daily or routine registered nurse tasks. Data in Table 4.3 shows that 30% (n = 91) of Iranian nurses' indicated agree and only 4% (n = 12) strongly agree that they had opportunities to use their skills effectively. A total of 38.9% (n = 118) Iranian nurses' indicated that they were satisfied with the tasks or activities demanded by their jobs, with 49.5% (n = 150) of Iranian nurses' indicated "I definitely like my work".

A total of 52.5% (n = 159) of Iranian nurses whom participated indicated that they were satisfied with the nursing care they provided patients, while 23.1% (n = 70) disagree or strongly disagree. Only 17.5% (n = 53) of the Iranian nurses' reported that the amount of time they spend on paper work was reasonable, but about 64.7% (n = 196) of Iranian nurses' indicated disagree or strongly disagree on this item.

Less than one-third of the Iranian nurses' (29.4%, n = 89) indicated agree or strongly agree that they had enough time for direct patient care, but 32.5% (n = 159) of felt the opposite was true. A total of 24.1% (n = 73) Iranian nurses' reported that they had plenty of time and opportunities to discuss patient problems with other nursing service personnel.

Table 4.3: Frequency and Percentage of Iranian Nurses Satisfaction to Task Requirement (N = 303).

	Strongly disagree **n (%)**	**Disagree** **n (%)**	**Neither agree nor disagree** **n (%)**	**Agree** **n (%)**	**Strongly agree** **n (%)**
I have opportunities to use my skills effectively.	40(13.2)	71(23.4)	89(29.4)	91(30)	12(4)
I am satisfied with the types of activities that I do on my job.	22(7.3)	70(23.1)	93(30.7)	111(36.6)	7(2.3)
I definitely like my work.	10(3.3)	65(21.5)	78(25.7)	98(32.3)	52(17.2)
I am satisfied with the nursing care I provide to my patient.	18(5.9)	52(17.2)	74(24.4)	114(37.6)	45(14.9)
The amount of time spent on paperwork is reasonable.	102(33.7)	94(31)	59(17.8)	35(11.6)	18(5.9)
I have enough time to give good direct patient care.	63(2.8)	96(29.7)	61(20.1)	69(22.8)	20 (6.6)
I have plenty of time and opportunity to discuss patient's problems with other nursing service personnel.	55(18.2)	92(30.4)	83(27.4)	59(19.5)	14(4.6)

Iranian nurses

4.2.2.2.2 Work Interaction

In order to determine Iranian nurses' satisfaction in relation to work interaction, twelve items regarding to nurse−nurse interaction and nurse−physician interaction were developed. Data in Table 4.4 show that the less than half of the Iranian nurses (34.3%, n = 104) reported that there a good deal of team work and cooperation existed between various levels of nursing personal on their services.

A total of 24.1% of Iranian nurses' (n = 73) reported that the nurses in their units supported each other. About 15.8 % of the Iranian nurses' (n = 48) indicated agree and another 4.9% (n = 14) strongly agree that it is easy for new nurses to feel "at home" in their wards, while 13.9% (n = 42) disagree and 40.9% (n = 124) neither agree nor

disagree on this item. A total of 49.8% the Iranian nurses' (n = 151) reported that nursing staff helped each other when things were busy.

A total of 38.3% of Iranian nurses' (n = 116) indicated that the nursing staff interacted, but 22.2% (n = 67) of Iranian nurses' felt otherwise. Less than one-third of the Iranian nurses' (21.4%, n = 65) indicated agree or strongly agree that "rank consciousness" prevailed on their units, with nursing personnel seldom mingling with others of lower ranks, but 42.9% (n = 130) of participants denied this.

A total of 41.3% (n = 125) of Iranian nurses' indicated agree or strongly agree that the doctors were generally cooperative with nursing staff. Over twenty percent (n = 64) disagree while 18.2% (n = 55) neither agree nor disagree. About 27.7% (n = 84) of Iranian nurses' attested to good teamwork between nurses and doctors while 35.6% (n = 108) of Iranian nurses' indicated agree or strongly agree that the doctors and nurses had good working relationships.

Only 3% (n = 9) of Iranian nurses' reported that the doctors in their hospital generally appreciated the roles of the nursing staffs and 56.5% (n = 171) of Iranian nurses' mentioned that they wished physicians would show more respect for the skills and knowledge of the nursing staff.

Table 4.4: Frequency and Percentage of Iranian Nurses Satisfaction to Work Interaction (n = 303)

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
There is a good deal of teamwork and cooperation between various levels of nursing personnel on my service.	63 (20.8)	57(18.8)	79(26.1)	83(27.4)	21(6.9)
The nurses in my unit support each other	61(20.1)	49(16.2)	120(39.6)	60(19.8)	13(4.3)
It is easy for new nurses to feel "at home" in my ward	75(24.8)	42(13.9)	124(4.9)	48(15.8)	14(4.9)
Nursing staff help each other when things get in a rush	33(10.9)	28(9.2)	91(30)	123(40.6)	28(9.2)
I am satisfied with the interactions among the nursing staff	22(7.3)	45(14.9)	120(39.6)	104(34.3)	12(4)
There is a lot of “rank consciousness” on my unit. Nursing personnel seldom mingle with others of lower ranks.	56(18.5)	74(24.4)	108(35.6)	47(15.5)	18(5.9)
The doctors are general cooperative with nursing staff.	59(19.5)	64(21.1)	55(18.2)	120(39.6)	5(1.7)
There is a lot of teamwork between nurses and doctors	35(11.6)	76(25.1)	108(35.6)	83(27.4)	1(0.3)
The doctors and nurses have good working relationship	48(15.8)	76(25.1)	78(25.7)	108(35.6)	
The doctors in this hospital generally appreciate what the nursing staffs do	44(14.5)	163(53.8)	87(28.7)	9(3%)	
I am satisfied with my interactions with doctors	37(12.2)	28(9.2)	173(57.1)	55(18.2)	10(3.3)
I wish the physicians here would show more respect for the skill an knowledge of the nursing staff	40(13.2)	43(14.2)	49(16.2)	62(20.5)	109(36)

Iranian nurses

4.2.2.2.3 Decision-Making

Seven items were developed to measure Iranian nurses' satisfaction on management policies and practices related to decision-making. Data in Table 4.5 showed that only 13.9% of the participants (n = 39) reported that there was ample opportunity for nursing staff to participate in administrative decision-making at the ward. Only about 16.2% of Iranian nurses' (n = 49) indicated that they agree or strongly agree with the level of Iranian nurses' in decision-making in their wards, but 28.7% (n = 87) disagree with this statement. Twenty one percent (n = 64) of Iranian nurses' reported that they had their say in planning policies and procedures for their wards.

Twenty two percent (n = 68) of Iranian nurses' reported that they had the freedom to make important decisions at work. Only about 10.5% of the Iranian nurses' (n = 32) indicated agree or strongly agree that the nursing administrates generally consulted with the staff on daily issues.

Less than one-third of the Iranian nurses' (18.5%, n = 56) reported that they were able to count on nursing administration to back them up while 44.6% (n = 135) of Iranian nurses' indicated disagree and strongly agree that administration decisions at their hospital interfered too much with patient care, with 25.7% (n = 78) agreeing and strongly agreeing with this statement.

Table 4.5: Frequency and Percentage of Iranian Nurses Satisfaction to Decision Making (n = 303)

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
There is ample opportunity for nursing staff to participate in administrative decision-making at ward level.	85(28.1)	88(29)	91(30)	26(8.6)	13(4.3)
I am satisfied with level of nurse's participation in decision-making in my ward.	45(14.9)	87(28.7)	122(40.3)	33(10.9)	16(5.3)
I have all the voice I want in planning policies and procedure for my ward.	70(23.1)	70(23.1)	99(32.7)	50(16.5)	14(4.6)
I have the freedom to make important decisions in my work.	70(23.1)	64(21.1)	101(33.3)	52(17.2)	16(5.3)
Nursing administrators generally consult with the staffs on daily problems.	87(28.7)	103(34)	81(26.7)	24(7.9)	8(2.6)
I can count on nursing administrators to back me up.	99(31)	96(31.7)	57(18.8)	31(10.2)	25(8.3)
Administrative decisions at this hospital interfere too much with patient care.	60(19.8)	75(24.8)	90(29.7)	44(14.5)	34(11.2)

Iranian nurses

4.2.2.2.4 Autonomy

Iranian nurses' were asked to respond to six items measuring job freedom and the ability to take initiatives and working independently on the job. Data presented in Table 4.6 show that majority of the Iranian nurses' (68%, n = 200) reported that they had good control over their work. Nearly 36% percent of Iranian nurses' (n = 108) indicated agree or strongly agree that they had the freedom to make important patient care decisions. An estimated 37.6% of Iranian nurses' (n = 104) reported that they received sufficient information regarding their patients care plans, while 29% of

Iranian nurses' (n = 88) indicated agree or strongly agree that they were free to adjust their daily practice to fit individual patient needs.

Data in Table 4.6 showed that 31% of Iranian nurses' (n = 89) indicated agree or strongly agree that they actively participated in developing their work schedules (days off and shifts duties), while another 45.6% (n = 138) indicated disagree or strongly disagree in that they did not do so. Thirty five percent of Iranian nurses' (n = 106) reported that they were not placed in the position of having to act against their nursing judgment.

Table 4.6: Frequency and Percentage of Iranian Nurses Satisfaction to Autonomy (n =303)

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
I have good control over my own work.	2(0.7)	16(5.3)	85(28.1)	147(48.5)	53(17.5)
I have freedom to make important patient care and work decisions.	10(3.3)	87(28.7)	98(32.3)	83(27.4)	25(8.3)
I receive sufficient information regarding my patient care plan.	2(0.7)	103(34)	84(27.7)	88(29)	16(8.6)
I am free to adjust my daily practice to fit patients' needs.	4(1.3)	140(46.2)	71(23.4)	74(24.4)	14(4.6)
I actively participate in developing my work schedules (days off and shifts duties).	69(22.8)	69(22.8)	76(28.1)	69(24.4)	20(6.6)
I have not being placed in a position of having to do things that are against my nursing judgment.	27(8.9)	74(24.4)	96(31.7)	69(22.8)	37(12.2)

Iranian nurses

4.2.2.2.5 Professional Development

The six items in this component of MIOWS, aimed to evaluate Iranian nurses' satisfaction with regards to opportunities for professional development with finding as presented in Table 4.7.

Forty five percent of the participants (n = 138) reported that they had access to continuing professional education in nursing. Twenty three percent of Iranian nurses' (n = 69) indicated agree and 12.9% (n = 39) strongly agree that they had opportunities for career development, if they performed well. Almost a quarter of Iranian nurses' (n = 74) indicated agree and 4% (n = 12) strongly agree that they had fair opportunity to attend seminars/conferences or workshops.

A total of 33% (n = 100) of Iranian nurses' reported that they had opportunity to learn new skills while only 24.1% (n = 73) of Iranian nurses' reported that there were quality preceptor program for newly qualified nurses. However, only about 18.1% of Iranian nurses' (n = 55) indicated agree or strongly agree that the opportunities for promotion or career advancement based on achievement of the (key performance indicators) was fair, but about 49.8% (n = 151) indicated disagree, or strongly disagree, while 32.1% (n = 97) expressed neutrality.

Table 4.7: Frequency and Percentage of Iranian Nurses of Satisfaction to Professional Development (n = 303)

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
I have access for continuing professional education in nursing	35(11.6)	38(12.5)	92(30.4)	125(41.3)	13(4.3)
If I perform well, I have opportunities for career development	43(14.2)	84(27.7)	68(22.4)	69(22.8)	39(12.9)
I have fair opportunity to attend seminar/conferences or workshop	38(12/5)	99(32.7)	80(26.4)	74(24.4)	12(4)
I have opportunity to learn new skills	26(8.6)	115(38)	62(20.5)	76(25.1)	24(7.9)
There is a quality preceptor program for newly qualified nurses	71(23.4)	71(23.4)	88(29)	62(20.5)	11(3.6)
The opportunity for promotion or career advancement based on achievement of "key performance indicators " is fair	58(19.1)	93(30.7)	97(32)	37(12.2)	18(5.9)

Iranian nurses

2.2.2.2.6 Professional Status

Iranian nurses' were asked to respond to eight items on professional status. Table 4.8 shows the analysis of this component. The information for this table indicates that more than half of Iranian nurses' (50.4%, n = 153) indicated disagree or strongly disagree that given a choice, they would still choose nursing as their career. Approximately, 40.4% of Iranian nurses' (n = 95) reported that the statement that most people do not sufficiently appreciate the importance of nursing care to hospital patients.

A total of 21.4% Iranian nurses' (n = 65) indicated agree or strongly agree that staff in other departments appreciate nurses and about 45.6% (n = 138) of Iranian nurses' affirmed that patient and their families acknowledged nurses' contribution to their care.

Twenty percent of Iranian nurses' (n = 61) indicated disagree or strongly disagree with this item. Less than half of Iranian nurses' (41.6%, n = 126) reported that they were proud to talk to other people about their jobs. A total of 29.4% of Iranian nurses' (n = 89) indicated agree or strongly agree that they were satisfied with their statues of nursing in the hospital, while 51.5% (n = 156) disagree or strongly disagree.

Meanwhile, 29.3% of Iranian nurses' (n = 89) reported that their work contributed to a sense of personal achievement. Almost twenty percent (19.5%) Iranian nurses' (n = 59) indicated agree or strongly agree that what they did on the job did not add actual significant, but about 39.6% (n = 120) of Iranian nurses' felt the opposite way.

Table 4.8: Frequency and Percentage of Iranian Nurses of Satisfaction to Professional Status (n = 303)

	Strongly disagree n (%)	**Disagree** n (%)	**Neither agree nor disagree** n (%)	**Agree** n (%)	**Strongly agree** n (%)
If I had the choice again, I would still choose nursing as my career	61(20.0)	92(30.4)	42(13.9)	46(15.2)	62(20.5)
Most people do not sufficiently appreciate the importance of nursing care to hospital patients	90(21.7)	92(30.4)	26(8.6)	66(21.8)	29(9.6)
Staffs in other departments appreciate nursing	47(15.5)	74(24.5)	117(38.6)	47(15.5)	18(5.9)
Patients and their family acknowledge nurses' contribution to their care	24(7.9)	37(12.2)	104(34.3)	106(35)	32(10.6)
I am proud to talk to other people about my job	34(11.2)	22(7.3)	121(39.9)	73(24.1)	53(17.5)
I am satisfied with the status of nursing in the hospital	82(27.1)	74(24.4)	58(19.1)	46(15.2)	43(14.2)
My work contributes to a sense of personal achievement	47(15.5)	66(21.8)	101(33.3)	48(15.8)	41(13.5)
What I do on my job does not add up to anything really significant	59(19.5)	61(20.1)	124(40.9)	39(12.9)	20(6.6)

Iranian nurses

4.2.2.2.7 Supportive Nursing Management / Administration

Seven items were used to determine the Iranian nurses' satisfaction in relation to nursing management / administrative support and some of the leadership characteristics of nurse managers'. This component aimed to evaluate registered nurses' satisfaction on nursing management/administrative support and some of the leadership characteristic of nurse managers. The results are as shown in Table 4.9.

Twenty two percent of Iranian nurses' (n = 68) indicated agree or strongly agree that their nurse manager was a good manager and leader, but 33.2% of Iranian nurses' disagree or strongly disagree (n = 101) on this while 42.2% (n = 134) were ambivalent. Only about 19.8% of Iranian nurses' indicated that their nurse managers were supportive of nurses and backed the nursing staff in decision making even if it resulted in conflict with doctors (24.4%, n = 74).

About 31% (n = 97) of Iranian nurses' reported that their nurse managers frequently supervised and guided their work. Only about 12.5% (n = 38) of Iranian nurses' reported that their nurse managers often praised and recognised a job well done. However, 22.1% of Iranian nurses' (n = 67) indicated agree or strongly agree that their hospital administration often listened and responded to employee concerns. Only about 23.8% of Iranian nurses' (n = 72) indicated that they were satisfied with their nurse managers.

Table 4.9: Frequency and Percentage of Iranian Nurses of Satisfaction to Supportive Nursing Management (n = 303).

	Strongly disagree n (%)	**Disagree** n (%)	**Neither agree nor disagree** n (%)	**Agree** n (%)	**Strongly agree** n (%)
My nurse manager is a good manager and leader	70(23.1)	31(10.2)	134(44.2)	38(12.5)	30(9.9)
My nurse manager is supportive of nurses	53(17.5)	62(20.5)	128(42.4)	33(10.9)	27(8.9)
My nurse manager backs up the nursing staff in decision making even in conflicts with doctors	74(24.4)	33(10.9)	122(40.3)	47(15.5)	27(8.9)
My nurse manager frequently supervises and guides nurses in their work	42(13.9)	53(17.5)	111(36.6)	69(22.8)	28(9.2)
My nurse manager often praise and recognize the good job done by staffs	87(28.7)	69(22.8)	109(36)	21(6.6)	17(5.5)
My hospital administration often listens and responds to employee's concerns.	84(27.7)	73(24.1)	79(26.1)	31(10.9)	36(11.9)
I am satisfied with my nurse manager.	93(30.7)	35(11.6)	103(34)	33(10.9)	39(12.9)

Iranian nurses

4.2.2.2.8 Working Condition

Eight items regarding work environment, work load, work schedule and staffing, fair practices, and availability of equipment and facilities were used to evaluate Iranian nurses' satisfaction with their work conditions. The findings are presented in Table 4.10.

Twenty four percent of Iranian nurses' (n = 72) reported that the nursing staff had sufficient control over the scheduling of their own work shifts in their hospitals, while 21.1% of Iranian nurses' (n = 64) reported that their work environment was pleasant, attractive and comfortable. Only about 31.7% of Iranian nurses' (n = 93) indicated agree or strongly agree that nurses in their wards did not need to float to other unit

often, there were 27% (n = 82) who disagree or strongly disagree while 42.7% (n = 128) neither agree nor disagree.

A total of 18.9% (n = 57) Iranian nurses' indicated that there were adequate staff caring for patients in their wards most of the time, while 32% (n = 91) of Iranian nurses' conceded that the availability of equipment and facilities in their ward was satisfactory. Only about 7.9% of Iranian nurses' (n = 24) indicated agree and another 4.3% (n = 13) strongly agree that discrimination and unfairness practices did not happen in their wards, while 60.4% (n = 173) of Iranian nurses' felt that the antithesis was true.

More than half of Iranian nurses' (61.1%, n = 185) indicated disagree or strongly disagree that the workload in their wards was reasonable, with only 20.2% (n = 61) agreeing or strongly agreeing with this statement. Twenty six percent (n = 79) of Iranian nurses' indicated that the knowledge and skills of registered nurses who worked in their wards as satisfactory.

Table 4.10: Frequency and Percentage of Iranian Nurses of Satisfaction to Work Condition (n = 303).

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
The nursing staffs have sufficient control over scheduling their own work shifts in my hospital.	99(32.7)	79(26.1)	53(17.5)	58(19.1)	14(4.6)
My work environment is pleasant, attractive and comfortable.	60(19.8)	96(31.7)	83(27.4)	43(14.2)	21(6.9)
Nurses in my ward do not need to float to another unit so often.	31(10.2)	51(16.8)	128(42.7)	60(19.8)	33(10.9)
There is adequate amount of staffs to give good patient care at most of time.	89(29.4)	62(20.4)	95(31.3)	42(13.9)	15(5.0)
The availability of equipment and facilities in my ward is satisfactory.	42(13.9)	71(23.4)	93(30.7)	81(26.7)	10(5.3)
Discrimination and unfairness practices do not happen in my ward.	94(31)	89(29.4)	83(27.4)	24(7.9)	13(4.3)
The workload in my ward is reasonable.	80(26.4)	105(34.7)	57(18.8)	42(13.9)	19(6.3)
The knowledge and skills of registered nurses working in my ward is satisfactory.	47(15.5)	76(25.1)	101(33.3)	58(19.1)	21(6.9)

Iranian nurses

4.2.2.2.9 Salary

This component of MIOWS contained six items which assessed Iranian nurses' satisfaction on nurses' salary and benefits. Only about 7.3% of Iranian nurses' (n = 22) indicated agree or strongly agree that their present salary was satisfactory, in contrast to 78.3% (n = 237) who disagree or strongly disagree on this item.

Only 6.6% of Iranian nurses' (n = 20) indicated that the latest salary scheme for government nursing services personnel as satisfactory, but 67.3% (n = 204) of Iranian nurses' felt the opposite way. The findings are presented in Table 4.11.

A total of 88.5% (n = 268) Iranian nurses' indicated disagree or strongly disagree that a revised pay scheme for registered nurse was not needed. Similarly, 63.3% (n = 183) of Iranian nurses' indicated disagree or strongly disagree that the pay and benefit they were receiving for their level of responsibility was fairly good compared to private hospitals.

Approximately 68.9% of Iranian nurses' (n = 201) reported disagree or strongly disagree that a number of nursing staff in their hospital were satisfied with their current pay and benefits. Only 11.6% (n = 35) of Iranian nurses' indicated that the present salary increment system practiced in their hospital was fair, but 57.4% (n = 174) strongly disagree, while 16.2% (n = 49) disagree on this aspect.

Table 4.11: Frequency and Percentage of Iranian Nurses of Satisfaction to Salary (n = 303)

	Strongly disagree n (%)	**Disagree** n (%)	**Neither agree nor disagree** n (%)	**Agree** n (%)	**Strongly agree** n (%)
My present salary is satisfactory.	152(50.2)	85(28.1)	44(14.5)	20(6.6)	2(0.7)
The latest salary scheme for nursing services personnel by the government is satisfactory.	156(51.5)	48(15.8)	79(26.1)	18(5.9)	2(0.7)
An up grading of pay scheme for registered nurse is not needed.	226(74.6)	42(13.9)	18(5.9)	13(4.3)	4(1.3)
The pay and benefit I am getting for my level of responsibility is fairly good compared to private hospital.	131(43.2)	52(20.1)	98(32.3)	21(6.9)	1(0.3)
A lot of nursing staffs in this hospital are satisfied with their pay and benefits.	140(48.8)	61(20.1)	72(23.8)	21(6.9)	1(0.3)
The present salary increment system that has been practiced in my hospital is fair.	174(57.4)	49(16.2)	45(14.9)	32(10.6)	3(1.0)

Iranian nurses

The midpoint score of the job satisfaction scale for each component of MIOWS was used as the reference for determining nurses' job satisfaction. Therefore, mean score higher than midpoint was considered as satisfied and mean score exactly on the midpoint and lower than the midpoint as dissatisfied.

The mean scores for autonomy (mean 19.01; midpoint 18), task requirement (mean 21.01; midpoint 21), and work interaction (mean 36.01; midpoint 36) components were slightly higher than midpoint scores as shown in Table 4.12. The mean scores for the six components were lower than their respective midpoint scores (salary: mean 10.87, midpoint 18, work condition: mean 20.69, midpoint 24, professional development: mean16.80, midpoint18, professional status: mean 23.00, midpoint 24, decision making: mean 17.39, midpoint 21, and supportive nursing management: mean 18.74, midpoint 21).

Table 4.12: Descriptive Statistics of Components of MIOWS (Iran Part)

	No. of item	Midpoint score	Mean	SD	Min. Score	Max. Score
Task Requirement	7	21	21.01	5.01	7	35
Work Interaction	12	36	36.01	7.69	12	60
Decision Making	7	21	17.39	6.68	7	35
Autonomy	6	18	19.01	4.65	6	30
Professional Development	6	18	16.80	5.02	6	30
Professional Status	8	24	23.00	6.64	8	40
Supportive Nursing Management	7	21	18.74	4.23	7	35
Work Condition	8	24	20.69	6.77	8	40
Salary	6	18	10.87	4.81	6	30
Overall Job Satisfaction Score	67	201	183.53	42.87	67	335

Note: the mean score of each domain higher than the natural score provided the highest level of satisfaction. The lowest possible overall score is 67, and the highest possible overall score is 335.

4.2.2.3 Iranian Nurses' Demographic Characteristics and Overall Job Satisfaction Score

The demographic differences for Iranian nurses in all components of MIOWS are shown in Table 4.13 and Table 4.14.

4.2.2.3.1 Age Group

Analysis of one-way ANOVA showed that Iranian nurses in the 25−29 age group had significantly higher scores on the decision-making and professional development components compared to registered nurses in the 35 and above age group ($p > 0.05$). Iranian nurses in the 25−29 age group also had higher scores for work conditions, autonomy and salary components compared to other age groups.

As shown in Table 4.14, Iranian nurses in the 25−29 age group (196.09±36.16) were found to have significantly higher overall job satisfaction score than registered nurses in the 30−34 age group (174.50±36.40) and then those aged 40 years and above (167.52±35.86, $p < 0.05$).

4.2.2.3.2 Gender

The results of independent-samples t-test indicated that Iranian female nurses scored significantly higher on professional status (23.71±5.96), work conditions (21.21±6.47), task requirement (20.55±5.04), salary (11.14±4.46), supportive nursing management (19.45±7.34), and work interaction (35.18±7.07) components than their male colleagues ($p < 0.05$). As shown in Table 4.14, the overall job satisfaction score for females (184.11±41.25) was significantly higher than that of males (164.61±46.40, $p < 0.05$).

4.2.2.3.3 Marital Status

The results of independent-samples t-test showed that compared to unmarried Iranian nurses, the married nurses scored significantly higher on task requirement (20.65±4.91), autonomy (19.24±4.61), decision-making (17.82±6.96), work interaction (35.28±7.28), professional development (17.07±5.32), supportive nursing management (19.66±7.65), work condition (21.46±6.74) and salary (11.12±5.08) components (Table 4.13).

As shown in Table 4.14, Iranian married nurses had significantly higher overall job satisfaction score (185.08±42.99) than nurses who were single (162.4±1, SD 37.56, $p < 0.05$).

4.2.2.3.4 Educational Level

The results of independent-samples t-test indicated that there were no statistically significant differences scores on nine components of the MIOWS and overall job satisfaction score between educational levels.

4.2.2.3.5 Years of Working Experience

The results of independent-samples t-test showed that Iranian nurses with less than six years of working experience had significantly higher scores than those with more than six years of working experience on the following components of the MIOWS: autonomy (19.39±3.68), professional development (18.01±4.64), work conditions (23.35±7.03) and professional status (25.06±6.73). As shown in Table 4.14, Iranian nurses with a working experience of less than six years were found to have significantly higher overall job satisfaction score (191.75±17.22) than more experienced nurses (176.66±42.24, $p < 0.05$).

4.2.2.3.6 Work Unit

A one-way ANOVA showed that there were statistically significant differences for scores on work interaction, task requirement, autonomy and salary components between Iranian nurses working in medical, surgical and critical care units. Post hoc comparison using Tukey's test showed that Iranian medical ward nurses had significantly higher scores on the task requirement; autonomy and work interaction components ($p < 0.05$) compared to surgical and critical care units nurses. Both Iranian medical and surgical ward nurses scored higher scores for the salary component compared to critical care units' nurses ($p < 0.05$). As shown in Table 4.14, there were no statistically significant differences for overall job satisfaction score between Iranian nurses are working in medical, surgical and critical care units.

Table 4.13: Socio-demographic Difference on the Nine Components of the MIOWS (Iran Part)

Socio-demographic variables	No.	Task requirement	Work interaction	Decision making	Autonomy	Professional development	Professional status	Supportive nursing management	Work condition	Salary
		Mean ± SD								
Gender										
Male	57	18.68 ± 4.61*	30.56 ± 9.11*	17.49 ± 5.95	18.01 ± 3.17	16.77 ± 3.54	19.26 ± 8.11*	15.68 ± 7.81*	18.47 ± 7.63*	9.68 ± 5.36*
Female	246	20.55 ± 5.04	35.18 ± 7.07	17.36 ± 6.84	16.77 ± 3.54	16.81 ± 5.42	23.71 ± 5.96	19.45 ± 7.34	21.21 ± 6.47	11.14 ± 4.46
Age										
25-29	53	21.11 ± 4.08*	36.50 ± 4.56	18.28 ± 4.84*	20.77 ± 4.34*	19.01 ± 4.86*	24.41 ± 5.98	19.77 ± 5.25*	22.83 ± 5.08*	13.37 ± 4.39*
30-34	99	19.15 ± 4.85	33.10 ± 9.71	19.14 ± 7.97	18.60 ± 5.08	18.01 ± 5.01	22.93 ± 7.48	19.98 ± 8.79	21.31 ± 8.25	11.07 ± 5.07
35-39	120	20.88 ± 5.80	34.57 ± 7.40	16.53 ± 5.53	17.72 ± 4.21	15.01 ± 4.82	21.96 ± 6.62	17.86 ± 7.24	19.65 ± 6.25	9.81 ± 4.11
40 and above	31	19.38 ± 2.36	33.41 ± 4.52	13.61 ± 7.07	17.64 ± 4.25	14.16 ± 4.66	23.61 ± 4.10	16.45 ± 7.17	19.129 ± 4.89	10.09 ± 5.64
Marital statues										
Single	62	18.43 ± 5.02*	30.53 ± 8.16*	15.70 ± 5.17*	15.81 ± 3.73*	15.72 ± 4.08*	23.45 ± 6.88	15.17 ± 6.04*	17.69 ± 6.08*	9.87 ± 3.42*
Married	241	20.65 ± 4.91	35.28 ± 7.28	17.82 ± 6.96	19.24 ± 4.61	17.07 ± 5.32	22.73 ± 6.58	19.66 ± 7.65	21.46 ± 6.74	11.12 ± 5.08
Level of education										
Diploma	19	19.01 ± 5.46	28.78 ± 13.09	18.10 ± 8.81	18.31 ± 3.83	17.05 ± 3.76	17.84 ± 11.12	16.26 ± 10.85	19.05 ± 10.71	11.31 ± 6.03
Bachelors	284	20.285 ± 4.97	34.68 ± 7.81	17.34 ± 6.53	18.55 ± 4.70	16.77 ± 5.21	23.21± 6.11	18.91 ± 7.28	20.81 ± 6.44	10.84 ± 4.27
Years of working Experience										
≤6 years	76	20.02 ± 4.85	35.52 ± 8.39	18.94 ± 7.04	19.39 ± 3.68*	18.01 ± 4.64*	25.06 ± 6.73*	20.02 ± 6.50	23.35 ± 7.03*	11.41 ± 4.30
>6 years	227	20.26 ± 5.07	33.90 ± 7.42	16.87 ± 6.48	18.25 ± 4.90	16.39 ± 5.22	22.14 ± 6.49	18.32 ± 7.85	19.80 ± 6.46	10.69 ± 5.41
Work unit										
Medical ward	103	21.48 ± 5.16*	36.44 ± 8.99*	17.54 ± 6.24	19.61 ± 4.11*	17.11 ± 5.61	22.11 ± 5.89	18.97 ± 7.51	21.23 ± 7.22	12.45 ± 5.43*
Critical care unit	122	19.72 ± 4.46	33.91 ± 5.91	16.86 ± 7.74	18.68 ± 4.86	17.01 ± 5.39	23.53 ± 6.93	19.37 ± 7.57	20.69 ± 6.45	9.40 ± 3.64
Surgical unit	78	19.26 ± 5.32	34.31 ± 7.68	18.02 ± 5.31	16.91 ± 4.59	16.05 ± 3.82	22.87± 7.07	17.47 ± 7.55	19.98 ± 6.68	11.07 ± 4.86

*$p < 0.05$; **$p < 0.01$

4.2.2.4 Demographic Characteristics Correlates to the Iranian Nurses 'Overall Job Satisfaction Score

4.2.2.4.1 Multiple Analyses (Iran part)

Using multiple linear regression analysis, all significant associations ($P<0.05$) from univariate analyses were entered into the model. Gender ($\beta = 23.84$, $p < 0.01$), age ($\beta = 11.20$, $p < 0.01$), and marital status ($\beta = 33.49$, $p < 0.01$) were found to be significant correlates of overall job satisfaction score (Table 4.14). The adjusted R^2 for this model was 0.14, which indicates that 14% of the variations in overall job satisfaction score can be explained by the correlates variables in the model. The regression model was highly significant, $F(4,299) = 13.19$, $p < 0.001$.

Table 4.14: Socio-demographic Characteristics Correlates to the Iranian Nurses Overall Job Satisfaction Score

Socio-demographic characteristics	No.	Overall job satisfaction Mean ± SD	Multiple Linear Regression F(4,299)=13.19, p<0.001, Adjusted Square R=0.14, β(SE)
Gender			
Male	57	164.61 ± 46.40*	References
Female	246	184.11 ± 41.25	23.84(5.96)**
Age			
25-29	53	196.09 ± 36.16*	11.20(0.49)**
30-34	99	183.31 ± 52.26	-
35-39	120	174.50 ± 36.40	-
40 and above	31	167.52 ± 35.86	-
Marital statues			
Single	62	162.41 ± 37.56*	References
Married	241	185.08 ± 42.99	33.49(5.95)**
Level of education			
Diploma	19	165.74 ± 68.87	-
Bachelors	284	181.14 ± 40.55	-
Years of working experience			
≤6 years	76	191.75 ± 17.22*	References
>6 years	227	176.66 ± 42.24	−10.19(5.90)
Work unit			
Medical ward	103	186.97 ± 42.11	-
Critical care	122	179.19 ± 43.20	-
Surgical unit	78	173.78 ± 42.68	-

Note: Mean age was entered into the model.
**P value <0.01

4.3 Quantitative Results: Malaysia Part

4.3.1 Sample Characteristics (Malaysia Part)

Details of the demographic characteristics for the entire sample are summarised in Table 4.15. There were more females than males in this study. The age ranges for Malaysian nurses were from 21 to 54 years, with a mean age of 30.5 years (SD±8.0). Almost half of the Malaysian nurses were married (54.7%, *n* = 179). Most of the Malaysian nurses possessed diplomas (87.2%, *n* = 285). More than half of the Malaysian nurses (59.3%, *n* = 194) had a working experience of six years or less. More than one-third of the Malaysian nurses were from the medical ward (38.2%, *n* =125) and about 27% of Malaysian nurses were from surgical wards.

Table 4.15: Distribution of Socio-demographic Characteristics of Malaysian Nurses (n = 327)

	Frequency	%
Gender		
Male	25	7.6
Female	302	92.4
Age		
20-29	202	61.8
30-39	57	17.4
40 and above	68	20.8
Marital status		
Single	148	45.2
Married	179	54.8
Ethnicity		
Malay	305	93.3
Non-Malay	22	6.7
Level of education		
Diploma	285	87.2
Post Basic	35	10.7
Bachelors	7	2.1
Years of experience		
≤6 years	194	59.3
>6 years	133	40.7
Work unit		
Medical ward	125	38.2
Critical care units	112	34.2
Surgical unit	90	27.6

Malaysian nurses

4.3.2 Analysis of Finding

This section consists of the research questions that guided this study. Each question is followed by a description of the analysis used and a review of the findings of the particular question.

4.3.2.1 Level of Malaysian Nurses Overall Job Satisfaction Score

In order to answer the first question, an overall measure of Malaysian nurses overall job satisfaction score was determined by calculating total scores for all the 67 questions in the Modified – Index of Work Satisfaction (MIOWS). The overall job satisfaction score for Malaysian nurses is shown in Table 4.16. The Malaysian nurses had an overall job

satisfaction score of 228.68 out of possible 335 score. A total of 290 Malaysian nurses (88.7%) had an overall job satisfaction score above the midpoint score of 201, while 37 Malaysian nurses (12.3%) score below the midpoint score.

Table 4.16: Level of Malaysian Nurses Overall Job Satisfaction Score (n = 327).

Interpretation	Score	Frequency (n)	Percentage (%)
Dissatisfied	67-201	290	88.7
Satisfied	202-335	37	11.3
Total		**327**	**100**

Malaysian nurses

4.3.2.2 Level of Malaysian Nurses Satisfaction on the Nine Components of the MIOWS

The analysis in this section examines the level of satisfaction of Malaysian nurses on the nine components of the MIOWS scores. The nine components of the MIOWS comprise of task requirement, work interaction, decision-making, autonomy, professional development, professional status, supportive nursing management, work condition and pay. Table 4.17 to Table 4.26 show the result of the analysis related to the Malaysian nurses' satisfaction levels on the nine components of the MIOWS.

4.3.2.2.1 Task Requirement

This component of MIOWS evaluated participants' satisfaction on seven items regarding daily or routine registered nurse tasks. Data in Table 4.17 shows that majority of Malaysian nurses (n=296, 90.5%) reported that they had opportunities to use their skills effectively. A total of 86% (n = 281) Malaysian nurses indicated that they were satisfied with the tasks or activities demanded by their jobs, with 84.7% (n = 277) of Malaysian nurses indicating definite liking for their work.

A total of 85.4% (n = 279) of Malaysian nurses whom participated indicated that they were satisfied with the nursing care they provided patients. Less than half of the Malaysian nurses who participated (35.7%, n = 117) reported that the amount of time they spend on paper work was reasonable.

Malaysian nurses who strongly agree or agree (n=168, 51.3%) that they had enough time for direct patient care than those who strongly disagree or disagree (n=71, 21.7%). A total of 35.8% (n = 117) Malaysian nurses reported that they had plenty of time and opportunities to discuss patient problems with other nursing service personnel.

Table 4.17: Frequency and Percentage of Malaysian Nurses Satisfaction to Task Requirement (n = 327)

	Strongly disagree **n (%)**	**Disagree** **n (%)**	**Neither agree nor disagree** **n (%)**	**Agree** **n (%)**	**Strongly agree** **n (%)**
I have opportunities to use my skills effectively.	-	3 (0.9)	28(8.6)	208(63.6)	88(26.9)
I am satisfied with the types of activities that I do on my job.	6(1.8)	7(2.1)	33(10.1)	216(66.1)	65(19.9)
I definitely like my work.	-	2(0.6)	48(14.7)	162(49.5)	115(35.2)
I am satisfied with the nursing care I provide to my patient.	-	11(3.4)	37(11.3)	200(61.2)	79(24.2)
The amount of time spent on paperwork is reasonable.	27(8.3)	71(21.7)	112(34.3)	109(33.3)	8(2.4)
I have enough time to give good direct patient care.	20(6.1)	51(15.6)	88(26.9)	144(44.0)	24 (7.3)
I have plenty of time and opportunity to discuss patient's problems with other nursing service personnel.	12(3.7)	78(23.9)	120(36.7)	104(31.8)	13(4.0)

Malaysian nurses

4.3.2.2.2 Work Interaction

In order to determine Malaysian nurses' satisfaction in relation to work interaction, twelve items regarding to nurse−nurse interaction and nurse−physician interaction were

developed. Data in Table 4.18 show that the majority of Malaysian nurses (83.8%, n = 274) reported that there a good deal of team work and cooperation existed between various levels of nursing personal on their services. A total of 83.1% of Malaysian nurses (n = 272) reported that the nurses in their units supported each other. Malaysian nurses who strongly agree or agree (68.8%) that, it is easy for new nurses to feel "at home" in their wards than those who disagree (3.1%). A total of 90.5% Malaysian nurses (n = 296) reported that nursing staff helped each other when things were busy.

A total of 87.4% of Malaysian nurses (n = 286) indicated agree or strongly agree that the nursing staff interacted, but 1.8% (n = 6) of Malaysian nurses felt the opposite way. Less than one-third of the Malaysian nurses (24.8%, n = 81) indicated disagree or strongly disagree that “rank consciousness” prevailed on their units, with nursing personnel seldom mingling with others of lower ranks, but 49.5% (n = 162) of Malaysian nurses reported they agree or strongly agree of the statement.

Malaysian nurses strongly agree or agree (70.4%) that, the doctors were generally cooperative with nursing staff while there were only 6.1% (n=20) who strongly disagree or agree. About 68.2% (n =223) of Malaysian nurses attested to good teamwork between nurses and doctors and 66.1% (n = 216) of Malaysian nurses reported that the doctors and nurses had good working relationships. A total 40.3% (n = 132) of Malaysian nurses reported that the doctors in their hospital generally appreciated the roles of the nursing staffs.

Nearly two-third of the Malaysian nurses (62.1, n=203) reported they are satisfied with their interactions with doctors. However, 91% (n = 298) of Malaysian nurses mentioned that they wished physicians would show more respect for the skills and knowledge of the nursing staff.

Table 4.18: Frequency and Percentage of Malaysian Nurses Satisfaction to Work Interaction (n = 327)

	Strongly disagree n (%)	**Disagree** n (%)	**Neither agree nor disagree** n (%)	**Agree** n (%)	**Strongly agree** n (%)
There is a good deal of teamwork and cooperation between various levels of nursing personnel on my service.	1 (0.3)	11(3.4)	41(12.5)	204(62.4)	70(21.4)
The nurses in my unit support each other	2(0.6)	13(4.0)	40(12.2)	179(54.7)	93(28.4)
It is easy for new nurses to feel "at home" in my ward	-	10(3.1)	92(28.1)	176(53.8)	49(15.0)
Nursing staff help each other when things get in a rush	-	6(1.8)	25(7.6)	204(62.4)	92(28.1)
I am satisfied with the interactions among the nursing staff	-	6(1.8)	35(10.7)	215(65.7)	71(21.7)
There is a lot of “rank consciousness” on my unit. Nursing personnel seldom mingle with others of lower ranks.	18(5.5)	63(19.3)	84(25.7)	107(32.7)	55(16.8)
The doctors are general cooperative with nursing staff.	6(1.8)	14(4.3)	77(23.5)	218 (66.7)	12(3.7)
There is a lot of teamwork between nurses and doctors	1(0.3)	25(7.6)	78(23.9)	209 (63.9)	14(4.3)
The doctors and nurses have good working relationship	3(0.9)	17(5.2)	91(27.8)	202(61.8)	14(4.3)
The doctors in this hospital generally appreciate what the nursing staffs do	8(2.4)	59(18)	128(39.1)	126(38.5)	6(1.8)
I am satisfied with my interactions with doctors	4(1.2)	32(9.8)	88(26.9)	191(58.4)	12(3.7)
I wish the physicians here would show more respect for the skill an knowledge of the nursing staff	-	2(0.6)	27(8.3)	121(37)	177(54)

Malaysian nurses

4.3.2.2.3 Decision-Making

Seven items were developed to measure Malaysian nurses satisfaction on management policies and practices related to decision-making. Data in Table 4.19 showed that 46.8% of the Malaysian nurses (n = 153) reported that there was ample opportunity for nursing staff to participate in administrative decision-making at the ward.

More than half of the Malaysian nurses (63.4%, n = 207) indicated that they agree or strongly agree with the level of nurses' participation in decision-making in their wards, but 8.9% (n = 29) disagree with this statement. Forty nine percent (n = 160) of Malaysian nurses reported that they had their say in planning policies and procedures for their wards.

Forty three percent (n = 175) of Malaysian nurses reported that they had the freedom to make important decisions at work. Malaysian nurses who strongly agree or agree (41.3%) that the nursing administrates generally consulted with the staff on daily issues.

More than half of the Malaysian nurses (50.8 %, n = 166) reported that they were able to count on nursing administration to back them up while 29% (n = 95) of Malaysian nurses indicated disagree that administration decisions at their hospital interfered too much with patient care.

Table 4.19: Frequency and Percentage of Malaysian Nurses Satisfaction to Decision Making (n = 327)

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
There is ample opportunity for nursing staff to participate in administrative decision-making at ward level.	1(0.3)	54(16.5)	119(36.4)	113(34.6)	40(12.2)
I am satisfied with level of nurse's participation in decision-making in my ward.	-	29(8.9)	91(27.8)	181(55.4)	26(8.0)
I have all the voice I want in planning policies and procedure for my ward.	2 (0.6)	41(12.5)	124(37.9)	138(42.2)	22(6.7)
I have the freedom to make important decisions in my work.	2 (0.6)	42(12.8)	108(33)	160(48.9)	15(4.6)
Nursing administrators generally consult with the staffs on daily problems.	12(3.7)	49(15)	131(40.1)	117(35.8)	18(5.5)
I can count on nursing administrators to back me up.	8(2.4)	41(12.5)	112(34.3)	138(42.2)	28(8.6)
Administrative decisions at this hospital interfere too much with patient care.	22(6.7)	73(22.3)	136(41.6)	71(21.7)	25(7.6)

Malaysian nurses

4.3.2.2.4 Autonomy

Malaysian nurses were asked to response to six items measuring job freedom and the ability to take initiatives and working independently on the job. Data presented in Table 4.20 shows that majority of the Malaysian nurses (81.4%, n = 266) reported that they had good control over their work. Sixty four percent of Malaysian nurses (n = 211) indicated agree or strongly agree that they had the freedom to make important patient care decisions.

An estimated 80.1% of the Malaysian nurses (n = 262) reported that they received sufficient information regarding their patients care plans, while 78.6% of the Malaysian

nurses (n = 257) indicated agree or strongly agree that they were free to adjust their daily practice to fit individual patient needs. Malaysian nurses who strongly agree or agree (44.3%, n = 144) that they actively participated in developing their work schedules (days off and shifts duties) than those who strongly disagree or disagree19.6% (n = 64). Fifty three percent of Malaysian nurses (n = 176) indicated that they were not placed in the position of having to act against their nursing judgment.

Table 4.20: Frequency and Percentage of Malaysian Nurses Satisfaction to Autonomy (n = 327).

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
I have good control over my own work.	-	3(0.9)	58(17.7)	221(67.6)	45(13.8)
I have freedom to make important patient care and work decisions.	-	27(8.3)	89(27.2)	184(56.3)	27(8.3)
I receive sufficient information regarding my patient care plan.	17(5.2)	8(2.4)	57(17.4)	232(70.9)	30 (9.2)
I am free to adjust my daily practice to fit patients' needs.	5(1.5)	5(1.5)	65(14.9)	219(67)	38(11.6)
I actively participate in developing my work schedules (days off and shifts duties).	-	64(19.6)	102(31.2)	121(37)	23(7.3)
I have not being placed in a Position of having to do things that are against my Nursing judgment.	5(1.5)	36(11)	110(33.6)	152(46.5)	24(7.3)

Malaysian nurses

4.3.2.2.5 Professional Development

The six items in this component of MIOWS aimed to evaluate Malaysian nurses' satisfaction with regards to opportunities for professional development with finding as

presented in Table 4.21. Malaysian nurses who strongly agree or agree (69.1%) that they had access to continuing professional education in nursing than those who strongly disagree or disagree (7.0%).

Seventy three percent (n=226) of the Malaysian nurses reported that they had opportunities for career development, if they performed well. Majority of Malaysian nurses (65.4%) reported that they had fair opportunity to attend seminars/conferences or workshops.

A total of 80.4% (n = 263) of Malaysian nurses indicated agree or strongly agree that they had opportunity to learn new skills and 87.1% (n = 285) of the Malaysian nurses indicated agree or strongly agree that there were quality preceptor program for newly qualified nurses.

Malaysian nurses who strongly agree and agree (49.9%) that the opportunities for promotion or career advancement based on achievement of the "Sasaran Kerja Tahunan"(key performance indicators) was fair than those who strongly disagree and disagree (12.6%).

Table 4.21: Frequency and Percentage of Malaysian Nurses of Satisfaction to Professional Development (n = 327).

	Strongly disagree n (%)	Disagree n (%)	Neither agree nor disagree n (%)	Agree n (%)	Strongly agree n (%)
I have access for continuing professional education in nursing	2(0.6)	21(6.4)	78(23.9)	185(56.6)	41(12.5)
If I perform well, I have opportunities for career development	1(0.3)	12(3.7)	72(22)	185(56.6)	57(17.4)
I have fair opportunity to attend seminar/conferences or workshop	9(2.8)	28(8.8)	76(23.2)	172(52.6)	42(12.8)
I have opportunity to learn new skills	2(0.6)	11(3.4)	51(15.6)	212(64.8)	51(15.6)
There is a quality preceptor program for newly qualified nurses	1(0.3)	5(1.5)	36(11.1)	209(63.9)	76(23.2)
The opportunity for promotion or career advancement based on achievement of "SasaranKerjaTahunan" is fair	11(3.4)	30(9.2)	123(37.6)	135(41.3)	28(8.6)

Malaysian nurses

4.3.2.2.6 Professional Status

Malaysian nurses were asked to respond to eight items on professional status. Table 4.22 shows the analysis of this component. The information for this table indicates that more than half of the Malaysian nurses (59.3%, n = 194) indicated agree or strongly agree that given a choice, they would still choose nursing as their career.

Approximately, 20.8% of Malaysian nurses (n = 68) reported that the statement that most people do not sufficiently appreciate the importance of nursing care to hospital patients. A total of 31.2% Malaysian nurses (n = 102) reported that staff in other departments appreciate nurses and about 55.7% (n = 182) of Malaysian nurses affirmed that patient and their families acknowledged nurses' contribution to their care.

Table 4.22: Frequency and Percentage of Malaysian Nurses of Satisfaction to Professional Status (n = 327)

	Strongly disagree **n (%)**	**Disagree** **n (%)**	**Neither agree nor disagree** **n (%)**	**Agree** **n (%)**	**Strongly agree** **n (%)**
If I had the choice again, I would still choose nursing as my career	5(1.5)	33(10.1)	95(29.1)	129(39.4)	65(19.9)
Most people do not sufficiently appreciate the importance of nursing care to hospital patients	53(16.2)	132(40.4)	74(22.6)	45(13.8)	23(7.0)
Staffs in other departments appreciate nursing	21(6.4)	63(19.3)	141(43.1)	93(28.4)	9(2.8)
Patients and their family acknowledge nurses' contribution to their care	10(3.1)	41(12.5)	94(28.7)	170(52)	12(3.7)
I am proud to talk to other people about my job	1(0.3)	18(5.5)	47(14.4)	175(53.5)	86(26.3)
I am satisfied with the status of nursing in the hospital	4(1.2)	46(14.1)	68(20.8)	170(52.0)	39(11.9)
My work contributes to a sense of personal achievement	2(0.6)	11(3.4)	44(13.5)	185(56.6)	85(26)
What I do on my job does not add up to anything really significant	17(5.2)	90(27.5)	101(30.9)	85(26)	34(10.4)

Malaysian nurses

More than half of Malaysian nurses (79.8%, n = 261) indicated that they were proud to talk to other people about their jobs. A total of 63.9% of Malaysian nurses (n =209) reported that they were satisfied with their statues of nursing in the hospital. Meanwhile, 82.6% of the Malaysian nurses (n = 270) indicated that their work contributed to a sense of personal achievement. Almost thirty six percent of Malaysian nurses (n = 119) reported that what they did on the job did not add actual significant.

4.3.2.2.7 Supportive Nursing Management / Administration

Seven items were used to determine the Malaysian nurses' satisfaction in relation to nursing management / administrative support and some of the leadership characteristics

of nurse managers'. This component aimed to evaluate registered nurses' satisfaction on nursing management/administrative support and some of the leadership characteristic of nurse managers. The results are as shown in Table 4.23.

Fifty seven percent of Malaysian nurses (n = 220) reported that their nurse manager was a good manager and leader. More than half of the Malaysian nurses (64.5%) indicated that their nurse managers were supportive of nurses and backed the nursing staff in decision making even if it resulted in conflict with doctors.

About 58.4% (n = 191) of the Malaysian nurses indicated that their nurse managers frequently supervised and guided their work. More than half of the Malaysian nurses (65.1%) reported that their nurse managers often praised and recognised a job well done.

Malaysian nurses who strongly agree or agree (43.7%) that their hospital administration often listened and responded to employee concerns than those who strongly disagree or disagree (8.8%). More than half of the Malaysian nurses (59.7%, n = 195) indicated that they were satisfied with their nurse managers.

Table 4.23: Frequency and Percentage of Malaysian Nurses of Satisfaction to Supportive Nursing Management (n = 327).

	Strongly disagree n (%)	**Disagree** n (%)	**Neither agree nor disagree** n (%)	**Agree** n (%)	**Strongly agree** n (%)
My nurse manager is a good manager and leader	9(2.8)	23(7.0)	75(22.9)	160(48.9)	60(18.3)
My nurse manager is supportive of nurses	6(2.0)	26(8.1)	83(25.4)	153(46.4)	59(18.1)
My nurse manager backs up the nursing staff in decision making even in conflicts with doctors	7 (2.1)	27(8.3)	102 (31.2)	151(46.2)	40(12.2)
My nurse manager frequently supervises and guides nurses in their work	3(0.9)	22(6.7)	89(27.2)	179(54.7)	37(10.4)
My nurse manager often praise and recognize the good job done by staffs	5(1.5)	24 (7.3)	124(37.9)	142(43.5)	32(9.8)
My hospital administration often listens and responds to employee's concerns.	19 (5.8)	42(12.8)	128(39.1)	121(37.0)	17(5.2)
I am satisfied with my nurse manager.	5(1.5)	17(5.2)	110(33.6)	148(45.3)	47(14.4)

Malaysian nurses

4.3.2.2.8 Working Condition

Eight items regarding work environment, work load, work schedule and staffing, fair practices, and availability of equipment and facilities were used to evaluate Malaysian nurses' satisfaction with their work conditions. The findings are presented in Table 4.24. Twenty five percent of Malaysian nurses (n = 82) reported that the nursing staff had sufficient control over the scheduling of their own work shifts in their hospitals, while 48.3% of the Malaysian nurses (n = 158) indicated disagree or strongly disagree that their work environment was pleasant, attractive and comfortable.

Malaysian nurses strongly agree or agree (32.7%) that nurses in their wards did not need to float to other unit often, while 26% of the participants reported disagree or strongly

disagree (26%). A total of 20.5% (n = 67) Malaysian nurses indicated that there were adequate staff caring for patients in their wards most of the time, while 32.7% (n = 101) of Malaysian nurses conceded that the availability of equipment and facilities in their ward was satisfactory.

Only about 12.2% of the Malaysian nurses (n = 40) indicated agree and another 4.3% (n = 14) strongly agree that discrimination and unfairness practices did not happen in their wards, while 56.2% (n = 184) of Malaysian nurses felt that the antithesis was true. Less than one-third of the Malaysian nurses (22.6%, n = 74) reported that the workload in their wards was reasonable. Thirty percent (n = 98) of Malaysian nurses indicated that the knowledge and skills of registered nurses who worked in their wards as satisfactory.

Table 4.24: Frequency and Percentage of Malaysian Nurses of Satisfaction to Work Condition (n = 327).

	Strongly disagree n (%)	**Disagree n (%)**	**Neither agree nor disagree n (%)**	**Agree n (%)**	**Strongly agree n (%)**
The nursing staffs have sufficient control over scheduling their own work shifts in my hospital.	100(30.6)	83(25.4)	62(19)	67(20.5)	15(4.6)
My work environment is pleasant, attractive and comfortable.	60(18.3)	98(30.0)	86(26.3)	60(18.3)	23(7.0)
Nurses in my ward do not need to float to another unit so often.	32(9.8)	53(16.2)	135(41.3)	71(21.7)	36(11)
There is adequate amount of staffs to give good patient care at most of time.	92(28.1)	68(20.8)	100(30.6)	52(15.9)	15(4.6)
The availability of equipment and facilities in my ward is satisfactory.	44(13.5)	76(23.2)	100(30.6)	91(27.8)	10(4.9)
Discrimination and unfairness practices do not happen in my ward.	94(28.7)	90(27.5)	89(27.2)	40(12.2)	14(4.3)
The workload in my ward is reasonable.	81(24.8)	110(33.6)	62(19)	55(16.8)	19(5.8)
The knowledge and skills of registered nurses working in my ward is satisfactory.	47(14.4)	79(24.2)	103(31.5)	77(23.5)	21(6.4)

Malaysian nurses

4.3.2.2.9 Salary

This component of MIOWS contained six items which assessed Malaysian nurses' satisfaction on nurses' salary and benefits. Only about 40.7% of the Malaysian nurses (n = 133) reported that their present salary was satisfactory. Only 33.1% of the Malaysian nurses (n = 108) indicated that the latest salary scheme for government nursing services personnel as satisfactory, but 44.1% (n = 141) of Malaysian nurses felt the opposite way. The findings are presented in Table 4.26.

A total of 78.9% (n = 258) Malaysian nurses indicated disagree or strongly disagree that a revised pay scheme for registered nurse was not needed. Similarly, 46.8% (n = 153) of the Malaysian nurses indicated disagree or strongly disagree that the pay and benefit they were receiving for their level of responsibility was fairly good compared to private hospitals. Approximately 49.8% of Malaysian nurses (n = 163) indicated disagree or strongly disagree that a number of nursing staff in their hospital were satisfied with their current pay and benefits. Only 26.6% (n = 87) of Malaysian nurses indicated that the present salary increment system practiced in their hospital was fair.

Table 4.25: Frequency and Percentage of Malaysian Nurses of Satisfaction to salary (n = 327)

	Strongly disagree n (%)	**Disagree** n (%)	**Neither agree nor disagree** n (%)	**Agree** n (%)	**Strongly agree** n (%)
My present salary is satisfactory.	19(15)	86(26.3)	59(18)	119(36.4)	14(4.3)
The latest salary scheme for nursing services personnel by the government is satisfactory.	50(15.3)	91(27.8)	78(23.9)	99(30.3)	9(2.8)
An up grading of pay scheme for registered nurse is not needed.	132(40.4)	126(38.5)	36(11.0)	27(8.3)	6(1.8)
The pay and benefit I am getting for my level of responsibility is fairly good compared to private hospital.	54(16.5)	99(30.3)	90(27.5)	77(23.5)	7(2.1)
A lot of nursing staffs in this hospital are satisfied with their pay and benefits.	60(18.3)	103(31.5)	104(31.8)	54(16.5)	6(1.8)
The present salary increment system that has been practiced in my hospital is fair.	45(13.8)	74(22.6)	121(37)	79(24.2)	8(2.4)

Malaysian nurses

The midpoint score of the job satisfaction scale for each component of MIOWS was used as a baseline reference to determine overall job satisfaction score. Therefore, mean

score higher than midpoint was considered as satisfied and mean score exactly on the midpoint and lower than midpoint as dissatisfied.

The mean scores for seven components autonomy (mean 22.02; midpoint 18), task requirement (mean 25.81; midpoint 21), work interaction (mean 45.60; midpoint 36), professional development (mean 22.36; midpoint 18), professional status (mean 27.36; midpoint 24), decision−making (mean 23.58; midpoint 21) and supportive nursing management (mean 25.13; midpoint 21) were higher than their midpoint scores as shown in Table 4.26.

The mean scores for salary (mean 15.54; midpoint 18) and work condition (mean 21.16; midpoint 24) components were lower than their respective midpoint scales.

Table 4.26: Descriptive Statistics of the Nine Components of MIOWS (Malaysia Part).

	No. of Item	**Midpoint score**	**Mean**	**SD**	**Min. score**	**Max. score**
Task requirement	7	21	25.81	3.94	7	35
Work interaction	12	36	45.60	4.66	12	60
Decision making	7	21	23.58	3.68	7	35
Autonomy	6	18	22.02	2.76	6	30
Professional development	6	18	22.36	3.31	6	30
Professional Status	8	24	27.36	3.65	8	40
Supportive nursing management	7	21	25.13	4.91	7	35
Work condition	8	24	21.16	6.81	8	40
Salary	6	18	15.54	5.02	6	30
Overall job satisfaction score	67	201	228.8	21.51	67	335

Note: the mean score of each domain higher than the midpoint score provided the highest level of satisfaction. The lowest possible overall score is 67, and the highest possible overall score is 335.

4.3.2.3 Malaysian Nurses' Demographic Characteristics and Overall Job Satisfaction Score

The demographic differences of Malaysian nurses in the nine components of MIOWS are shown in Table 4.27 and Table 4.28.

4.3.2.3.1 Age Group

One way ANOVA showed that Malaysian nurses in the age group 40 years and above had significantly higher scores in task requirement component compared to nurses in the age group 20-29 years ($p < 0.05$). Malaysian nurses in the age group 30-39 years also had higher scores on the professional status component compared to other age group.

As shown in Table 4.28, Malaysian nurses in the 40 and above age bracket (233.63±21.14) were found to have significantly higher overall job satisfaction score than the 30-39 (228.14±21.26) and 20-29 age bracket group (227.62±21.43, $p < 0.05$).

4.3.2.3.2 Gender

The results of independent-samples t-test indicated that there were no statistically significant differences in scores between male and female nurses on the nine components of the MIOWS and overall job satisfaction score ($p > 0.05$).

4.3.2.3.3 Marital Status

The results of independent-samples t-test indicated that compared to Malaysian nurses who were single, married nurses had significantly higher scores on task requirement (26.59±3.45), professional development (23.11±3.37) and supportive of nursing management (25.39±5.22) components. As shown in Table 4.28, married nurses had higher overall job satisfaction score (mean ±SD; 231.01±21.31) than unmarried nurses (226.31±21.45, $p < 0.05$).

4.3.2.3.4 Educational Level

One way ANOVA indicated that was no statistically significant differences scores on nine components of the MIOWS and overall job satisfaction score among nurses with different educational levels ($p > 0.05$).

4.3.2.3.5 Ethnicity

The results of independent-samples t-test indicated that compared to Malay nurses, the non-Malay nurses had significantly higher scores on decision−making (25.14±4.51) and autonomy (23.55±3.31). As shown in Table 4.28, there was no statistically significant difference in overall job satisfaction score between Malay (228.23±21.18) and non-Malay nurses (227.27±24.68, $p > 0.05$).

4.3.2.3.6 Years of Working Experience

The results of independent-samples t-test indicated that Malaysian nurses with a working experience of six years or more had significantly higher scores than those with less than six years of experience on the task requirement (26.89±3.73), decision-making (24.29±3.99), autonomy (22.66±3.44) and professional development (23.53±3.14) components. As shown in Table 4.28, Malaysian nurses with less than six years of working experience were found to have lower overall job satisfaction score (226.56±21.62) than their more experienced colleagues (232.57±21.84, $p < 0.05$).

4.3.2.3.7 Work Unit

A one way ANOVA indicated that there were statistically significant difference in scores between Malaysian nurses working in medical, surgical and critical care units with regard to decision−making, work interaction, professional development, salary, and supportive nursing management components.

Post hoc comparison using Tukey's test showed that medical ward nurses had significantly higher scores on the decision−making, work interaction, professional development, salary, and supportive nursing management components compared to surgical and critical care nurses. As shown in Table 4.28, Malaysian nurses working in medical wards had significantly higher overall job satisfaction score (234.52±21.91) than surgical (225.96±19.56) and critical care units nurses (224.6±21.70, $p < 0.05$).

Table 4.27: Socio-demographic Difference in the Nine Components of MIOWS (Malaysia Part).

Socio-Demographic Variables		Task Requirement	Work Interaction	Decision Making	Autonomy	Professional Development	Professional Status	Supportive Nursing Management	Work Condition	Salary
	No.					Mean ± SD				
Gender										
Male	25	24.92±3.26	45.12±3.4.20	24.16±2.98	22.12±2.42	22.72±2.821	27.92±3.031	25.36±4.02	20.92±7.02	15.40±4.96
Female	302	25.89±3.98	45.62±4.75	23.53±3.73	22.02±2.79	22.67±3.342	27.31±3.71	25.11±4.97	21.18±6.81	17.21±5.52
Age										
20-29	202	25.07±3.90*	45.49±4.66	23.14±3.57	21.79±2.49	22.37±3.25	27.01±3.74*	24.93±4.88	21.51±7.11	15.66±5.62*
30-39	57	26.23±3.51	45.41±4.46	24.02±3.76	22.25±3.12	22.86±3.47	27.01±2.86	24.79±4.61	20.43±5.80	15.16±5.61
40 and above	68	27.66±3.19	46.07±4.87	42.35±3.83	22.53±3.13	23.43±2.89	28.72±3.72	26±5.16	20.75±6.71	15.51±4.53
Marital Status										
Single	148	24.88±4.28*	45.54±4.41	23.18±3.77	21.85±2.58	22.15±3.14*	27.18±4.06	24.81±4.47	21.66±6.68	14.85±5.21*
Married	179	26.59±3.45	45.64±4.87	23.91±3.55	22.17±2.91	23.11±3.37	27.15±3.28	25.39±5.22	20.58±6.71	16.11±4.79
Ethnicity										
Malay	305	25.83±4.01	45.51±4.71	23.47±3.61*	21.91±2.69*	22.61±3.26	27.38±3.52	24.99±4.87	21.02±6.82	15.59±4.89
Non-Malay	22	25.59±2.823	46.73±3.84	25.14±4.51	23.55±3.31	23.77±3.78	27.09±5.24	27.05±5.09	23.09±6.63	15.27±6.98
Level of Education										
Diploma	285	25.94±3.94	45.48±4.64	23.54±3.59	21.87±2.71	22.65±3.37	27.38±3.43	25.06±5.01	21.01±6.81	15.06±5.08
Post Basic	35	24.71±5.80	46.63±.4.74	23.86±4.56	23.37±2.85	22.61±2.77	26.86±4.97	24.94±3.97	21.85±6.49	14.49±4.32
Bachelors	7	26.29±4.75	45.01±6.41	23.86±2.73	21.57±2.82	24.14±2.41	28.86±4.88	28.57±3.41	24.57±8.79	15.86±5.87
Years of Working Experience										
≥ 6 years	194	25.07±3.91*	45.57±4.49	23.09±3.37*	21.59±2.07*	22.09±3.29*	27.11±3.38	24.85±4.76	21.51±7.17	15.70±5.03
< 6 years	133	26.89±3.73	45.64±4.92	24.29±3.99	22.66±3.44	23.53±3.14	27.73±3.44	25.53±5.08	20.67±6.26	15.32±5.02
Work Unit										
Medical Ward	125	26.17±4.78	46.35±4.80*	24.38±3.56*	22.51±2.77*	23.28±3.63*	27.79±3.83	26.52±4.29*	21.33±6.68	6.51±4.88*
Surgical Ward	112	25.62±3.63	45.62±4.07	23.42±3.38	21.69±2.71	22.11±2.83	27.29±3.65	24.9±4.38	21.73±6.63	14.43±5.20
Critical care units	90	25.52±2.88	44.52±4.99	22.66±3.99	22.64±2.79	22.54±4.02	26.89±336	24.48±3.81	20.37±7.22	15.58±4.75

Malaysian nurses *P value < 0.05

4.3.2.4 Demographic Characteristics Correlates to the Malaysian Nurses Overall Job Satisfaction Score

4.3.2.4. 1 Multiple Analysis (Malaysia part)

In the multiple linear regression analysis, among all the significant associations ($p < 0.05$) from univariate analyses entered into the model, only work unit ($\beta = -9.45$, $p < 0.01$) was found to be significant correlates with overall job satisfaction score. However, the adjusted R^2 for this model was 0.05, could be due to big sample size. The regression model was highly significant. $F(4,323) = 4.37$, $p < 0.001$(Table 4.29).

Table 4.28: Socio-Demographic Correlates to the Malaysian Nurses Overall Job Satisfaction Score

Socio-demographic variables		Overall Job Satisfaction Score	Multiple linear regression F(4,323)=4.37, p<0.001, Adjusted Square R=0.05, β(SE)
	No.	**Mean ± SD**	
Gender			
Male	25	230.44±18.53	-
Female	302	228.25±21.76	-
Age			
20-29	202	227.62±21.43*	0.70(0.21)
30-39	57	228.14±21.26	-
40 and above	68	233.63±21.14	-
Marital Status			
Single	148	226.31±21.45*	References
Married	179	231.01±21.31	3.67(2.85)
Ethnicity			
Malay	305	228.23±21.18	-
Non-Malay	22	227.27±24.68	
Level of education			-
Diploma	285	228.59±21.27	
Post Basic	35	229.31±23.63	-
Bachelors	7	238.71±21.79	
Years of working experience			
≤ 6 years	194	226.56±21.62*	References
> 6 years	133	232.54±21.84	1.93(3.84)
Work unit			
Medical Ward	125	234.52±21.91*	References
Surgical ward	112	225.98±19.56	-9.45(2.95) *
Critical care units	90	226.66±21.70	-0.91(2.99)

Note: Mean age was entered into the model
Malaysian nurses *P value < 0.05

4.4 Comparison of Findings between Iranian and Malaysian Nurses

4.4.1 Comparisons the Differences in the Level of Overall Job Satisfaction Score and the Nine Components of the MIOWS Scores between Iranian and Malaysian Nurses

Comparisons of distributions of demographic characteristics between Iranian and Malaysian nurses are shown in Table 4.29. The sample of Iranian nurses is majority composed of females. The ages of the Iranian nurses ranged from 25 to 53 years, with a mean age of 34.2 years (SD = 5.0). Most of the Iranian nurses were educated to Bachelor's degree level (93.7%, n = 284). Nearly three-quarters (74.9%, n = 227) of Iranian nurses had work experience of six years or above. Less than half of the Iranian nurses worked at critical care units (40.3%, n =122).

The sample of Malaysian nurses there were more females than males. Malaysian nurses' age ranged from 21 to 54 years, with the mean age of 30.5 years (SD = 8.0). Most of the Malaysian nurses possessed diplomas (87.2%, n = 285). More than half of Malaysian nurses (59.3%, n = 194) had a working experience of six years or less. Nearly one third of Malaysian nurses were from the medical ward (38.2%, n =125)

Statistical analysis differences between the demographic characteristics of Iranian and Malaysian nurses were analysed with the Chi-square test. The result of the Chi - square test indicated that there were statistically significant differences between demographic characteristics (age, gender, marital status, level of education, work unit) of Iranian and Malaysian nurses ($P<0.05$).

Table 4.29: Differences in Demographic Characteristics between Iranian and Malaysian

Demographic Characteristics	Overall (N=620)	Iranian	Malaysian	Iranian vs. Malaysian
		(n=303)	(n=327)	x^2 p
Gender				
Male	82(13.0)	57(18.80)	25(7.60)	0.08
Female	548(87.0)	246(81.20)	302(92.40)	
Age				
20-29	255(40.47)	53(17.50)	202(61.80)	0.01
30-39	276(43.80)	219(72.30)	57(17.40)	
40 and above	99(15.73)	31(12.20)	68(20.80)	
Marital Status				
Single	210(33.34)	62(20.50)	148(45.20)	0.02
Married	420(66.66)	241(79.50)	179(54.80)	
Level of education				
Diploma	339(53.80)	19(6.30)	320(97.90)	0.04
bachelors	291(46.20)	284(93.70)	7(2.10)	
Years of experience				
≤ 6years	275(43.65)	76(25.10)	199(59.30)	0.05
>6 years	360(56.35)	227(74.90)	133(40.70)	
Work unit				
Medical Ward	228(36.20)	103(34.00)	125(38.20) *	0.04
Surgical Ward	190(30.15)	78(25.70)	112(34.20)	
Critical care units	212(33.65)	122(40.30)	90(27.60)	

**P* value<0.05

4.4.2 Differences on Nine Components of the MIOWS Scores and Mean Total Job Satisfaction Score between Iranian and Malaysian Nurses

The result of General Linear Models indicated that there were statistically significant differences in scores between Iranian and Malaysian nurses on the eight components of the MIOWS and mean total job satisfaction score ($p < 0.05$).

Malaysian nurses scored significantly higher on professional status (27.36±3.65), task requirement (25.81±3.94), supportive nursing management (25.12±4.90), work interaction (45.59±4.66) autonomy (22.02±2.76), decision−making (23.58±3.68),

professional development (22.67±3.31), salary (15.5±45.02) and mean total job satisfaction score (228.88±21.51) than Iranian nurses (Table 4.30).

Table 4.30: Differences on Nine Components of the MIOWS Scores and Mean Total Job Satisfaction Score between Iranian and Malaysian nurses.

Variables	**Iran Mean (SD)**	**Malaysia Mean (SD)**	**Mean Differences (SD)**	***p***
Task Requirement	21.01 (5.01)	25.81(3.94)	4.80	0.00
Work Interaction	36.01(7.69)	45.60(4.66)	9.59	0.01
Decision Making	17.39(6.68)	23.58(3.68)	6.19	0.00
Autonomy	19.01(4.56)	22.02(2.76)	3.01	0.01
Professional Development	16.81(5.11)	22.36(3.31)	5.55	0.01
Professional Status	23.01(6.64)	27.36(3.65)	4.35	0.01
Supportive Nursing Management	18.74(4.23)	25.11(4.91)	6.37	0.01
Work Condition	20.69(6.77)	21.16(6.81)	0.47	0.35
Salary	10.87(4.81)	15.54(5.02)	4.67	0.01
Mean Total Job Satisfaction Score	183.33(42.87)	228.88(21.51)	45.55	0.01

4.4.3 Differences on Overall Job Satisfaction Score by Demographic Characteristics between Iranian and Malaysian Nurses

In the Iranian nurses, there were significant differences in overall job satisfaction score according to age group, gender, marital status and years of working experience. Among the Malaysian nurses, there were significant differences in overall job satisfaction score according to age group, years of working experience, marital status and work unit. Table 4.31 shows the socio-demographic variables (age, marital status, years of working experience) that are significantly different between Iranian and Malaysian nurses.

Other variables (gender, work unit, education) that are not significantly different between Iranian and Malaysian nurses are not shown in the table. The result of one- way ANOVA indicated that there were statistically significant differences in overall job satisfaction score between Iranian and Malaysian nurses according to age, years of working experience and marital status ($p > 0.05$).

Post hoc comparison using Tukey's test showed that Malaysian nurses in the 40 and above age bracket (233.63±21.14) with more than six years of working experience (232.54±21.84) were found to have significantly higher overall job satisfaction score than other age groups in Iran and Malaysia. The result also indicated that Malaysian married nurses (231.01±21.31) had significantly higher score on overall job satisfaction than Iranian married nurses.

Table 4.31: Difference between Demographic Characteristics with Overall Job Satisfaction Score among Iranian and Malaysian Nurses

Socio-demographic variables	Overall Job Satisfaction Score	
	Malaysia	Iran
	Mean ± SD	Mean ± SD
Gender		
Male	230.44±18.53	164.61 ± 46.40*
Female	228.25±21.76	184.11 ± 41.25
Age		
20-29	227.62±21.43*	196.09 ± 36.16*
30-39	228.14±21.26	178.48 ± 44.39
40 and above	233.63±21.14	174.50 ± 36.40
Marital Status		
Single	226.31±21.45*	162.41 ± 37.56*
Married	231.01±21.31	185.08 ± 42.99
Level of education		
Diploma	228.59±21.27	165.74 ± 68.87
Post Basic	229.31±23.63	-
Bachelors	238.71±21.79	181.14 ± 40.55
Years of working experience		
≤ 6 years	226.56±21.62*	191.75 ± 17.22*
> 6 years	232.54±21.84	176.66 ± 42.24
Work unit		
Medical Ward	234.52±21.91*	186.97 ± 42.11
Surgical ward	225.98±19.56	179.19 ± 43.20
Critical care units	226.66±21.70	173.78 ± 42.68

**P value <0.05*

In the multiple linear regression analysis in Iran among all the significant associations ($p < 0.05$) from univariate analyses entered into the model, gender ($\beta = 23.84$, $p < 0.01$), marital status ($\beta = 33.49$, $p < 0.01$) and age ($\beta = 11.20$, $p < 0.01$) were found to be significant correlates with overall job satisfaction score. Iranian female nurses, younger age, and married nurses were more satisfied with their job than the others were.

In the multiple linear regression analysis in Malaysia, only work unit ($\beta = -9.54$, $p < 0.05$) was found to be significant correlates with overall job satisfaction score. Multiple linear regression analysis for overall job satisfaction score indicated that the model explained 14% F (4.298 = 13.19, P < 0.001) and 5% F (4,323 = 4.37, P < 0.001) of the variance in the Iranian and Malaysian nurses, respectively.

4.5 Summary

The data analysis in this study involved analysing the quantitative data collected in phase one which led to the selection of the participants for the FGDs conducted in phase two. The purpose of this mixed methods sequential explanatory study, which included quantitative and qualitative phases, was to discover the factors related to nurses' job satisfaction in Iran and Malaysia. The quantitative data was collected and analysed from MIOWS questionnaires in both countries. The quantitative phase was followed by a qualitative phase involving fifteen focus group discussions with a purposeful sample of nurses working in two teaching hospitals in Iran and Malaysia.

Statistical Package for the Social Sciences (SPSS), Version 16.00 (SPSS Inc.; Chicago, IL, USA) was used to analyse the quantitative data and MAXQ2007 was used to assist in analysis of the qualitative data. A Modified Index of Work Satisfaction (MIOWS) questionnaire consisting of nine components (autonomy, task requirement, work interaction, professional development, supportive nursing management, decision-making, professional status, salary, and work conditions) was used to measure the nurses' job satisfaction. It was found that the overall job satisfaction score of the Malaysian nurses (228.88±21.51) was significantly higher than that of the Iranian nurses (183.53±42.87) ($p<0.001$). The Malaysian nurses had a significantly higher score than the Iranian nurses in all the components of MIWOS except for work conditions. Of the nine components of MIOWS, both the Iranian and Malaysian nurses had higher

scores than their respective midpoints on three components, namely, autonomy, task requirement and work interaction, although Malaysian nurses also scored higher in terms of professional development, supportive nursing management, decision-making and professional status.

The results also indicated that only 87 Iranian nurses (28.7%), compared to 290 Malaysian nurses (88.7%), had an overall job satisfaction score which was above the midpoint score of 201. The overall job satisfaction score was significant different between gender, age, marital status and years of working experience for the Iranian nurses although in addition for Malaysian nurses work units were found significant. In multiple analyses, young age, being female and being married were significantly associated with a overall job satisfaction score for the Iranian nurses while work unit namely Malaysian nurses working in surgical and critical care units were more likely to have a lower overall job satisfaction score. The adjusted R^2 for the model for the Iranian nurses and Malaysian nurses was 0.14 and 0.05, indicating a 14% and 5% variability respectively. The results of the regression model for the Iranian and Malaysian nurses were highly significant at $F(4,299) = 13.19$, $P<0.001$ and $F(5,322) = 4.37$, $p<0.001$ respectively.

CHAPTER 5: Qualitative Analysis (PHASE II)

5.1 Introduaction

This chapter outlines the results of the qualitative phase of the study. This chapter presents the findings from participant interviews as they related to the research questions composed for this study. The chapter consists of several sections. The first section presents a summary of Iranian nurses' characteristics and themes emerges from Iranian eight FGDs. The second section presents a summary of Malaysian nurses' characteristics and themes emerges from Malaysian seven FGDs.

5.2 Qualitative Results: Iran Study

5.2.1 Background Characteristics of Iranian Nurses FGD Participants

All interviews were conducted between March and Jun 2012. The 90.2% of nurses were female (n = 65) and 9.8 % were male (n = 7), with the ages ranging from 25 to 43years. All nurses had held a bachelor's degree. More nurses worked in medical wards (n=29, 40.2%) compare with surgical (n=27, 37.6%) and critical care units (n=16, 22.2%). More than half (n=40, 55.6%) of the nurses have a work experience of six years and above (Table 5.1).

Table 5.1: Distribution of Socio-demographic Characteristics of Iranian Participants (n = 72).

			Focus group (n)							
	Frequency	**%**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Gender										
Male	7	9.8	1		2	1	1		2	
Female	65	90.2	7	8	6	8	10	9	8	9
Age										
20-29	23	31.9	3	4	2	1	3	3	4	3
30-39	37	51.5	4	2	6	6	5	5	4	5
40 and above	12	16.6	1	2		2	3	1	2	1
Years of experience										
≤6 years	32	44.4	3	3	4	3	5	3	5	6
>6 years	40	55.6	5	5	4	6	6	6	5	3
Work unit										
Medical ward	29	40.2	3	5		4	3	6	4	4
Critical care units	16	22.2	2		6	3	3		2	
Surgical unit	27	37.6	2	3	2	2	5	3	5	5

5.2.2 Factors that Affect Iranian Nurses' Job Satisfaction

The qualitative analysis led to the emergence of the five themes from the focus group data. From the nurses' points' of view spiritual feeling, environment factors, organization factors, were considered important factors affect Iranian nurse job satisfaction. A summary of the themes are presented in Table 5.2.

Table 5.2: Summary of Key Finding of the Main Theme (Iran Part)

Key Themes Identified	Sub Themes
Spiritual Feeling	
	Helping Sick People
	Involvement in Patient Care
Environment Factors	
	Team Cohesion
	Benefit and Reward
	Working Condition
	Lack of Clarity over Nurses'Responsibilities
	Work Interaction
	Patient and Doctor Perceptions
	Poor Leadership Skills
	Discrimination at Work
Organization Factors	
	Professional Status
	Professional Development
	Lack of Clinical Autonomy

5.2.2.1 Theme 1: Spiritual Feeling

This theme emerged from eight focus group discussions when nurses described factors affecting their satisfaction. Nurses highlighted a spiritual feeling when taking care of patients.

5.2.2.1.1 Helping Sick People

Many of nurses said that helping sick people allowed them to strengthen their own religious faith, renew energy and bring rewards from God. The nurses gave the following explanations:

"I think money or social positions are not my main purpose in being a nurse. I have some higher belief such as God's satisfaction with the work that I am doing for my patients." (Critical care unit nurse, bachelor's degree, aged 31).

"When I help the patients and they feel good and pray for me, I believe that their prayers are real and I feel satisfy. I think it is their prayers that give us more energy to do our work." (Surgical ward nurse, bachelor's degree, aged 32).

5.2.2.1.2 Involvement in Patient Care

Almost all the nurses reported that that the main factors that influence their job satisfaction were involvement with patient care and focusing on the patient's problems, as illustrated by these participants:

"When I help my patients with their needs and problems, I feel happy and this makes me feel satisfied."(Medical ward nurse, bachelor's degree, aged 41).

"I choose this career only for helping people. It is more important that I believe that if I help someone, I will receive rewards another time from someone else, in another place."(Critical care units nurse, bachelor's degree, aged 42).

5.2.2.2 Theme 2: Environment Factors

The environment factors that influence Iranian nurse job satisfaction included*: team cohesion, benefit and reward, working conditions, lack of clarity over nurse responsibilities, work interaction, patient and doctor perceptions, poor leadership skills and discrimination at work.*

5.2.2.2.1 Team Cohesion

In the focus group discussion, almost all the Iranian nurses reported that working with supportive and helpful colleagues was one of the main factors related to job satisfaction. Many Iranian nurses reported that they were satisfied with cooperating and having good relationships within their own profession. Supportive co-workers and good relationships

between nurses were found to be valuable by the rest of the participants. Nurses gave the following explanations:

“I am satisfied with the relationship with my nurse colleagues in my ward.” (Critical care unit nurse, bachelor’s degree, aged 42).

“*I think that my colleagues are helpful and supportive. There is a good cooperation between nurses in my ward.” (Medical ward nurse, bachelor’s degree, aged 39).*

“I have not left nursing because I love working with my colleagues. We have been working together for a long time. We believe in one another and most of the time we support one another at work.” (Critical care units nurse, bachelor’s degree, aged 33).

5.2.2.2.2 Benefit and Reward

In the focus group discussions, almost all the Iranian nurses said that salary was one of the most important factors affecting their job satisfaction. The majority of Iranian nurses explained that nursing is a stressful and serious job with a low salary and rewards. Underpayment of nurses was one of the major reasons for their job dissatisfaction. Iranian nurses mentioned the "inadequate income of nurses" frequently. The common opinion of Iranian nurses was that the salary did not satisfy them compared to the responsibility and skills required by nurses. One of the critical care nurses summarised:

“*Money is the major issue for all nurses! All nurses here that I know would be much more satisfied if we were paid well enough so we were not forced to work in two hospitals. We need to financially support our families and need to work hard*.”

Below are some of the ideas explained by surgical and critical care nurses:

“If one of my family or friends asks about my salary, I am embarrassed to tell them truth.” (Surgical ward nurse, bachelor’s degree, aged 38).

"I am happy with my job as a nurse but I work with few vacations and a low salary, we do not have enough time to spend with our families." (Critical care unit nurse, bachelor's degree, aged 34).

Many of Iranian nurses said that they are frustrated with the unfair and unjust distribution of income in health care organisations. Many Iranian nurses reported that they were underpaid compared with other medical professions such as doctors and physiotherapists. Some of the nurses emphasised the significant difference between doctor and nurse incomes. They believed that a doctor's salary is much higher than a nurse's salary as illustrated by the quotes below *"I know that in this hospital, many doctor's incomes are at least twenty times more than a nurse's salary." (Medical ward nurse, bachelor's degree, aged 39).*

"In this hospital our salary in one month is the same as one day of a doctors' income." (Surgical ward nurse, bachelor's degree, aged 28).

This discrimination in salary made nurses preoccupied with financial difficulties; all male nurses and some female nurses reported that their salary was not enough for the cost of living and that they have to work in more than one hospital. Many Iranian nurses reported that due to the nursing shortage and low salary, they sometimes worked 18 hours a day which caused them to be tired and unable to concentrate on their patient's needs. According to nurses, they are also at great risk of making errors that threaten patient safety, especially medication errors. Nurses made the following comments:

"I think there is a large gap between doctors' and nurses' salaries in Iran, our salary is very low and many of us are working in two hospitals, more than 18 hours a day. I believe that nurses are underpaid for the responsibilities and heavy workload that they have."(Surgical ward nurse, bachelor's degree, aged 33).

“As a nurse I feel that we are always under stress; we do not have enough staff nurses and equipment and we are underpaid.” (*Medical ward nurse, bachelor’s degree, aged 29*).

“I think, low salary and the lack of human resources are our biggest problems. We have to work on long day shifts or evening night shifts (18h) because of low salaries or staff shortages. Consecutive shifts reduce our effectiveness and reduce the quality of patient care.” (Surgical ward nurse, bachelor’s degree, aged 31).

5.2.2.2.3 Working Conditions

In all focus group discussions many of the Iranian nurses said that nursing shortages and a heavy workload were the main factors that affect their job satisfaction. Many of the Iranian nurses mentioned heavy- duty work as a factor contributing to workforce stress and that sometimes they feel frustrated. Many of medical and surgical ward nurses mentioned that factors such as unbalanced nurse-patient ratios and increased work hours have decreased their relationship with patients and stopped them using their knowledge and skills effectively. They felt the heavy workload was difficult to manage effectively within the work hours of a day. Nurses gave the following explanations:

“I don’t feel that I can work effectively because I have many patients and not enough time for good patient care. This makes me upset because it is the patient who suffers.” (Medical ward nurse, bachelor’s degree, aged 39).

“This hospital is a government hospital and we have many patients, sometimes I have a patient who is suffering because of breathing and a heart attack. We need ventilators but we need to know where to find the ventilator. I think at least there should be one or two standby ventilators in the CCU.” (Critical care ward nurse, bachelor’s degree, aged 38).

“We have no time for giving good care. Not enough equipment, not enough staff nurses, only two nurses and two auxiliary nurses for more than 40 patients every day. We don’t even have time for a short break.” (*Surgical ward nurse, bachelor’s degree, aged 26*).

“Sometimes I need to give my patients’ drugs, answer a phone call, and transfer patients to other wards or operating rooms all at the same time. We don’t have time to provide everything that a patient needs and if we do something wrong; even a single error can affect the patient’s life. This puts much stress on us.” (*Surgical ward nurse, bachelor’s degree, aged 36*).

A shortage of staff nurses made Iranian nurses unable to apply their professional knowledge in patient care, thus, they feel unable to meet their patient’s needs effectively, which gives them a feeling of inadequacy. Nurses gave the following explanation:

"When we only have two nurses for more than 30 patients, how can we provide good care? We can only do routine work such as monitor blood pressure and give drugs and write nursing reports." (Surgical ward nurse, bachelor’s degree, aged 34).

“We have to work hard during shift work; we have no time for rest or tea breaks. Our working conditions are difficult, with inadequate technical equipment and shortage of nurses.” Critical care ward nurse, bachelor’s degree, aged 27).

“There are so many seriously ill patients on hospital wards but managers always say we don’t have the budget to increase the numbers of staff nurses.” (Critical care ward nurse, bachelor’s degree, aged 31).

Many Iranian nurses reported the negative effects of excessive shifts and busy schedules on their family relationships and that they are not able make a balance between their work and family responsibilities. Nurses gave the following explanations:

"After I got married, working the night shift became a big problem for me. The working hours were long and it was hard once I had a baby."(Surgical ward nurse, bachelor's degree, aged 32).

"After the night shift, when I go home in the morning. I feel tired and only want to sleep. My kids always complain that I don't have enough time to spend with them."(Medical ward nurse, bachelor's degree, aged 36).

The shortage of supplies and dysfunction or lack of equipment was described by Iranian nurses as key issues that should be addressed to improve nurses' job satisfaction. According to nurses, better equipment will improve quality care for patients and increase nurses' job satisfaction. Some of the nurses also reported that they feel pressure because of insufficient equipment and the large number of patients received each day from other hospitals. *Nurses said that:*

"One of the problems that we suffer is a shortage of medical equipment, which is not available, and that some equipment is very old and does not work well." (Critical care units nurse, bachelor's degree, aged 30).

"I always feel pressure because a shortage of staff, lack of equipment, and not enough medicine increases our errors on wards and all these reduce the quality of nursing care." (Surgical ward nurse, bachelor's degree, aged 30).

5.2.2.2.4 Lack of clarity over Nurse Responsibilities

Many of the Iranian nurses reported that there was no clear job description for the nurses. They explained that they also usually carried out auxiliary nurse and secretary responsibilities. Based on nurses' experiences, these factors conflict with their role as nurses and put them under pressure. One nurse said:

"I do not know who I am. Am I a nurse, auxiliary nurse, or secretary? We are responsible for everything because there is not enough staff. How can I be a good nurse with this heavy workload?" (Surgical ward nurse, bachelor's degree, aged 28).

5.2.2.2.5 Patient and Doctor Perceptions

In all focus group discussions, some nurses talked about patient and doctor perceptions of nurses. Nurses explained that their caring skills are not recognised by these people. One nurse explained that:

"We spend more time than doctors with patients and we know their problems sometimes better than the doctors but they don't like listen to us." (Surgical ward nurse, bachelor's degree, aged 27).

Many of nurses believed that Iranian culture gives an unrealistic superiority to doctors. Nurses gave the following explanations:

"In our culture, parents always keep saying that my daughter or my son will be a doctor. On the first day their son or daughter goes to medical university, they call him or her a doctor. When they become doctors, they see themselves as superior to others and think that they are the only persons that know everything." (Medical ward nurse, bachelor's degree, aged 36).

"It has always been like this. In our society doctors see themselves as superior to others." (Medical ward nurse, bachelor's degree, aged 26).

Many of the nurses in this study believed that there is a physician-centred culture in the Iranian health care system that does not respect nurses' decisions and does not let them use their authority.

One nurse made the following comment:

"We are always dependent on doctors' orders. Our job is only measuring blood pressure or giving medications. If one patient has a simple headache, we cannot give them even one simple tablet without a doctor's order." (Medical ward nurse, bachelor's degree, aged 29).

According to many of the nurses, the delayed attendance of a doctor and absence of doctors on the ward, especially in the evening and on night shifts, creates a blame culture in the patients. Nurses gave the following explanations:

"In my ward sometimes doctors delay visiting patients or do not answer patients or their relative's questions, then patients always blame us." (Surgical ward nurse, bachelor's degree, aged 27).

"We often do the tasks of doctors; we need all sorts of knowledge. We have to solve most patient problems."(Critical care unit nurse, bachelor's degree, aged 36).

Some of the Iranian nurses also reported that patients blame nurses for prescriptions mistakes by doctors. One medical nurse said:

"I remembered that one night the resident visited the new patient and first asked for a blood test for routine exams, and fifteen minutes later also wanted a blood culture analysis. When I took the patient's blood for the second time, the patient got very angry and asked me "Why you are doing it again, you already took my blood?"(Medical ward nurse, bachelor's degree, aged 30).

5.2.2.2.6 Poor Leadership Skills

Many of the Iranian nurses said that nurse managers were non-supportive and not cooperative. They reported that nurse managers do not acknowledge their staff's work problems nor listen to their issues.

According to Iranian nurses in this study, non-supportive styles in nurse managers cause a high level of nurses' job dissatisfaction. When asked to clarify these problems, many of the Iranian nurses reported a shortage of skilled human resources and orders written by unskilled medical and inexperienced medical students as their daily problems at work. Some of the Iranian nurses said that if something wrong happened in the hospital the manager supported others rather than the nurses. Nurses gave the following explanations:

"I expect my manager to understand us and our issues on the ward. Even if he does nothing for us. At least they can say 'thank you', or I support you and I will think about your issues." (Medical ward nurse, bachelor's degree, aged 33).

"I think there is a lack of staff nurse and even o some necessary equipment like monitors. We have too much responsibility. Nurses managers do not seem to care about nurses' issues." (Critical care unit nurse, bachelor's degree, aged 38).

"All of us are under stress, especially now that there are not enough staff nurses. I hope the nurses' manager can help improve our work conditions by listening to our problems and addressing them." (Surgical ward nurse, bachelor's degree, aged 27).

Many Iranian nurses reported the nursing managerial system has no authority in the hospital and only follow the doctors' decisions. Nurses gave the following explanations:

"There is something wrong in the system. Nurses in this hospital are degraded as auxiliary health personnel and hospital managers do not look at us as professionals. We are treated differently than doctors. But they need us for their achievement. Nursing is a profession, just like being a doctor. They must recognise nursing as a profession. We do not have incentives. Rather than motivating us, they are always blocking us. In our

hospital we don't have professional opportunities for nurses. The doctors are always on the first level and finally nurse." (Medical ward nurse, bachelor's degree, aged 37).

"I do not know what this managerial system is doing for us. They do nothing; we have no professional, financial, or life-support at all." (Surgical ward nurse, bachelor's degree, aged 31).

Some of the Iranian nurses also said that they were unhappy and dissatisfied with their head nurse's behaviour. Some of the Iranian nurses reported that head nurses do not have experience and they do not know how to manage the issues arising in their wards. Nurses reported as follows:

"*Head nurses doing a routine task were regarded as more important than showing good patient care. We just followed the doctor's orders and provided routine care according to hospital protocol, not the patient's individual needs." (Surgical ward nurse, bachelor's degree, aged 32).*

"I think, in this hospital our head nurses don't have experience and they don't know how to solve nurses' problems." (Medical ward nurse, bachelor's degree, aged 35).

5.2.2.2.6 Discrimination at Work

Many of the Iranian nurses said that they felt upset with the unfair and discriminatory decisions made by the head nurses. They believed that they were not fair when planning weekend, holiday, and vacation time for their staff nurses. Many junior nurses claimed that head nurses tend to show favouritism. According to Iranian nurses, head nurses tend to favour staff members they like regardless of their ability and performance. Nurses gave the following explanation:

"The head nurse does not come during the evening, night shifts or at weekends. So, how do they know about evening and night shift problems? They just judge without realising, they decide based on reports only. I always feel that we do not have good communication with our head nurse." (Surgical ward nurse, bachelor's degree, aged 28).

"I remember that one night a patient came from the emergency room to the CCU and we were busy, suddenly he arrested and CPR was being given. My colleagues and I did our best and the patient returned to normal condition. It takes a long time and we forgot to clean the name above his bed and write a new patient name. The next day when I came to the ward, my head nurse wrote a letter for us asking why we didn't write a patient name above his bed. I did not know what I should tell her."(Critical care units nurse, bachelor's degree, aged 30).

Our head nurses' behaviours are not fair, they are not fair in providing weekend or holiday, time scheduling between their staff nurses. Usually they prefer to give more days off to the senior nurses, for two years I was on duty at New Year."(Critical care unit nurse, bachelor's degree, aged 27)

5.2.2.3 Theme 3: Organisation Factors

5.2.2.3.1 Task Requirements

Some of the Iranian nurses explained that they liked their jobs. They explained that "Nurses are the core and foundation of any health care setting" and they were satisfied with the care given to sick people. One nurse said:

"I really like my job and when people are discharged from hospital and they get better this makes me satisfied." (Medical ward nurse, bachelor's degree, aged 29).

Some of the Iranian nurses reported that they spend too much of their time on paper work so they don't have enough time to give patients care. One nurse remarked that:

"I think we spent a lot of time on paper work and we don't have enough time for really good patient care." (Surgical ward nurse, bachelor's degree, aged 32).

5.2.2.3.2 Professional Status

One view frequently expressed by Iranian nurses in all focus group sessions was that poor social views that existed towards nursing staff within society. They felt that compared to doctors, nurses receive less respect from society. Many of the Iranian nurses said that the patients only respect their doctors and think the nurses are just physician's servants. According to nurses, the media should present the role of nurses more correctly and that society should respect nurses as it does other health care professions. Nurses made the following comments:

"I think people should respect nurses the same as doctors." (Surgical ward nurse, bachelor's degree, aged 27).

"Our people do not respect nurses. We work so hard, get educated; they only respect their doctors. It would have been better if we had gone into the field of medicine and become doctors so people respect us." (Medical ward nurse, bachelor's degree, aged 31).

"Public perceptions of nursing are not good; people usually use negative words, such as 'hard work' and 'underpaid' when they want to describe our job." (Critical care unit nurse, bachelor's degree, aged 30).

"As long as the patients believe that nurses are just doctors' servants, nurses will never be satisfied." (Surgical ward nurse, bachelor's degree, aged 29).

5.2.2.3.3 Professional Development

Some of the Iranian nurses in this study were concerned about the need for support with professional development and updating their clinical knowledge by attending conferences, seminars or workshops. According to the Iranian nurses they don't have opportunities to attend these kinds of activities because of their heavy schedules. One nurse said:

"*There are so many seminars and nursing workshops here, but so many times, I couldn't join in because I was on duty. I think it is not fair, we don't have same opportunities to join these activities and head nurses always select special groups of nurses to join these seminars or workshops."(Medical ward nurse, bachelor's degree, aged 30).*

Some Iranian nurses described the lack of integration of theory into clinical practice in their work in some way. Nurses remarked that:

"We have learnt so many things at university, but we never do them in actual settings. Like physical exams or nursing assessments." *(Surgical ward nurse, bachelor's degree, aged 29).*

5.2.2.3.4 Lack of Clinical Autonomy

In only two focus group sessions did some of the nurses say they believed that they don't have enough control over their own work. They explained that they can only give drugs, monitor vital signs and write nursing reports. Some of the Iranian nurses noted that they were not given any independence to make decisions for patients according to their own knowledge and skills. Some of the nurses reported that they have to wait for a doctor's order for all kinds of nursing interventions, even for very simple interventions such as pain medication. Nurses said that:

"We also studied at medical university for four years, but many times patients may suffer pain for a couple of hours, and I cannot give them even one Acetaminophen without a doctor's order, I think only one year's education is enough for being nurse here."(Medical ward nurse, bachelor's degree, aged 34).

"We have to always check with doctors before doing anything for our patients. We just follow doctors' orders."(Surgical ward nurse, bachelor's degree, aged 28).

5.3 Qualitative results: Malaysia Part

5.3.1 Background Characteristics of Malaysian Nurses FGD Participants

All interviews were conducted between August to December 2011. Nearly ninety four percent of nurses which participated in focus group discussion (FGD) were female (n = 43), with ages ranging from 22 to 43years old (Table 5.3). The majority of nurses possessed a diploma (n=43), while 6.5% held a bachelor's degree.

Less than half of the nurses from were medical wards (n = 19, 41.3%), while 26% (n = 12) were from surgical, and 32.7% (n = 15) from critical care units. Less than half (n=19, 41.3%) of the nurses possessed a working experience of six years or more.

Table 5.3: Distribution of Socio-demographic Characteristics of Malaysian Nurses (n = 46).

	Frequency	%	Focus group (n)						
			1	**2**	**3**	**4**	**5**	**6**	**7**
Gender									
Male	3	6.5			1	1	1		
Female	43	93.5	7	6	6	5	7	6	6
Age									
20-29	23	50	4	2	3	2	4	4	4
30-39	16	34,7	2	2	3	3	3	2	1
40 and above	7	15.3	1	2	1	1	1		1
Level of education									
Diploma	43	93.5	7	6	6	6	7	5	6
Bachelors	3	6.5			1		1	1	
Years of experience									
≤6 years	27	58.7	4	3	2	3	6	4	5
>6 years	19	41.3	3	3	5	3	2	2	1
Work unit									
Medical ward	19	41.3	2	2	2	2	4	3	4
Critical care units	15	32.7	3	2	3	2	3	1	1
Surgical unit	12	26.0	2	2	2	2	1	2	1

5.3.2 Factors that affect Malaysian nurse job satisfaction

The qualitative analysis led to the emergence of the three themes from the focus group data. From the nurses'point of view nurse, environment factors, organization factors, were considered important factors affect Malaysian nurses' job satisfaction. A summary of the themes are presented in Table 5.4.

Table 5.4: Summary of Key Finding of the Main Themes (Malaysia Part)

Key Themes Identified	Sub-themes
Helping People	-
Environment Factors	
	Team Cohesion
	Flexible Work Schedule
	Benefit and Reward
	Working Condition
	Work Interaction
	Lack of Support by Management
	Lack of Clarity over Nurses Responsibilities
Organization Factors	
	Task Requirement
	Professional Status
	Professional Development
	Lack of Clinical Autonomy

5.3.2.1 Theme 1: Helping People

This theme emerged from all focus group discussions when nurses described factors affecting their job satisfaction. Almost all the Malaysian nurses in this study reported a wish to help people who are sick as the primary factor that influenced their job satisfaction. The Malaysian nurses explained that by helping patients, they felt honoured and happy. Some noted that treating the patients made them feel that they have made a difference in their patient's lives. Giving good care, in particular being able to identify the various needs of the patients, was found to be another important factor in nurse job satisfaction.

For many of the Malaysian nurses, helping patients achieve a better quality of life, seeing patients improve, become symptom-free and allowed to be discharged from the hospital strongly influenced job satisfaction. The nurses gave the following explanations:

"I feel I like to be a nurse because I can help sick people and I am proud to be a nurse."(Medical ward nurse, diploma degree, aged 25).

"That's where we get our biggest job satisfaction, is patient care, because that's what we came into nursing for, to look after people. Any time that patients get better and are discharged from hospital I feel very good." (Critical care unit nurse, diploma degree, aged 31).

5.3.2.2 Theme 2: Environment Factors

The environment factors that influence Malaysian nurse job satisfaction according to the nurses included*: team cohesion, flexible work schedule, benefit and rewards, working conditions, work interaction, lack of support from management, lack of clarity over nurses' responsibilities and safety issues.*

5.3.2.2.1 Team Cohesion

This theme emerged from all focus group discussions. Almost all the Malaysian nurses in this study reported a need to work as a team when it comes to discussing and sharing their knowledge and experience of patient care with their colleagues. Many of the Malaysian nurses stated their belief that teamwork in nursing is important and that nurses who work together forge the best outcomes for their patients. Junior nurses working in critical care units explained that when nurses work as a team, they are able to ask questions and request help without fear of interruption or being told no. This helped junior nurses improve their clinical skills. Malaysian nurses also reported a greater sense of job satisfaction and less stress among nurses who worked together during their shifts, as approaching a situation as a team made it easier to break the work into smaller, more manageable parts. The nurses gave the following explanation:

"For me I chose nursing because of the teamwork. There is good teamwork between colleagues. Without my colleagues I think, I would quit this work."(Surgical ward nurse, diploma degree, aged 32).

"In my opinion, good teamwork is one of the factors that can influence our satisfaction. If we work as a good team, we can give better nursing care to our patients." (Surgical ward nurse, diploma degree, aged 28).

"As a junior nurse, I think when we work as a team, I can easily ask senior nurses to guide me and support me through nursing care and also improve my skills." (Critical care unit nurse, diploma degree, aged 23).

5.3.2.2.2 Flexible Work Schedule

Only in one group discussion did some of the Malaysian medical nurses pointed out that the flexibility of their work schedule allowed them to meet family and personal demands which were important to them. As one nurse explained, "I think the flexibility of the schedule is a great part of nursing." Flexible work schedules provided flexibility for some of the nurses to manage work and family life values. One of the nurses who has three different shifts reported:

"This is good for me. For example after night shifts you can have one day off, and spend more time with your family compared with office hours. For me nursing is a job with a more flexible time-frame." (Medical ward nurse, diploma degree, age 32).

5.3.2.2.3 Benefit and Reward

This theme emerged from all focus group discussions. Almost all the Malaysian nurses in this study reported salary as one of the most important factors related to nurse job satisfaction. Many Malaysian nurses explained that they were satisfied with their basic

salaries but they are not satisfied with their annual salary increment. Some of the female nurses explained that being able to contribute to their overall household incomes gave them satisfaction. However, many of Malaysian nurses were concerned with the inequity of salary received for their responsibility and heavy workload. Many of Malaysian nurses remarked that "in comparison with other job fields, I feel that nurses are underpaid for the responsibilities that they have compared to other jobs." Nurses explained that:

"I think the hospital should increase our salary based on our responsibility and heavy workload. I think our workload is more than teachers and other jobs. We also have to work on public holidays. We don't have rest time; we don't have enough free time to spend with our families." (Surgical ward nurse, diploma degree, aged 43).

"I am satisfied with my basic salary but not with my salary increment every year. I think working for a government hospital as a nurse is not good although I don't know what the salary increment is in the private hospitals."(Medical ward nurse, diploma degree, aged 25).

Some of the Malaysian medical and surgical nurses explained that they did not receive extra salary for working overtime because of staff shortages and a heavy workload. One of the junior nurses explained:

"Our work hours in the morning were 6 am until 2pm.Usually we have a lot of patients and not enough nurses; because of this workload we sometimes have to stay in the ward until 4pm to finish our work and we don't receive extra money for these two extra hours." (Medical ward nurse, diploma, aged 24).

Malaysian nurses continued their bachelors and advanced degrees in the hope of a salary increase, but the outcome was not what they had expected. As one Malaysian nurse with a bachelor degree explained:

"The advanced education that I received in nursing offered no increase to my salary." (Critical care unit, bachelor's degree, aged 36).

Some of the Malaysian senior nurses reported that they were satisfied with their basic salary but were dissatisfied with the annual increment and poor retirement benefits which require nurses to continue working after retirement for financial reasons. One senior nurse said*:*

"Compared with other jobs our basic salary is 1400RM and each year 60 RM is added, let say we work for 30 years as a nurse, after we retire our salary is still only about 4000RM. When people working with other organisations retire, their salary is 10,000RM. I think after retirement I should still work."(Surgical ward nurse, diploma, aged 43).

Many Malaysian critical care nurses believed that the hospital should offer a higher salary, commensurate with their specialised skill set and the greater amount of pressure they faced when caring for their patients compared with other nurses. One of the critical care nurses remarked:

"We are working with ill patients and with highly technical equipment, ventilators, and we have more stress compared with other nurses, I think the hospital should pay us extra money for our critical care." (Critical care units nurse, diploma, aged 32).

One of the medical ward nurses made comparisons between the financial remuneration offered by private hospitals and public hospitals. She said *"I think new nurses would*

choose to work at private hospitals, because they offer higher salaries and more job opportunities."(Medical ward, diploma degree, aged 24).

Single Malaysian nurses reported more satisfaction with their salaries than married nurses. One single nurse compared her salary before and after her marriage and commented:

"When I was single my salary was enough for me. I even sometimes saved my money or gave it to my mother and my family. But after I married, I had to spend my money on rental payments, bills, tolls, oil, and so many things and now I feel my salary is not enough." (Medical ward, diploma degree, aged 24).

In addition, inadequate income for all Malaysian nurses was an issue that was frequently brought up across all the focus group nurses. Various feedback was given by Malaysian nurses about this in the focus groups.

"In comparison with other jobs, I feel that nurses are underpaid for the responsibilities that they have, and not given enough respect for knowledge gained from experience."(Medical ward, diploma degree, aged 34).

5.3.2.2.4 Working Conditions

In all focus group discussions, almost all the Malaysian nurses in this study cited inadequate staffing and heavy workload as the main factors that affect their job satisfaction. Heavy workload was mentioned as a factor contributing to workforce stress and making it difficult for nurses to balance their work and life. They described their workload as difficult to effectively manage within the work hours of a day. A shortage of staff nurses and absenteeism were also reported as added pressure during work hours. Malaysian nurses also, described having a great amount of work to do in a single shift, with too much nursing documentation. Many Malaysian nurses also stated that hospital

managers should hire more staff nurses to reduce nurses' heavy workload. One of the nurses said:

"Firstly, I think for me, hire new staff nurses, because we cannot cope anymore with so many procedures for one patient and mostly we have to take care of ten patients. We are supposed to finish our job at 2 o'clock but we can't and mostly it takes until 2.30. I like to add other things. We do a lot of paperwork during one shift so we don't have enough time for patient care. I think nurse managers should think about this issue."(Surgical ward nurse, diploma degree, aged 27).

A shortage of supplies and lack of the necessary equipment were the source of many Malaysian nurses' dissatisfaction in this study. They also felt unable to adequately provide patient care because of hospital budget cuts and nurses shortages, when they faced difficulty accessing appropriate services or faced extensive waiting times for the necessary equipment. Malaysian nurses made the following comments:

"You feel frustrated sometimes because my patients need medicine or equipment but there is a lack of equipment and medicine in the ward."(Medical ward nurse, diploma degree, aged 32).

"Most of the equipment is gone or old. How can we give better nursing care to the patients? Even the simple saturation monitor is not functioning well, how can we check the saturation? How can we satisfy the doctor when the doctor keeps asking how the saturation now? We cannot give good saturation."(Critical care units, diploma degree, aged 27).

"Sometimes we get critical care patients, we need to monitor them. Sometimes we don't have enough monitors, and this is stressful for us."(Critical care units, diploma degree, aged 24).

5.3.2.2.5 Work Interaction

In all focus group discussion, many Malaysian nurses reported that a good relationship with other staff nurses is an important factor related to their job satisfaction. They explained that they were satisfied with good cooperation with other staff nurses and good relationships with their colleagues.

Peer support was also reported as valuable by all the Malaysian nurses in this study. Nurses gave the following explanation:

"I am satisfied with the relationship with my colleagues. Everything that I want to do, I feel confident and happy because I know that others are supporting me."(Medical ward, diploma degree, aged 24).

"*I think that my colleagues are very helpful. I love working with the team, and I think they just make me do my job harder and better."(Critical care units, bachelor's degree, aged 26).*

"I think there is good cooperation on my ward. We have a shortage of staff but when we admit a patient we will cooperate; if one staff member is busy, we will help them, we don't like to be selfish and only take care of our own patients. I am quite satisfied with that."(Surgical ward nurse, diploma degree, aged 31).

On the other hand, some of the Malaysian nurses reported a lack of communication between nurse managers and staff nurses. Some of the junior nurses expressed a fear of communication and voicing their opinion about a problem or concern on the unit to their nurse managers. When asked to clarify these problems nurses talked about insufficient equipment and not enough staff nurses, problems with patients' relative and some medical students.

Some of them reported that they felt a lack of support from their nurse mangers; this feeling was closely followed by recurring comments about feeling unappreciated by nurse mangers, such as “They do not support nurses”. They reported that matrons do not support them when a conflict occurs between doctors and nurses or between nurses and patients. Nurses said that:

“I think usually nurses, especially new nurses, are scared to talk with the nurse officer about the problems that they have in the ward. She doesn’t know what our problems in the ward are. Sometimes there is a conflict between different wards or we have problems with doctors or patient relatives. We hope that our nurse officer and administrator see all the problems and at least back up us.” (Surgical ward nurse, diploma degree, aged 30).

“We need good communication between nurses and matrons. We know the matrons are a higher level than us but there is a lack of communication between us. They only know how to condemn their nurses. They do not communicate to solve problems; they only stand in front of the chart and ask “Why don’t you do this, do that?’. I think to them, the black and white paperwork is much more important.”(Medical ward nurse, diploma degree, aged 28).

Some of the Malaysian nurses suggested that a more participative and supportive approach is required from the nursing management group, to decrease the stress nurses face at work. One of the nurses said that:

“I wish the matrons can view situations more from a nurse’s perspectives when handling complaints from patients and their relatives, and not only blame us for everything that happens. When these complaints are reported to them, they simply scold us, assuming that it is always our fault. We are always under stress.”(Surgical ward nurse, diploma degree, aged 24).

Some of the surgical and medical nurses described mainly facing issues in collaborative relationships between doctors and nurses. Malaysian nurses in this study reported that often have a problem with medical students.

Nurses in this study believed that medical students do not have enough work experience and they do not like to use nurses' experience to solve patient problems. Nurses gave the following explanation:

"I remember that one day in the morning a patient was visited by his doctor and the doctor started IV medication for the patient. At night, the first year resident visited the patient and changed the IV medication to tablets, because based on the hospital role IV medication should give by medical doctors. Again the next day before morning shift he came and changed his order to IV medication. Sometimes they are wrong and they may be harmful for the patients. But we can't say anything." (Surgical ward nurse, diploma degree, aged 29).

"We have a good relationship with senior doctors. Usually they discuss patient problems with us and ask our opinion, but junior doctors don't listen and discuss patients with us, and they want us to simply follow their orders." (Surgical ward nurse, diploma degree, aged 31).

Some nurses also compared medical students from their hospital with medical students from other hospitals. They reported that they have less conflict with medical students from their hospital compared with medical students from other hospitals. One of the surgical nurses said:

"Doctors from other hospitals, posted for one or two months, never discuss patients' problems with us and we just follow their orders. They don't want to listen to us. But the

doctors from this hospital, when they want to order something, they first discuss patient problems with us. They respect us as nurses." (Surgical ward nurse, diploma, aged 25).

Some medical nurses complained of doctors not conveying proper information about patient discharges or changes in their treatment plans, creating barriers to timely and appropriate nursing care, which therefore resulted in decreased staff and patient satisfaction. Nurses gave the following explanation:

"In my ward doctors sometimes delayed visiting patients or do not answer patients and their relatives' questions, then patients shout at us."(Medical ward, diploma degree, aged 26).

On the other hand, some of the critical care nurses reported positive and good cooperation with doctors. One nurse said:

"I am working in CCU, maybe we are lucky, our doctors, lecturers and consultants are friendly and we work as a team. They listen to nurses. So whatever we complain about, or sometimes suggest, if reasonable they accept it." (Critical care unit nurse, diploma degree, aged 32).

5.3.2.2.6 Lack of Support from Management

Malaysian nurses had a different view of support given by nursing sisters. Some nurses in this study reported that they were not satisfied with the emotional support given by nursing sisters. They believed that the sisters focussed only on documentation and do not cares about the quality of patient care or the pressure that nurses are under in wards due to inadequate staffing.

Nurses gave the following examples:

"Our sister just thinks about documentation and there is no appreciation of our work.

When you want to continue your study, just because there is not enough staffing, you cannot go. The sister will not sign your letter. It means that she will not let you study, because of not enough staffing. Next, she will say, "I need you to be here". So, you will have to apply next year again."(Medical ward nurse, diploma degree, aged 25).

"I think our sister should be more supportive of nurses, for example if problems happen between doctors and nurses most of the time, the sisters' trust the doctors without asking us about the real problem."(Surgical ward nurse, diploma degree, aged 30).

According to nurses, sisters have responsibility for providing enough staff nurses on the wards, but they do not do it properly. Shortages in the nursing workforce and heavy workloads made nurses unable to apply their professional knowledge. One of the nurses said:

"Sometimes you have to work for 10 days, when the ward is busy, they cannot spare any off. So you wait for your night shift, only then can you get a day off. You have to wait too long."(Critical care units, diploma degree, aged 30).

"How can we provide good nursing care when we don't have enough time even to give patients necessary information regarding to their problems." Surgical ward, diploma degree, aged 28).

On the other hand, some of the critical care nurses reported that they were happy and satisfied with certain support received from the sisters in difficult situations. One nurse said:

"*One good thing is that any time we need help, some of the sisters' guide us and we can go and ask various things. So we're well supported by our sisters." (Critical care ward nurse, diploma degree, aged 28).*

Some of the Muslim nurses reported the lack of male nurses as one of the main factors of their dissatisfaction. They said that they believed sisters have a responsibility to solve this problem. One Muslim nurse remarked:

"In my ward we have more male patients than female and based on our religion we need more male nurses to provide patient care for males. We have mentioned this to our sisters so many times but they do not bother." (Surgical ward nurse, Bachelor's degree, aged 30).

5.3.2.2.7 Lack of Clarity over Nurses Responsibilities

Nurses explained that their responsibility at work was unclear and that this made them frustrated. They reported that they have job description, but it is impossible for them to work based on their job description. The consensus was that registered nurses were performing the tasks of doctors as well as secretaries. Despite carrying heavy ward workloads, Malaysian nurses reported that they needed to be available to give information to patients, their family members and even answer telephone calls. This left them little time for providing good nursing care. Nurses said that:

"We don't know the meaning of nurse, in my ward when our clerk is on holiday or off, I sometimes do clerical work. This is not in our field, so it is difficult for us to cope with their work."(Medical ward nurse, diploma degree, aged 31).

"We have a clear job description that explains our responsibilities as nurses, but due to staff shortages we have to do extra work that is not our responsibility as a nurse." (Surgical ward nurse, diploma degree, aged 34).

5.3.2.3 Theme 3: Organisation Factors

5.3.2.3.1 Task Requirements

This theme emerged from all focus group discussions. Malaysian nurses reported that a lack of time to deliver good care was a major problem, especially with the growing number of acute care patients demanding more time from nurses. Some nurses felt that they spent more time on paperwork. One of the critical care nurses made the following comments:

"With all the daily paperwork I never have time to care for my patients the way they should be cared for."(Critical care units, diploma degree, aged 38).

Medical and surgical nurses also reported a wide range of nurse-patient ratio experiences every day. They explained that increases in the number of patients made them unable to provide good nursing care. Nurses made the following comments:

"There are only six staff on my ward to take care of fifty five to sixty patients. It is divided roughly one to ten or one to eight. So we cannot attend to all patients needs at the same time. I mean there are not enough staff nurses to provide good nursing care."(Surgical ward, bachelor's degree, aged 27).

"Usually on the medical ward one nurse has 10 or 12 patients. At the same time if two or three patients with RRT (renal replacement therapy) are in the ICU ward, two of our staff nurses have to go to ICU. We don't have time to provide good patient care."(Medical ward nurse, diploma degree, aged 25).

5.3.2.3.2 Professional Status

Many of the Malaysian nurses in this study explained that when good care is provided, they were happy with the positive feedback from patients. Acknowledgment of their work with patients and their relatives also has a positive impact on job satisfaction. The nurses gave the following explanation:

“When people say thank you to me and they get better this makes me satisfied.” (Surgical ward nurse, diploma degree, aged 24).

“When patients say that you have done a good job and pray for me these things really makes me satisfied.” (Medical ward nurse, bachelor’s degree, aged 29).

5.3.2.3.3 Professional Development

Continuing education and improved knowledge emerged from three focus group discussions. Some of the medical and surgical nurses stated that they should improve their skills and knowledge to cope with the complex needs of acutely ill patients. They also reported higher satisfaction when given the opportunity to learn and gain more knowledge. The Malaysian nurses felt that they could provide more effective care for patients and their family members by gaining more knowledge and clinical skills. Some nurses reported that the nurse’s quality of practice and skills needed to be developed by training, and providing more facilities for further education. The nurses show this in the following:

“I am proud to be a nurse because I can help my family and people when they are in need. I enjoy learning new skills. When we learn more new skills, we can help our patients more.”(Critical care unit nurse, diploma degree, aged 26).

“This is a teaching hospital and there are many things to learn, so I am satisfied with this.”(Medical ward nurse, diploma degree, aged 32).

“When you are a nurse you always meet different people with different backgrounds. There is an opportunity to talk to different people and learn many things.”(Surgical ward nurse, diploma degree, aged 30).

5.3.2.3.4 Lack of Clinical Autonomy

Only in one focus group discussion did nurses mention clinical autonomy as a main factor relating to nurse satisfaction. They explained that when they were more autonomous in making patient care decisions they felt more satisfied with their jobs.

One nurse said:

"I don't have any control over my own work as a junior nurse, I cannot do anything without a senior nurse's permission and I don't feel good about it. I think I need to have autonomy to decide how to provide good nursing care. For example: if we have an available bed in our ward and another ward wants to transfer the patient to my ward, only the senior nurses decide whether to admit or not admit the patient. If we admit a patient without their permission, we made them angry." (Medical ward nurse, diploma, aged 24).

5.4 Differences in Factors that Affect Malaysian and Iranian Nurse Job Satisfaction

The distribution comparison of demographic characteristics between Iranian and Malaysian nurses is shown in Table 5.5. The sample of Iranian nurses is majority composed of females. All nurses had held a bachelor's degree. More Iranian nurses worked in medical wards (n=29, 40.2%) compare with surgical (n=27, 37.6%) and critical care units (n=16, 22.2%). More than half (n=40, 55.6%) of the Iranian nurses have a work experience of six years and above.

The sample of Malaysian nurses there were more female (n=43), with ages ranging from 22 to 43years old (Table 5.5). The majority of nurses possessed a diploma (n=43), while 6.5% held a bachelor's degree. Less than half of the nurses from were medical

wards (n = 19, 41.3%), while 26% (n = 12) were from surgical, and 32.7% (n = 15) from critical care units. Less than half (n=19, 41.3%) of the nurses possessed a working experience of six years or more.

Table 5.5: Differences in Demographic Characteristics between Iranian and Malaysian Nurses

Demographic Characteristics	Overall (N=118)	Iranian	Malaysian
		(n=72)	(n=46)
Gender			
Male	10(8.5)	7(9.80)	3(6.50)
Female	108(91.5)	65(9.20)	43(93.50)
Age			
20-29	46(39.1)	23(31.90)	23(50.00)
30-39	53(44.9)	37(51.50)	16(34.70)
40 and above	19(16.0)	12(16.60)	7(15.30)
Level of education			
Diploma	43(36.4)	0	43 (93.50)
bachelors	75(53.6)	72(100)	3(3.50)
Years of experience			
≤ 6years	59(50.0)	32(44.40)	27(58.70)
>6 years	59(50.0)	40(55.60)	19(41.30)
Work unit			
Medical Ward	48(40.6)	29(40.20)	19(41.30)
Surgical Ward	31(26.2)	16(22.20)	15(32.70)
Critical care units	39(33.2)	27(37.60)	12(26.00)

Three themes were identified from the FGDs, two of which influenced both Iranian and Malaysian nurses' job satisfaction. These were environment and organization factors. Spiritual feelings were reported by the Iranian nurses, while the Malaysian nurses highlighted their ability to help people as the third factor that influenced their job satisfaction. Similar subthemes were reported by both Iranian and Malaysian nurses with regard to environment factors: team cohesion, benefits and rewards, a lack of clarity over nurses' responsibilities for working conditions and organizational factors: task requirements, professional status, professional development and a lack of clinical autonomy.

These supplemented the quantitative findings, as both Malaysian and Iranian nurses scored lower on salary and work conditions components in the MIOWS but higher on task requirements and autonomy.

5.5 Summary

A proposive sample of 118 Iranian and Malaysian nurses recruited at two large hospitals participated in the study. A total of fifteen focus group discussions were conducted with nurses from surgical, medical and critical care wards. A semi-structured interview guide was used to facilitate the interviews, which were audio-recorded, transcribed verbatim and checked. The transcripts were used as data and were analysed using a thematic approach. Findings from the qualitative study showed that Iranian and Malaysian nurses were satisfied with task requirements, autonomy and work interaction components and were dissatisfied with salary and work condition components. Four core themes emerged from the data analysis: (a) helping people, (b) spiritual feeling, (c) environment factors, and (d) organisational factors. The composite description and the resulting theme meanings can be used to provide explanations and clarify the results obtained in the quantitative phase of the study.

CHAPTER 6: DISCUSSION

6.1 Introduction

This mixed method study was conducted to identify the levels and factors related to the Iranian nurses and Malaysian nurses' job satisfaction were working as registered nurses in two large teaching hospitals. In the quantitative phase of the study, the population sample consisted of 813 Iranian and Malaysian registered nurses. In the qualitative phase of the study, fourteen FGDs with a purposeful sample of 118 nurses conducted in Iran and Malaysia. This chapter contains a discussion of key findings concerning research questions, positional implementations of the research, recommendation for future study and conclusion.

6.2 Discussion of Findings

6.2.1 Iranian Nurses Overall Job Satisfaction and Related Factors

The Modified Index of Work Satisfaction (MIOWS) was used to measure Iranian nurses' level of job satisfaction with their current position. The results of this study indicate that nearly one third of Iranian nurses were likely satisfied with their jobs. Likewise, Mirzabeigi et al. (2009) and Mogharab et al. (2006) reported that only about one third of Iranian nurses were satisfied with their jobs.

6.2.1.1 Factors related to Iranian Nurses' Job Satisfaction

The results of the study indicate that Iranian nurses were likely to be satisfied with task requirements, work interactions and autonomy components and were likely not to be satisfied with decision making, professional development, professional status, supportive nursing management, work conditions and salary. The study findings were in totality inconsistent with Herzberg's Two-Factor Theory of job satisfaction because

majority of Iranian nurses identified that both hygiene factors (salary, working conditions, work interaction, decision making, and supportive nursing management) and motivation factors (task requirement, autonomy, professional development, professional status) are important factors in contributing to nurses job satisfaction. Monjamed et al. (2004) support this finding, indicating that both hygiene and motivation factors contributed to the Iranian nurses job satisfaction.

The results of this study show that task requirement affected job satisfaction of Iranian nurses. More than half of nurses (52%) indicated that they like their job and nurses were satisfied with the nursing care they provided patients. Iranian nurses, in almost all FGDs, explained that they like their jobs. They explained, “nurses are the core and foundation of any health care setting.”

In addition, Iranian nurses mentioned that spiritual feeling gained by helping patients is one of the main factors that influence their job satisfaction. Both quantitative and qualitative data clearly show that the majority of nurses were likely satisfied with their task requirement. Cortese et al. (2007) and Ravari et al. (2012) support this finding, indicating that nurses were satisfied with helping patients and receiving recognition from patients and family members. Likewise, Archibald (2006) also reports that nurses were satisfied with the patients- positive outcome. If nurses are able to render spiritual care to their patients and if they experience a sense of purpose in the job, perhaps the end results will be increased job satisfaction, increased patient satisfaction, and increased quality of care.

In the current study, the results show that work interaction had an effect on the job satisfaction of the Iranian nurses. About half of the nurses (49.8%) indicate that nursing staff help each other when things are busy. In addition, in FGDs, almost all the Iranian nurses reported that working with supportive and helpful colleagues is a main factor

related to job satisfaction. Both quantitative and qualitative data clearly show that the majority of nurses were likely satisfied with their work interaction. Likewise, Konver et al. (2007) and Tao et al. (2012) report that work interaction and cooperation among nurses are important factors related to nurses' job satisfaction. Thus, nurse managers should offer more shared governance opportunities and improve the work environment by offering activities such as a journal club and opportunities to join different committees and workshops, and give nurses opportunities to attend these activities (Bjørk et al., 2007; Lu et al., 2008; Mrayyan, 2007).

Autonomy was one of the important factors related to the Iranian nurses job satisfaction, which is similar to findings previously reported in the literature (Apostolidis & Polifroni, 2006; Bjørk et al., 2007; Curtis, 2007; Finn, 2001; Price, 2002; Wilson et al., 2006; Zurmehly, 2008). Furthermore, in FGDs some of the nurses mentioned autonomy as an important factor related to their job satisfaction.

Likewise, Foley et al. (2004) report that American nurses also ranked the variable of autonomy the highest in perceived importance for their current job satisfaction. It seems that nurses who have control over their work (autonomy) are more satisfied with their jobs because they may feel they can achieve their goal of providing quality nursing care. The result of the study supports the notion that autonomy is an important factor to all nurses regardless of geographic location. Nurses' mangers can give nurses freedom to act on nursing decisions using their clinical knowledge and encourage nurses to make decisions about clinical patient care.

On the professional development component, more than half of the nurses (65%) believed that opportunities for promotion were unfair and career development was not related to good performance. Iranian nurses in FGDs explained that because of heavy work schedules, they do not have any opportunities to attend to these kinds of activities

(e.g., seminars, conferences and workshops). Work schedules should be available in good time; be as flexible as possible (with consultation of all concerned) and minimal changes should be implemented in order to avoid disrupting nurses' social lives and family commitments.

The data from both the quantitative and qualitative sections reveal that Iranian nurses were likely not satisfied with their professional development. Likewise, Al-Enezi et al. (2009) conclude that dissatisfaction with professional opportunities reflects some of the key issues in the nursing service in Kuwait. For example, the absence of opportunities for nurses to enhance their capabilities and competencies or to extend their scientific potential, were reported as some of the key issues. Therefore, it is recommended that nurse managers create a good working environment using job enrichment techniques.

According to Hu and Liu (2004), job enrichment involves upgraded responsibility, and usually includes increased recognition and greater chances for promotion, development, learning and achievement. It is suggested that nurse managers establish staff annual performance reviews in order to promote and improve employee effectiveness. During performance appraisals, supervisors should address issues like, promotions, salaries, advancement opportunities, recognition, responsibility and achievements.

On the professional statues component, approximately 78% of the nurses believed that staff in other departments did not appreciate nursing as a professional. In addition, nurses in FGDs expressed that in comparison with doctors, nurses receive less respect from society. Many of the nurses said that the patients only respects their doctors' and think that the nurses are just physician's servants. Data from both the quantitative and qualitative sections reveal that Iranian nurses were likely not satisfied with their professional statues. Zarea et al. (2009) in support of this finding stated that, in comparison with physicians, Iranian nurses receive less respect from the community. Public awareness of the role of nurses in health care organisations needs to be

improved. One way to improve the social position of nurses in the community is to report the nursing profession accurately in the media and newspapers.

In the current study, about 43.6% of Iranian nurses reported not being satisfied with levels of nurses participating in decision-making in their ward. This indicates that nurses felt that they did not have enough say in decisions related to management policies and the practices that affected them. The data from quantitative part of this study revealed that Iranian nurses were likely not satisfied with their limited participation in decision-making. In general, the involvement of nurses in decision-making activities in Asian countries tends to be low (Golbasi et al., 2008; Kwak et al., 2010). Nurses working at Magnet hospitals (in USA) are more satisified compare to other hospitals due to the high level of support from hospital and nursing leadership and having a voice in decisions regarding to practice and participate in collaborative relationships with other clinicians (Watson, 2010). Therefore, it is recommended that nurse managers provide more opportunities for nurses to participate in desion making regarding to the patients care.

Regarding supportive nurse managers, about 78% of nurses in this study believe that their hospital administration often does not respond to employee concerns. In addition, in FGDs many nurses remarked that nurse managers are non-supportive and do not give importance to their staff needs and do not listen to their work issues. The data from both the FGDs and questionnaire revealed that Iranian nurses were likely not satisfied with support given by their managers. The present findings seem to be consistent with other research, which found that Iranian nurses suffered from managerial problems (Farsi et al., 2010; Mirzabeigi et al., 2009). Therefore, it is recommended that nurse managers should develop the required knowledge to deal with situations that influence nurses' job satisfaction; they should promote their nurses' satisfaction through managerial

intervention such as involving nursing staff in policy making, especially in policies that affect nursing staff directly; and nurses and supervisors should be encouraged to open communications as a way of providing a better working environment.

In the current study, about 75% of nurses believed that the workload in their ward is unreasonable. A total of 81.1% (n = 246) of the nurses also indicated that, most of the time, there was not an adequate number of staff caring for patients. Almost all Iranian nurses in FGDs also reported that inadequate staffing, too much paper work, and high workload are main factors affecting their satisfaction. Both quantitative and qualitative data clearly show that the majority of nurses were likely not satisfied with their work condition. According to Kalist and Okoye (2011), Khowaja et al. (2005) and Pillay (2009) workload has negative and significant effects on job satisfaction. Therefore, self-scheduling, flexible scheduling and hiring new staff nurses are required to decrease heavy workloads and improve nurses' job satisfaction (Khowaja et al., 2005; Kovner et al., 2006).

More than half of the Iranian nurses (60.4%) indicated that discrimination and unfairness practices happen in their ward. Similarly, in FGDs Iranian nurses mentioned that they feel upset with the unfair and discriminatory decisions made by the head nurses. They believed that the head nurses are not fair when planning weekend, holiday, and vacation time for their staff nurses. Bagheri et al. (2012) support this finding. Justice in the workplace plays a pivotal role in the organisation and job satisfaction and the way individuals are treated directly affects their satisfaction (Baghari et al., 2012). Therefore, is recommended that nurse mangers reduce the risk of discriminatory decisions by establishing written objective criteria for evaluating nurses for promotion and encourage cooperation and equality in the workplace by creating diverse work groups.

Approximately 68.9% of Iranian nurses (n = 201) disagree or strongly disagree with the statement that a number of nursing staff in their hospital are satisfied with their current pay and benefits. The majority of nurses explained that nursing is a stressful with a low salary and reward; underpayment of nurses was one of the major reasons for their job dissatisfaction. Both FGDs and the questionnaire clearly show that the majority of the Iranian nurses were not satisfied with their salary, benefits and rewards. Likewise, many studies from other countries have shown that nurses express dissatisfaction, particularly about their salary, promotion opportunities and benefits (Cowin, 2003; El-Jardali et al., 2013; Khani & Jaafarpour, 2008; Mirzabeigi et al., 2009; Ramoo et al., 2013). It is reasoned that because nurses' incomes in Iran are generally lower than that of other health-related professionals, nurses feel that they are underpaid compared to other medical professions, even though their responsibility and workload seems similar (Emami & Nasrabadi, 2007). Therefore, the promotion and salary structure should be reviewed by policy makers and changed proportionately where necessary. Salaries and benefits for nurses should be increased based on performance and expertise. Nurse managers should create financial incentives for nurses and establish educational funds such as tuition reimbursement and scholarships to promote recruitment and retention of nurses.

Regarding environment factors, many of the nurses in the FGDs mentioned that there was no clear job description for nurses. They explained that, in addition to their regular duties, they usually also carried out the responsibilities of auxiliary nurses and secretaries. Similarly, Atashzadeh Shorideh et al. (2012) and Farsi et al. (2010) report that nurses were dissatisfied with unclear job descriptions. Iranian nurses play multiple roles in their wards because of unclear job descriptions, thus career ladder programmes should be established, expanded and explored for their clear job description to attract, satisfy and retain nurses.

6.1.2.1.2 Socio-demographic Variable Differences in Nine Components of Job Satisfaction

The significantly higher scores on work interaction, autonomy and task requirement components and overall job satisfaction scores among the medical ward nurses, compared with surgical and critical care unit nurses, contradict findings by Davis et al. (2006), who found no significant difference in total job satisfaction scores between medical, surgical and critical care unit nurses.

One reason medical nurses in this study have a higher level of job satisfaction may be due to the perceived increased autonomy and greater work interaction among medical nurses compared to critical care unit and surgical nurses. Both medical and surgical ward nurses had higher scores in the salary component compared to critical care unit nurses.

This may be due to the critical care unit nurses having expectations of better salaries and benefits than general surgical and medical ward nurses. Nurse managers should provide nurses with more challenges and greater autonomy at work, and supervisors should encourage support and collaborative teamwork among their staff; by providing immediate praise for good nursing conduct they can express recognition of their nurses (Duffield et al., 2009; Khowaja et al., 2005; Smith et al., 2005).

With regard to the factors associated with job satisfaction, this study found younger Iranian nurses had higher overall job satisfaction scores and higher scores on most of the component of job satisfaction compared to older nurses. This concurs with the findings from Mogharab et al. (2006) who suggest that in Iran, younger nurses were more satisfied with their jobs than older nurses because younger nurses are energetic and have more positive attitudes, which can lead to higher levels of satisfaction. Gurkova et al. (2012) also support the findings and state that younger nurses were more

satisfied with their jobs than older nurses. However, our findings contradict those of Curtis (2007), who reported that total job satisfaction in the Republic of Ireland was lowest among nurses in the 18−25 and 26−35 age groups and highest among nurses in the 36−45 and 46−55 age groups. Norman et al. (2005) also found that in the USA, older nurses were more satisfied than younger nurses. We reason that, due to the mixed findings reported, it is difficult to draw any firm conclusions about the relationship between age and job satisfaction.

There are several possible explanations for higher levels of job satisfaction among younger nurses compare than older nurses. Higher levels of job satisfaction among younger nurses may be due to fewer responsibilities, work pressure and demands from colleagues. In contrast with Pillay's (2009) study, this study has found that nurses with less than six years' experience had significantly higher scores than those with six or more year's experiences in the autonomy, professional development, professional status and work condition components. Clearly, an implication for nurse managers is to challenge experienced nurses. According to Chung (2003), the longer nurses worked on one particular unit, the greater the likelihood they were dissatisfied with their job and experiencing psychological distress. Nurses with more years of service and commitment to the organization tend to expect more autonomy, recognition, and opportunities. When these factors do not exist, experienced nurses may feel upset and become dissatisfied. Likewise, Ma et al. (2003) also report that experienced nurses had lower levels of job satisfaction than those who were inexperienced. Therefore, it is recommended that nurse managers conduct regular job satisfaction surveys in order to understand the needs of different nurse groups (Choi et al., 2011); this also will provide nurses with the chance to voice opinions about their training, advancement opportunities and other issues related to job satisfaction.

Findings on marital status and job satisfaction were mixed. Berg et al. (2004) report no association between marital status and job satisfaction among nurses. In contrast, some studies have reported that married nurses exhibit higher levels of job satisfaction compared to unmarried nurses (Al-Enezi et al., 2009; Monjamed et al., 2004). The findings of this study concur with those of Al-Enezi et al. (2009) and Monjamed et al. (2004), in which married nurses obtained higher scores than unmarried nurses for overall job satisfaction and all other components except for professional status. Al-Enezi et al. (2009) reasoned that the married nurses lived with their families, which contributed significantly to job satisfaction. The support given by families may help to improve nurses' job satisfaction.

In Iran, single nurses are often assigned greater responsibility for more duties than married nurses, as they are perceived to have more leisure time since they do not need to care for their spouse and children. Nurse managers should consider the need for new strategies such as recruiting new employees and designing new work schedules in order to increase nurses' job satisfaction. Nurses who received at least a day or more per month of scheduled professional development reported significantly higher scores for job satisfaction than those who did not receive a day of professional development (Bjørk et al., 2007; Pillay, 2009).

In this study and consistent with the findings by Dunn et al. (2005), there was no statistically significant difference between nurses with diplomas and those with Bachelor's degrees in overall job satisfaction score. However, some studies have found a positive association between nurses' educational level and job satisfaction (Al-Hussami, 2008; Ingersoll et al., 2002; Monjamed et al., 2004; Mogharab et al., 2006 Rambur et al., 2005), others have reported a negative association (Battu et al., 2000; Robinson et al., 2006).

A possible explanation for this study's findings may be that there is not much difference between the salary structures of the two groups of nurses in some hospitals in Iran. It is suggested that nurses' salaries in hospitals should be based on the urses'responsibilities and qualifications to ensure better job satisfaction. In Iran, the average nursing salary for newly hired nurses is approximately Rials 100,000,000 (US$1 = 25,000 Rials) per year.

In this study, female nurses scored higher than male nurses on most components, except autonomy, decision-making and professional development. The generally higher scores may be explained by the fact that, throughout history in Iran, nursing has been viewed as a profession for women and has traditionally, been more acceptable for women than for men. Kalist and Okoye (2011) and Shields and Ward (2001) reported similar findings.

The higher scores in autonomy, decision making and professional development among male nurses may be due to the fact that male nurses mostly work in highly technological wards, such as emergency and intensive care, where opportunities to learn new skills and be autonomous are increased due to advances in technology and the nature of the work in these wards. As an on-the-job incentive for nurses, Bjørk et al. (2007) suggested clinical ladder programmes. These programmes consider a nurse's continuing education, committee participation, work experience, certifications, academic degrees, community service, and performance appraisal scores as criteria for advancement (Bjørk et al., 2007). Clinical ladder programmes have been successfully introduced in some countries such as the UK and the USA (Lu et al., 2008). It is recommended that nurse managers establish this programme in Iran and explore its applicability to health care organisations.

The findings of the multiple linear regression analysis suggest that to improve job satisfaction, nurse leaders and the administration should focus on nurses who are

unmarried, male nurses, and nurses who are older. Nurse managers should be encouraged to establish formal recognition programmes, promote awards, and provide economic incentives and retirement benefits, especially for older nurses (Norman et al., 2005; Touranyeau & Cranley, 2006). Such an approach would acknowledge the skills, knowledge and experience of older nurses. In a society like Iran, men are typically the breadwinners for their household, so male nurses may require improved pay, benefits and rewards from their organisations to increase their level of satisfaction.

6.2.2 Malaysian Nurses Overall Job Satisfaction and Related Factors

The Modified Index of Work Satisfaction (MIOWS) was used to measure Malaysian nurses current level of overall job satisfaction with their current position. The findings indicate that the majority of Malaysian nurses (88.7%) were likely to be satisfied with their jobs. Likewise, Mohammad and Fakir (2010), Ahmad and Oranye (2010) and Ramoo et al. (2013) reported that the majority of Malaysian nurses were moderately satisfied with their jobs.

6.2.2.1 Factors Related to Malaysian Nurses' Job Satisfaction

The results of this study indicate that Malaysian nurses were likely to be satisfied with task requirements, work interactions, decision-making, autonomy, professional development, professional status and supportive nursing management and they were likely not satisfied with work conditions and salary. The study findings were in totality inconsistent with Herzberg's Two-Factor Theory of job satisfaction because majority of Malaysian nurses identified that both hygiene factors (salary, working conditions, work interaction, decision making, supportive nursing management) and motivation factors (task requirement, autonomy, professional development, professional status) are important factors in contributing to nurses job satisfaction. Similary, Ramoo et al.

(2013) reported that both hygiene and motivation factors contributed to the Malaysian nurses job satisfaction.

On the task requirement component, the majority of Malaysian nurses (84.7%) that participated in this study indicated that they like their jobs and they were satisfied with the nursing care they provided patients (85.4%). In addition, in FGDs, Malaysian nurses indicated that helping patients achieve a better quality of life, seeing patients improve, become symptom-free and allowed to be discharged from the hospital strongly influenced their job satisfaction. Both quantitative and qualitative data clearly show that the majority of Malaysian nurses were likely to be satisfied with their task requirement. Cortese (2007) and Ravari et al. (2012), which reported that nurses were satisfied by helping patients and recognition from patients and family members, support this finding. Similarly, El-Jardali et al. (2013) reported that nurses in Yaman, Jordan, Lebanon and Qatar liked their work and indicated that they would choose their job all over again if given the chance.

On the work interaction component, which addresses the level of satisfaction with social contact between nurse-nurse and nurse-physician, Malaysian nurses expressed a high level of job satisfaction with interactions, both nurse-nurse and nurse-physician, but particularly with nurse-nurse. The majority of Malaysian nurses (84%) reported that there was a good deal of teamwork and cooperation between various levels of nurses. Furthermore, in FGDs, many nurses reported that a good relationship with other staff nurses is an important factor related to job satisfaction. Both quantitative and qualitative data clearly show that the majority of Malaysian nurses were likely to be satisfied with their work interaction. Nurses explained that they were satisfied with the level of good cooperation with other staff nurses and good relationships with their colleagues.

Likewise, Konver et al. (2007), Ramoo et al. (2013) and Tao et al. (2012) reported that work interactions and cooperation among nurses were important factors related to nurses' job satisfaction in the USA, China and Malaysia. Therefore, it is recommended that nurse managers place more emphasis on factors that really matter to nurses' satisfaction; for example, improving supervisory training programmes is one way that may contribute to the improvement of nurses' satisfaction. In addition, nurses and supervisors should be encouraged to engage in open communication as a way of providing a better working environment.

In this study, the majority of Malaysian nurses (83.8%) indicated that there is a good deal of teamwork and cooperation between various levels of nursing personal on their services. The qualitative findings in the second phase of this study provide additional insight into these quantitative findings. Malaysian nurses report that they need to work as a team when it comes to discussing and sharing their knowledge and experience on patient care with their colleagues. Numerous studies mentioned that team cohesion and relationship with colleagues were important factors related to the nurses' job satisfaction in different countries (Cortese et al., 2007; Gardulf et al., 2008; Kovner et al., 2006; Ramoo et al., 2013; Wyatt & Harrison, 2010; Zangaro & Soeken, 2007). Therefore, the team can accommodate different levels of nurses working together with a shared goal, clear guidelines and communication, and reporting structures that are required to enable the team to function efficiently. Nurses Mangers could promote an atmosphere where working relationships and interaction are valued and emphasized.

On the decision-making components, more than half (76%) of the nurses reported that nursing staff do not have sufficient control over scheduling their own work shifts in the hospital. However, only in one focus group discussion did some of the Malaysian medical nurses point to the flexibility of their work schedule, which allowed them to meet family and personal demands that were important to them. Likewise, Khowaja et

al. (2005) and Kovner et al. (2006) found that self-scheduling and flexible scheduling to decrease workloads are essential to improve nurses' satisfaction. Heavy workloads and inflexible scheduling are factors that hinder nurse retention in healthcare organisations (Shamian & El-Jardali, 2007). Therefore, consideration should be given by nurse manager to improve scheduling, providing day care for children, and more part time employment, all of which are bound to have a positive effect on nurses' job satisfaction.

Nurses in this study appeared to be more satisfied if health care administration and nurse managers offered staff nurses more opportunities to participate in clinical decision-making and involving them in policies that directly affect nurses. More than half of the nurses reported that the nursing administration generally does not consult with staff on daily issues. Similarly, Lambrou et al. (2010) reported that nurses' participation in clinical decision-making was one factor related to the nurses' job satisfaction. This may partly be due to Asian cultures, where bureaucrats are given considerable power and subordinates are expected to be passive. Therefore, nurse managers should promote nurses' satisfaction through some managerial interventions such as involving nursing staff in policy making, especially in policies that affect nursing staff directly, and they should support their staff nurses in conflict between physicians and nurses. Registered nurses should be formally involved in decision making and policymaking processes so that they feel as a part of these processes.

On the autonomy component, more than half of the Malaysian nurses (81.4%) reported that they had good control over their work. However, in one focus group discussion, some of the junior nurses mentioned that they do not have autonomy over their work. They explained that when they were more autonomous in making patient care decisions they felt more satisfied with their jobs. It should be noted that there is no policy allowing flexible working hours in Malaysia for nurses in the public sector. Flexible shift scheduling and a decrease in heavy workloads via provisions of an adequate

number of nurses are essential to improve nurses' satisfaction and to create a better working environment (Kovner et al., 2007). A number of studies found that there was a positive correlation between nurses' job satisfaction and autonomy (Finn, 2001; Zangaro & Soeken, 2007).

Regarding professional development, more than half of the Malaysian nurses (65%) indicated that they had access to continuing professional education in nursing and they had a fair opportunity to attend seminars or workshops. In addition, in the FGDs, some of the medical and surgical nurses reported that it would be good for them to improve their skills and knowledge to cope with the complex needs of acutely ill patients.

They also reported higher job satisfaction when given the opportunity to learn and gain more knowledge. Likewise, Abualrub et al. (2009), Kwak et al. (2010), and Ramoo et al. (2013) reported that professional development had positive effects on nurses' job satisfaction. Therefore, it is recommended that nurse managers and administration provide more workshops and conferences to increase nurses' job satisfaction.

On the professional status component, more than half (63.9%) of the nurses indicated that they are satisfied with the status of nursing in the hospital. In addition, in the FGDs, many of the Malaysian nurses explained that when good care is provided, they were happy with the positive feedback from patients. Acknowledgment of their work with patients and their relatives also has a positive impact on job satisfaction.

Both quantitative and qualitative data clearly show that the majority of Malaysian nurses were likely to be satisfied with their professional status. This finding is in agreement with Bjork et al. (2007) and Curtis (2007) who show that professional status made the greatest contribution to nurses' current level of job satisfaction in Norway and Ireland. Therefore, if nursing roles in the hospital are better understood and appreciated

by patients and their families, other health care providers, and the general public, nurses' job satisfaction may be enhanced.

In the current study, Malaysian nurses had a different view of support given by their managers and sisters (head nurse). Sixty-five percent of Malaysian nurses indicated that their nurse managers were supportive of nurses and backed the nursing staff in decision-making, even if it resulted in conflict with doctors. On the other hand, in FGDs, Malaysian nurses said that their sisters only focus on documentation and they do not care about quality of patient care or pressure that nurses had in wards due to inadequate staff nurses. Malaysia nurses were more satisfied when their managers were supportive. Likewise, Iliopoulou and While (2010) and Konver et al. (2006), show that management support contributed to nurses' job satisfaction. Nurse managers should support their staff as they deal with challenging situations. The nurse managers should also give their staff choices about how to do their work, thereby ensuring the followers' growth in their jobs. They should spend more time in communicating with their nursing staffs. Nurse managers need to talk to the nurses regarding to their needs to keep them satisfied over the long-term.

On the work condition component, nurses reported low satisfaction on workload, work schedules, staffing and fairness. In addition, in all focus group discussions, almost all the Malaysian nurses cited inadequate staffing and workload as the main factors that affect their job satisfaction. Heavy workload was mentioned as a factor contributing to workforce stress and making it difficult for nurses to balance their work and life. They described their workload as difficult to effectively manage within the work hours. A shortage of staff nurses and absenteeism was also reported as an added pressure during work hours. Both quantitative and qualitative data clearly show that the majority of Malaysian nurses were not satisfied with their work conditions.

According to Dunn et al. (2005) and Kalist and Okoye (2011), decreasing the factors that contribute to work stress such as workload would improve nurses' level of job satisfaction. Kalliath and Morris (2002) stated that excessive workload was one of a number of external forces that resulted in burnout and distress at work. Therefore, self-scheduling and flexible scheduling to decrease workloads are essential for improving satisfaction (Khowaja et al., 2005; Kovner et al., 2006; Ramoo et al., 2013). The fact that workload satisfaction was rated poorly could be due to the current nursing shortage faced by hospitals, which has led to an increase in the patient-to-nurse ratio and, consequently, in nurses' workloads. Furthermore, nurses in this study did not have much choice when it came to their work schedules due to inadequate staffing and the absence of any policies on flexible working hours for nurses in Malaysia. Work schedules should be available in good time; be as flexible as possible (with consultation of all concerned) and minimal changes should be implemented in order to avoid disrupting nurses' social lives and family commitments. It is also recommend that nurse managers consider the need for new strategies such as recruiting new employees and designing new work schedules in order to increase nurses' job satisfaction.

Regarding the salary component, about 46.8% of nurses disagree or strongly disagree with the statement that the pay and benefit they receive for their level of responsibility was fairly good. Malaysian nurses participating in FGDs explained that salary is one of the most important factors affecting their job satisfaction. Many of the Malaysian nurses mentioned that nurses' salaries were low in comparison to their heavy workload. Both quantitative and qualitative data clearly show that the majority of Malaysian nurses were likely not satisfied with their salary. Previous studies from other countries also show that nurses express less satisfaction, particularly with regards to their salary, promotion opportunities and benefits (Al-Dossary et al., 2012; Best & Thurston, 2006;

Curtis, 2007; Iliopoulou & While, 2010; Gurkova et al., 2012; Koner et al., 2006; Mirzabeigi et al., 2009; Ramoo et al., 2013).

Under the Malaysian government salary system, nurses' salaries are similar to all other civil servants, following the same salary scheme, despite nurses' extensive working hours (up to 24 hours). In Malaysia, there are no night shift allowances or additional benefits for nurses working on public holidays or weekends. These factors may contribute to the lower scores on work conditions and salary for the nurses in this study. It is recommended that policy makers review the promotion and salary structure to take into considerations the nature and work demand of nurses.

Nurses explained that their responsibility in their work was unclear and that this made them frustrated. They mentioned that they have job descriptions, but it is impossible for them to work based on their job description. Similarly, Atashzadeh Shorideh et al. (2012) and Farsi et al. (2010) report that nurses were dissatisfied with unclear job descriptions. Malaysian nurses play multiple roles in their wards because of unclear job descriptions, thus career ladder programmes should be established, expanded and explored in order to attract, satisfy and retain nurses.

6.2.2.2 Socio-demographic Variable Differences in Nine Components of Job Satisfaction

There are discrepancies in the findings on job satisfaction between males and females in the literature. A study by Curtis (2007) shows no significant differences between gender and job satisfaction. However, studies by Kalist and Okoye (2011), and Shields and Ward (2001) showed that female nurses have higher levels of job satisfaction compared to male nurses. In this study, comparison between male and female nurses revealed no statistically significant differences in scores for the nine components of job satisfaction

and in the overall job satisfaction. However, it should be noted that the number of male nurse is too small to warrant the significant comparison differences.

With regards to factors associated with job satisfaction, this study found that married nurses had significantly higher scores on task requirements, professional development and work condition components as well as overall job satisfaction scores than unmarried nurses. This concurs in the findings of Al Enezi et al. (2009) and Kalsit and Okoye (2011), which suggest that marital status has a statistically positive effect on job satisfaction. Married nurses may be more capable than unmarried nurses to deal with difficult job situations; this could be due to various reasons such as support from their spouse and families or strong desire to work and support the family. The exact reason being married is associated with better job satisfaction is unable to be determined in this quantitative study, thus, future qualitative studies are warranted to gain in-depth understanding of this difference.

The results of this study shows that Malaysian nurses with more than six years of working experience were found to score significantly higher on task requirements, decision-making, autonomy and professional development components and overall job satisfaction. Likewise, Liu et al. (2011) and Pillay (2009), also report that nurses who were more experienced had higher levels of job satisfaction than nurses who were inexperienced. However, Ma et al. (2003) reported that experienced nurses in their study reported lower levels of job satisfaction compared to inexperienced nurses. One possible explanation may be that experienced nurses may not have many difficulties in their job and may face fewer challenges, thus having greater levels of readiness compared to inexperienced nurses. Thus, nurse managers should encourage experienced nurses to mentor nurses who have less experience.

In contrast to Ruggiero's (2005) study, this study reports that older nurses have significantly higher scores on task requirements, professional status components and total job satisfaction than younger nurses. The finding of this study concurs with that of Best and Thurston (2006), Bjork et al. (2006) and Lorber et al. (2012) and Norman et al. (2005), in that older nurses were significantly more satisfied than younger nurses. Furthermore, it has been reported that nurses aged 30 or younger were more likely to leave their current jobs within the next twelve months than were older nurses (Ingersoll et al., 2002). The reason may be that there are usually more opportunities for job promotion for older nurses due to more extensive work experience.

Older nurses are also more likely to possess greater expertise and skills to perform their duties and are familiar with their job settings, thus indirectly raising their level of job satisfaction. Adapting to a new environment also may contribute to the younger nurses' lower level of job satisfaction.

There were significantly higher scores among the medical ward nurses compared to critical care and surgical ward nurses on decision-making, work interaction, professional development, salary, supportive nursing management components and overall job satisfaction score. This concurs with the findings of Schmalenberg and Kramer (2008), which revealed that medical ward nurses had higher levels of satisfaction than surgical ward nurses. However, it contradicts the findings of Liu et al. (2011), who reported that nurses who worked in surgical wards were more likely to have higher job satisfaction than those who worked in medical wards. The reason why medical nurses in this study have a higher level of job satisfaction may be due to more opportunities to participate in clinical decisions about their patients and greater work interaction among medical nurses compared to critical care and surgical nurses. Therefore, a rotation programme should be in place for nurses so that they can be

rotated to other specialties ward after two or three year. This is also an opportunity for nurses to enhance their professional experience by working in a new speciality.

The current study found that there were no differences in overall job satisfaction score and nine components of job satisfaction scores between surgical and critical care unit nurses. This may be because nurses working in both surgical and critical care units have the same job description.

Consistent with the findings from Dunn et al. (2005) and Lu et al. (2008), there were no statistically significant differences between Malaysian nurses with diplomas and those with Bachelor's degrees in overall job satisfaction score and the nine components. In contrast, some studies have found a positive association between nurses' educational level and job satisfaction (Al-Hussami, 2008; Ingersoll et al., 2002; Rambur et al., 2005) while others have reported a negative association (Al Enezi et al., 2009; Robinson et al., 2006). It could be that nurses with high levels of education are better able to actualise their professional roles as they were given more autonomy, have more responsibility, skills and knowledge to make decisions related to patient care and more employment opportunities thus, exhibit higher level of job satisfaction.

Kendall-Gallagher et al. (2011) reported that higher levels of education are associated with improvement in patient outcomes, and that this might influence job satisfaction. However, it should be noted that the number of Bachelor degrees was too small to warrant significant comparison differences. This indicates that further research, with a larger number of nurses with a variety of educational backgrounds, is needed to explore these issues.

Although Shields and Price (2002) reported lower levels of job satisfaction among ethnic minority nurses, this study showed that non-Malay nurses scored significantly higher on decision-making and autonomy than Malay nurses. However, the majority of

nurses in this study were Malays, which forms the ethnic majority in most public hospitals in Malaysia. Thus, it remains difficult to draw any firm conclusions regarding the relationship between ethnicity and job satisfaction, due to the very small size of non-Malay nurses in this study.

Overall, in the multiple linear regression analyses, in which the effects of all the factors being studied were taken into account, findings revealed the variable work unit as the only significant predictor of job satisfaction. It was found that nurses in surgical and critical care units exhibited the lowest level of job satisfaction.

This implies that to improve job satisfaction, nurse leaders and administration should focus more on surgical and critical care unit nurses.

6. 3 Comparison of the Level of Nine Components of the MIOWS among Iranian and Malaysian Nurses

Health care systems in both countries are mainly under the responsibility of the Ministry of Health. Iran and Malaysia generally have an efficient and widespread system of health care, operating a two-tier health care system consisting of both a government-run universal healthcare system and a co-existing private healthcare system. In 2002, Iranian Nursing Organization (INO) was approved by Iran's legislature and the INO established itself in the same year. The INO has the legal responsibility to represent all nurses in all sectors of nursing. Some of its key objectives are, improving the quality of patient care, developing standards for nursing practice and promoting more professional opportunities for nurses. This organization could play a significant role in the development and empowerment of nurses.

The Malaysian Nurses Association (MNA) is the professional organization for all registered nurses (RNs). The main objectives of this organization are, to promote and

maintain the hounour and interest of the nursing protession, to help sustain the professional standard of nursing and nursing ethics and to promote professional opportunities for nurses.

6.3.1 Level of Nine Components of the MIOWS among Iranian and Malaysian Nurses

Iranian nurses and Malaysian nurses similarly provided higher scores on work interaction, task requirement and autonomy and lower scores on salary and work condition components of job satisfaction. Malaysian nurses reported higher scores in all components of the MIOWS except work condition.

The majority of Malaysian nurses (84%) and nearly half of the Iranian nurses (49%) reported that they liked their work and were satisfied with the nursing care provided to patients. However, about two-thirds of Malaysian nurses and more than half of the Iranian nurses (65%) indicated that the amount of time they spend on paper work was not reasonable. Nurses from both countries were satisfied with cooperation and interaction with other nurses. However, they were not satisfied with cooperation and relationship with doctors.

Nearly half of the Malaysian (50%) and Iranian nurses believed that they could not participate in developing their work schedules. Nurses from both countries believed that the opportunities for development are not fair and they were not satisfied with the support given by their nurse managers and supervisors.

Iranian nurses believed that people in the society do not respect nurses like they do other professionals. However, Malaysian nurses reported that if they perform well, they found positive feedback from patients and acknowledgment of their work with patients and their relatives also had a positive effect on job satisfaction.

Nurse-patient ratio is higher in Malaysia (27.3 density of nurses per 10,000 population) compared than Iran (14.1 density of nurses per 10,000 population). However, both Malaysian and Iranian nurses reported that inadequate staffing and heavy workload were main factors affecting their job satisfaction. Similarly, according to Dunn et al. (2005), Kalist and Okoye (2011), Khowaja et al. (2005) and Kovner et al. (2006), nurses were dissatisfied with their heavy workload and the insufficient amount of time in which they should provide patient care.

Numerous studies have reported that the effect of nursing shortage has led Iranian nurses to work more than the maximum required shift of 192 hours per month, with as much as 150 hours of overtime in some parts of Iran (Farsi et al., 2010; Varaei et al., 2012). However, under Malaysian law, nurses are not allowed to work more than their maximum required shift of 192 hours per month.

Iranian and Malaysian nurses believed that their salary is low compare to their heavy workload and responsibility. Similarly, results of studies conducted in other countries such as China (Hu and Liu, 2004), Jordan (Mrayyan, 2005), Pakistan (Khowaja et al., 2005), Ireland (Curtis, 2007), and South Africa (Pillay, 2009), reported nurses were dissatisfied with their salary.

Malaysian nurses provided higher scores on mean total job satisfaction scores compared to Iranian nurses. The reasons for the significant difference in mean total job satisfaction scores may be the higher proportion of Iranian nurses who had obtained university degree qualifications and therefore, had more expectations in all components of job satisfaction, which could not be met. On the other hand, Iranian nurses and Malaysian nurses are living and growing up in different cultures, so we cannot ignore the influence of culture on employees' level of job satisfaction and thus, the results of this study.

6.4 Summary

The results of this study indicate that Malaysian nurses had a significantly higher score on professional status, task requirement, supportive nursing management, work interaction, autonomy, decision making, salary, professional development and overall job satisfaction score than Iranian nurses. Both Iranian and Malaysian nurses were satisfied with autonomy, work interaction and task requirements components.
In the qualitative part of the study, both Iranian and Malaysian nurses reported that environment and organization factors as important factors that influence their job satisfaction.

The nursing shortage has become a serious challenge for healthcare organisations and policy-makers. As nurses, particularly hospital nurses, become more difficult to recruit and retain, organisations will need to use creative strategies in order to compete in the more limited labour market. Nurse managers should be required to create opportunities for professional development, provide more clinical autonomy and comfortable work environment for the nurses in organisations which may increase their job satisfaction.

CHAPTER 7: CONCLUSION

The result of the study indicates that less than one third of Iranian nurses were satisfied with their job. Task requirements, autonomy and work interaction were the components of the MIOWS associated with Iranian nurses job satisfaction. Multiple analyses revealed that Iranian male nurses, as well as older nurses, unmarried nurses and nurses with more experience are less satisfied with their work, which has helped identify target groups for intervention in Iran.

More than two-thirds of Malaysian nurses were satisfied with their jobs. Task requirement, autonomy and work interaction, professional development, professional status, supportive nursing management and decision-making components of the MIOWS are associated with Malaysian nurses' job satisfaction. Multiple analyses revealed that for Malaysian nurses, the variable work unit was significantly correlated with overall job satisfaction score, which implies that nurses from surgical and critical care units warrant special attention in regard to job satisfaction.

In addition, the result of this study indicate that Malaysian nurses had significantly higher scores on professional status, task requirement, supportive nursing management, work interaction, autonomy, decision-making, salary, professional development and overall job satisfaction scores than Iranian nurses.

Both Iranian and Malaysian nurses were satisfied with autonomy, work interaction and task requirement components. On the other hand, nurses in both countries were dissatisfied with their working conditions. There were significant differences in overall job satisfaction score for age, marital status and years of working experience in both countries. Older Malaysian nurses and those with more than six years of experience had significantly higher scores on overall job satisfaction compared to the older age group in

Iran. Married Malaysian nurses also had significantly higher scores on overall job satisfaction compared to Iranian married nurses.

Being female, younger and married were significantly associated with higher overall job satisfaction scores among the Iranian nurses. Among Malaysian nurses, those working in medical units were more likely to have significantly higher overall job satisfaction scores.

The results of the qualitative part of the study revealed that not enough time to provide high quality nursing care, an insufficient numbers of nurses, not enough equipment's and resources, unsupportive nurse managers and lack of clinical autonomy are factors that undermining nurses satisfaction in both countries. Furthermore, Iranian and Malaysian nurses state that their ability to help patients and their relationship with other members of the nursing staff are the most important factors in increasing their job satisfaction.

The nursing shortage has become a serious challenge for healthcare organisations and policy-makers. As nurses, particularly hospital nurses, become more difficult to recruit and retain, organisations will need to use creative strategies in order to compete in the more limited labour market. Nurse managers should be required to create opportunities for professional development for the nurses in an organisation, this may increase their job satisfaction.

This research suggests that by providing more clinical autonomy, incorporating nurses' active input in the decision-making process for their unit, managerial and supervisory support, and increased salary, the level of nurses' job satisfaction might increase. Nurse managers need to perform a job redesign, which should include a reward system that supports and appreciates a person's efforts. Inflexibility in work schedules and a heavy workload need to be reduced and discrimination practices need to be eliminated.

Nurses' mangers need to hire and mentor supervisors to become skilled and effective leaders promoting and providing positive, comfortable and pleasant working environments.

Taking this into account, staff nurses could improve their own satisfaction by increasing their work interactions, working on their communication skills, and making an effort to support their peers thereby making them feel appreciated. Overall, nurse managers and administrators should pay attention to what their employees need from the organisation and do everything within their power to meet those needs. This finding has important implications for develop policies that could lead to an improvement in nurses' job satisfaction and therefore better patient satisfaction, a decrease in the turnover of nurses, and increased profits for the organisation.

7.1 Implications for Nursing Practice

As this study was conducted only in one hospital in Iran and Malaysia which may not be reflective for all the hospitals in Iran and Malaysia, there is a need to replicate this study using a larger sample of nurses recruited from several hospital settings in each country.

Findings within this study have the potential to increase knowledge of the impact of nursing autonomy, professional development, professional status, work condition, work interaction, supportive nursing management, task requirement, salary, and the characteristics of the nursing population such as education, age, marital status, gender, years of working experience and speciality on nurses' job satisfaction in Malaysia and Iran. This is critical during a time of a growing shortage of acute care nurses.

The study findings also provide a lot of useful information for the hospital management. Firstly, extrinsic job conditions are very important and nurse managers should pay more attention to extrinsic factors if they want to motivate nurse in work.

Secondly, individual characteristics (gender, age, etc.) also affect nurses' job satisfaction. The present workforce consists of varying age groups, each with different value and belief systems. Effective managers will identify the needs of each age group to promote their growth, retention, and work satisfaction.

In addition, this study demonstrates that nurse mangers can successfully improve nurses' overall job satisfaction by providing more clinical autonomy and professional development, providing friendly and comfortable work environments, increasing the salary for nurses, focusing on professional support and recognition, etc.

This information is importance to the nursing community as a whole with the existing nursing shortage, and potential retention and recruitment strategies of nursing administrators. It is extremely important to consider the impact of the nursing shortage on the health care environment, and determine potential solutions toward improving the health care environment for nurses.

The level of job satisfaction among Malaysian nurses was higher than Iranian nurses. Thus, nurses' managers in Iran can get clues from this study and find out why Iranian nurses are not satisfied with their jobs.

7.2 Recommendations for Further Research

Although this study yields important results about nurses' job satisfaction, there is much more research to be done comparing countries. One recommendation is to repeat this study using a much larger sample, from more than one hospital in each country, to

improve the likelihood of achieving statistically significant results that could be generalised to a larger, more diverse population.

Second recommendation is to investigate the factors other than those examined in the present study to assess their relationship with nurses' job satisfaction. For example, it is very interesting to find out whether culture, economic condition and social differences could affect nurses' job satisfaction. One of the findings which indicated male, single and older nurses were less satisfied could be further explored to understand why this is so.

As the quantitative part of this study was cross-sectional, future studies should include a longitudinal study, during which respondents could be followed for a period of time or use a case study approach instead of one-shot basis. This will help to discover any changes in nurses' satisfaction levels and factors associated with those changes.

7.3 Summary

This study was carried out in a teaching hospital in Iran and Malaysia using MIOWS and FGDs. It was found that the overall job satisfaction score of the Malaysian nurses (228.88±21.51) was significantly higher than that of the Iranian nurses (183.53±42.87) ($p<0.001$). The Malaysian nurses had a significantly higher score than the Iranian nurses in all the components of MIWOS except for work conditions. Of the nine components of MIOWS, both the Iranian and Malaysian nurses had higher scores than their respective midpoints on three components, namely: autonomy, task requirement and work interaction, although Malaysian nurses also scored higher in terms of professional development, supportive nursing management, decision-making and professional status.

The results also indicated that only 87 Iranian nurses (28.7%), compared to 290 Malaysian nurses (88.7%), had an overall job satisfaction score which was above the

midpoint score of 201. The overall job satisfaction score was significant different between gender, age, marital status and years of working experience for the Iranian nurses although in addition for Malaysian nurses work units were found significant. In multiple analyses, young age, being female and being married were significantly associated with a overall job satisfaction score for the Iranian nurses while work unit namely Malaysian nurses working in surgical and critical care units were more likely to have a lower overall job satisfaction score. The adjusted R^2 for the model for the Iranian nurses and Malaysian nurses was 0.14 and 0.05, indicating a 14% and 5% variability respectively. The results of the regression model for the Iranian and Malaysian nurses were highly significant at $F(4,299) = 13.19$, $P<0.001$ and $F(5,322) = 4.37$, $p<0.001$ respectively.

The three themes elicited from the FGDs reported the environment and organization factors as important factors contributing to job satisfaction for both Iranian and Malaysian nurses. In addition, the Iranian nurses also identified spiritual feeling as a theme while the Malaysian nurses identified the ability to help people as an important factor influencing their job satisfaction.

These supplemented the quantitative findings, as both Malaysian and Iranian nurses scored lower on salary and work conditions components in the MIOWS but higher on task requirements and autonomy.

Efforts to increase clinical autonomy, improved teamwork and communication to promote team cohesions and improved working conditions to ensure a conducive and safe practice environment should be considered when developing strategic planning that could effectively improve nurses' job satisfaction in Iran and Malaysia.

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LIST OF PUBLICATIONS AND PAPERS PRESENTED

Narges Atefi, khatijah Lim Abdullah, Li Ping Wong, Reza Mazlom, 2013, Factors Influencing Job Satisfaction among Registered Nurses: Questionnaire Survey in Mashhad-Iran, *Journal of Nursing Management*, Online Published, doi: 10.1111/jonm.12151.

Narges Atefi, khatijah Lim Abdullah, Li Ping Wong, Reza Mazlom, 2014, Factors Influencing Registered Nurses Perception of Their Overall Job Satisfaction: A Qualitative Study, *Journal of International Nursing Review,* Online Published, doi: 10.1111/inr.12112.

Narges Atefi, Khatijah Lim Abdullah, Li Ping Wong, 2014, Job Satisfaction of Malaysian Registered Nurses; a Qualitative Study, *Journal of Nursing in Critical Care*, Accepted for publication, doi;10.1111/nicc.12100.

Narges Atefi, khatijah Lim Abdullah, Li Ping Wong, Job Satisfaction among Iranian and Malaysian Critical Care and Medical-Surgical Registered Nurses: A Comparison Study. *Journal of Applied Nursing Research*. Under Review.

Narges Atefi, khatijah Lim Abdullah, Li Ping Wong, Assessment of job satisfaction among Registered Nurses in a Teaching Hospital in Malaysia (2012), In proceeding: 2nd International Nursing Research Conference, University of Malaya, Kuala Lumpur, 9–12 Feb.

Narges Atefi, khatijah Lim Abdullah, Li Ping Wong, Job Satisfaction of Malaysian Registered Nurses at a Tertiary Hospital: a Qualitative Study, (2013), In proceeding: Qualitative Research Conference (QRC2013) - QRAM 2013, 21–23 Nov.

Factors influencing job satisfaction among registered nurses: a questionnaire survey in Mashhad, Iran

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Factors influencing job satisfaction among registered nurses: a questionnaire survey in Mashhad, Iran

Background Job satisfaction is a critical factor in health care. Strong empirical evidence supports a causal relationship between job satisfaction, patient safety and quality of care.
Objective To determine the level of nurses' job satisfaction and its associated factors.
Method A stratified random sample of 421 registered nurses working at a large hospital in Mashhad, Iran was surveyed.
Result The results showed that autonomy, task requirement and work interaction had scores higher than their respective median on the subscales. There were significant differences between demographic characteristics and the autonomy, task requirement, work interaction, salary, work condition, professional development, supportive nursing management, decision making, professional status subscales and mean total job satisfaction. In univariate analysis, young age, being female and being married were significantly associated with a higher level of job satisfaction. The adjusted R^2 for this model was 0.14, indicating that the model explained 14% of the variability. The regression model was highly significant, F (4298) = 13.194, $P < 0.001$.
Conclusions and implications for nursing management The authors emphasise that the human resources policies and incentive need to be re-visited. Efforts undertaken to improve working conditions, supportive nursing management, improved professional status, professional development and increased salaries are some of the ways for nurse managers to improve job satisfaction.

Keywords: Iran, job satisfaction, registered nurse, salary

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Introduction

Due to current nursing shortages, hospitals are facing serious challenges in providing high-quality care worldwide (Khowaja *et al.* 2005). Previous studies have shown that low job satisfaction is a major cause of turnover among health care providers (Camerino *et al.* 2006, Abualrub 2007). In Iran, a shortage of nursing staff, as a multidimensional phenomenon, is a significant challenge (Farsi *et al.* 2010). The shortage

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Factors influencing registered nurses perception of their overall job satisfaction: a qualitative study.

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Author Information

Abstract

AIM: The purpose of this qualitative descriptive study was to explore factors related to critical care and medical-surgical nurses' job satisfaction as well as dissatisfaction in Iran.

BACKGROUND: Job satisfaction is an important factor in healthcare settings. Strong empirical evidence supports a causal relationship between job satisfaction, patient safety and quality of care.

METHOD: A convenient sample of 85 nurses from surgical, medical and critical care wards of a large hospital was recruited. Ten focus group discussions using a semi-structured interview guide were conducted. Interviews were audio-recorded, transcribed verbatim and analysed using a thematic approach.

FINDINGS: The study identified three main themes that influenced nurses' job satisfaction and dissatisfaction: (1) spiritual feeling, (2) work environment factors, and (3) motivation. Helping and involvement in patient care contributed to the spiritual feeling reported to influence nurses' job satisfaction. For work environment factors, team cohesion, benefit and rewards, working conditions, lack of medical resources, unclear nurses' responsibilities, patient and doctor perceptions, poor leadership skills and discrimination at work played an important role in nurses' job dissatisfaction. For motivation factors, task requirement, professional development and lack of clinical autonomy contributed to nurses' job satisfaction.

CONCLUSION AND IMPLICATIONS FOR NURSING AND HEALTH POLICY: Nurse managers should ensure a flexible practice environment with adequate staffing and resources with opportunities for nurses to participate in hospital's policies and governance. Policy makers should consider nurses' professional development needs, and implement initiatives to improve nurses' rewards and other benefits as they influence job satisfaction.

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KEYWORDS: Environment; Iran; Motivation Factors; Qualitative

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Job satisfaction of Malaysian registered nurses: a qualitative study

Narges Atefi, Khatijah L Abdullah and Li P Wong

ABSTRACT

Background: Job satisfaction is an important factor in health care settings. Strong empirical evidence supports a causal relationship between job satisfaction, patient safety and quality of care. However, there have not been any studies exploring the job satisfaction of Malaysian nurses.

Aim: The main purpose of this qualitative descriptive study was to explore the factors related to feelings of job satisfaction as well as job dissatisfaction experienced by registered nurses in Malaysia.

Method: A convenient sample of 46 Malaysian nurses recruited from a large hospital (number of beds = 866) participated in the study. A total of seven focus group discussions were conducted with nurses from surgical, medical and critical care wards. A semi-structured interview guide was used to facilitate the interviews, which were audio-recorded, transcribed verbatim and checked. The transcripts were used as data and were analysed using a thematic approach.

Finding: The study identified three main themes that influenced job satisfaction: (1) nurses' personal values and beliefs, (2) work environment factors and (3) motivation factors. Concerning the nurses' personal values and beliefs, the ability to help people made the nurses felt honoured and happy, which indirectly contributed to job satisfaction. For work environment factors, team cohesion, benefit and reward, working conditions play an important role in the nurses' job satisfaction. Motivation factors, namely, professional development and clinical autonomy contributed to job satisfaction.

Conclusion: It is important for nurse leaders to provide more rewards, comfortable work environments and to understand issues that affect nurses' job satisfaction.

Relevance to clinical practice: Our findings highlight the importance of factors that can improve nurses' job satisfaction. The study provides basic information for hospital administrators in planning effective and efficient policies to improve nursing job satisfaction in order to increase the quality of patient care and decrease nursing turnover.

Key words: focus group discussions • hospital • Nurses • Qualitative

Uncorrected Proofs

INTRODUCTION

The shortage of nurses is a global problem and it is important to understand factors that promote the retention of registered nurses in the workplace (Kovner *et al.*, 2006). It is believed that resolving the nursing shortage is one of the most important steps in providing better health care for people living in developing countries (Dehghan Nayeri *et al.*, 2007; Li *et al.*, 2010).

Owing to the current nursing shortage, health care administrators are searching for effective methods to recruit and retain qualified nurses and provide high quality patient care worldwide (Khowaja *et al.*, 2009). Previous studies have shown that low job satisfaction is a major cause of turnover among nurses (Camerino *et al.*, 2006; Abualrub, 2007; Zangaro and Soeken, 2007). According to a recent report from the Nursing Solutions Inc (2013), nurses working in critical care wards had lower rate of turnover (12·6%) compared with nurses working in medical/surgical wards (16·8%). Nurses with high job satisfaction tend to be more committed to their profession and organizations (Hwang *et al.*, 2009).

Malaysia like many other countries is facing nursing shortages. The demands for nurses and social care have increased in response to an ageing population and increasing levels of chronic ill health. The number of qualified nurses has decreased because of increasing alternative job opportunities for nurses and the workforce is ageing with an average age of 40·5 among the practising workforce (International Council of Nurses, 2012). In Malaysia, the total number of nursing personnel is 79 700, which represents the largest workforce in

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Appendix A
Survey Instrument

<u>Section A</u> **Demographic Characteristics / Ciri- Ciri Demografi**

Instruction: please tick (√) in the appreciated box in the required information

A1	Age / Umur _____ Years old / Tahun
A2	Gender / Jantina [1] Male / Lelaki [2] Female / Perempuan
A3	Material statues / Taraf perkahwinan [1] Single / Never been married / Bujang/tidak pernah berkahwin [2] Married / Berkahwin [3] Divorced / Bercerai
A4	Ethnicity / Bangsa [1] Malay / Melayu [2] Chinese / Cina [3] Indian / India [4] Iranian / Iran
A5	Years of working experience as a registered nurse / Pengalaman bekerja Sebagai jururawat berdaftar [1] 4-6 years / 4 - 6 tahun [2] 6 years and above / Lebih daripada 6 tahun

A6	Present working unit / Tempat kerja sekarang (unit/bahagian/jabatan) [1] Medical ward / Wad perubatan [2] Critical care unit / Unit Rawatan Rapi [3] Surgical ward / Wad pembedahan [5] Others, please specify / Lain-lain, sila nyatakan
A7	What is your highest level of nursing education / Apa tahap pendidikan tertinggi anda keperawatan? [1] Diploma / Diploma [2] Associate's degree / Ijazah bersekutu [3] Bachelor's degree / Ijazah Sarjana Muda [4] Others, please specify / Lain-lain, sila nyatakan

<u>Section B</u> **Modified – Index of Work Satisfaction** (Penyesuaian – Indeks Kepuasan Kerja)

Instruction: this section concern statement representing possible feelings or perceptions individuals might have about their job and working environment. With respect to your own feelings or perceptions about your job and your working environment, please circle the number that indicates your feeling or perceptions toward each statement by checking one of the following alternatives.

(**Arahan:** bahagian ini berkaitan dengan kenyataan tentang perasaan dan persepsi individu yang mungkin wujud berkenaan dengan kerja dan persekitaran tempat kerja mereka. Berhubung dengan perasaan dan persepsi anda itu, sila bulatkan angka di sebelah setiap kenyataan untuk menggambarkan perasaan dan persepsi anda terhadap kenyataan yang diberikan.)

Key (Kunci):	**1= Strongly Disagree**	(sangat tidak setuju)
	2= Disagree	(tidak setuju)
	3= Neither Agree nor Disagree	(tidak pasti)
	4= Agree	(setuju)
	5= Strongly Agree	(Sangat setuju)

Task (Gerak Kerja)

1. I have opportunities to use my skills effectively. 1 2 3 4 5
(Saya berpeluang menggunakan kemahiran saya dengan berkesan.)

2. I am satisfied with the types of activities that I do on my job. 1 2 3 4 5
(Saya berpuas hati dengan jenis aktiviti yang saya buat dalam kerja saya.)

3. I definitely like my work. 1 2 3 4 5
(saya pasti suka kerja saya.)

4. I am satisfied with the nursing care I provide to my patient. 1 2 3 4 5
(Saya berpuas hati dengan perawatan kejururawatan yang
saya berikan kepada pesakit saya.)

5. The amount of time spent on paperwork is reasonable. 1 2 3 4 5
(Jumlah masa yang luangkan untuk kertas kerja adalah munasabah.)

6. I have enough time to give good direct patient care. 1 2 3 4 5
(Saya mempunyai masa yang cukup untuk melakukan penjagaan
pesakit dengan baik dan secara langsung.)

7. I have plenty of time and opportunity to discuss patient's
problems with other nursing service personnel. 1 2 3 4 5
(Saya mempunyai banyak masa dan peluang untuk berbincang tentang masalah
pesakit dengan kakitangan perkhidmatan kejuruwatan.)

Work interaction (Interaksi Semasa Bekerja)

Nurse - Nurse Interaction (Interaksi Sesama Jururawat)

8. There is a good deal of teamwork and cooperation between various levels of nursing personnel on my service. 1 2 3 4 5
(Terdapat kerjasama berkumpulan yang baik sesama kakitangan kejururawatan dari pelbagai peringkat dalam perkhidmatan saya.)

9. The nurses in my unit support each other. 1 2 3 4 5
(Jururawat di unit saya saling sokong-menyokong antara satu sama lain.)

10. It is easy for new nurses to feel "at home" in my ward. 1 2 3 4 5
(Jururawat yang baru senang rasa seperti “di rumah sendiri” di wad saya .)

11. Nursing staff help each other when things get in a rush. 1 2 3 4 5
(Kakitangan kejururawatan saling membantu antara satu sama apabila berada dalam keadaan sibuk.)

12. I am satisfied with the interactions among the nursing staff. 1 2 3 4 5
(Saya berpuas hati dengan interaksi antara kakitangan kejururawatan.)

13. There is a lot of “rank consciousness” on my unit. Nursing personnel seldom mingle with others of lower ranks. 1 2 3 4 5
(Terdapat jurang antara kakitangan yang berlainan pangkat di unit saya. Kakitangan kejuruwatan jarang bergaul dengan kakitangan yang berpangkat rendah.)

Nurse - Physician Interaction (Interaksi Antara Jururawat dengan Pegawai Perubatan)

14. The doctors are general cooperative with nursing staff. 1 2 3 4 5
(Doktor secara umumnya bekerjasama dengan kakitangan kejururawatan.)

15. There is a lot of teamwork between nurses and doctors. 1 2 3 4 5
(Terdapat banyak kerja berpasukan antara jururawat dan doktor.)

16. The doctors and nurses have good working relationship. 1 2 3 4 5
(Para doktor dan para jururawat mempunyai hubungan kerja yang baik.)

17. The doctors in this hospital generally appreciate what the nursing staffs do. 1 2 3 4 5
(Para doktor di hospital ini secara umumnya menghargai apa yang dilakukan oleh kakitangan kejururawatan.)

18. I am satisfied with my interactions with doctors. 1 2 3 4 5
(Saya berpuas hati dalam interaksi saya dengan doktor.)

19. I wish the physicians here would show more respect for the skill and knowledge of the nursing staff. 1 2 3 4 5
(Saya berharap agar doktor di sini lebih menghormati kemahiran dan pengetahuan kakitangan kejururawatan.)

Decision Making (Membuat Keputusan)

20. There is ample opportunity for nursing staff to participate in administrative decision-making at ward level. 1 2 3 4 5
(Terdapat peluang yang luas bagi kakitangan kejururawatan untuk mengambil bahagian dalam membuat keputusan pentadbiran pada peringkat wad.)

21. I am satisfied with level of nurse's participation in decision-making in my ward. 1 2 3 4 5
(Saya berpuas hati dengan tahap penglibatan jururawat dalam membuat keputusan di wad saya.)

22. I have all the voice I want in planning policies and procedure for my ward. 1 2 3 4 5
(Saya boleh memberikan pendapat saya sepenuhnya dalam perancangan polisi dan prosedur wad saya.)

23. I have the freedom to make important decisions in my work. 1 2 3 4 5
(Saya mempunyai kebebasan untuk membuat keputusan penting dalam kerja saya.)

24. Nursing administrators generally consult with the staffs on daily problems. 1 2 3 4 5
(Pegawai pentadbiran jururawat secara umumnya berunding dengan kakitangan Berkenaan masalah harian.)

25. I can count on nursing administrators to back me up. 1 2 3 4 5
(Saya boleh mengharapkan pegawai pentadbiran jururawat untuk menyokong saya.)

26. Administrative decisions at this hospital interfere too much with patient care. 1 2 3 4 5
(Keputusan pentadbiran di hospital ini terlalu banyak mengganggu dari aspek penjagaan pesakit.)

Autonomy (autonomi)

27. I have good control over my own work. 1 2 3 4 5
(Saya mempunyai kawalan yang baik terhadap kerja saya sendiri.)

28. I have freedom to make important patient care and work decisions. 1 2 3 4 5
(Saya bebas untuk membuat keputusan penting dalam penjagaan pesakit dan keputusan perlaksanaan kerja.)

29. I receive sufficient information regarding my patient care plan. 1 2 3 4 5
(Saya menerima maklumat yang mencukupi berkaitan rancangan penjagaan pesakit saya.)

30. I am free to adjust my daily practice to fit patients' needs. 1 2 3 4 5
(Saya bebas untuk menyesuaikan tugas harian saya bersesuaian dengan keperluan pesakit.)

31. I actively participate in developing my work schedules (days off and shifts duties). 1 2 3 4 5

(Saya mengambil bahagian secara aktif dalam membuat jadual tugasan saya (seperti menentukan hari cuti dan giliran kerja.)

32. I have not being placed in a position of having to do things that are against my nursing judgment. 1 2 3 4 5
Saya tidak pernah berada dalam keadaan di mana saya dikehendaki membuat sesuatu yang bertentangan dengan pertimbangan kejururawatan saya.)

Professional Development (Peningkatan Profesional)

33. I have access for continuing professional education in nursing. 1 2 3 4 5
(Saya mempunyai akses untuk meneruskan pendidikan professional dalam bidang kejururawatan.)

34. If I perform well, I have opportunities for career development. 1 2 3 4 5
(Jika prestasi saya baik, saya mempunyai banyak peluang dalam pembangunan kerjaya.)

35. I have fair opportunity to attend seminar/conferences or workshop. 1 2 3 4 5
(Saya mempunyai yang peluang yang adil untuk menghadiri seminar/persidangan atau bengkel.)

36. I have opportunity to learn new skills. 1 2 3 4 5
(Saya mempunyai peluang untuk belajar kemahiran yang baru.)

37. There is a quality preceptor program for newly qualified nurses. 1 2 3 4 5
(Terdapat program perseptor berkualiti bagi jururawat terlatih yang baru.)

38. The opportunity for promotion or career advancement based on achievement of "Sasaran Kerja Tahunan" is fair. 1 2 3 4 5
(Peluang kenaikan pangkat atau penbangunan kerjaya berdasarkan pencapaian “Sasaran Kerja Tahunan” adalah adil.)

Professional Status (Taraf Profesionl)

39. If I had the choice again, I would still choose nursing as my career. 1 2 3 4 5
Jika saya masih ada peluang untuk memilih, saya pasti akan memilih bidang kejururawatan sebagai kerjaya saya.)

40. Most people do not sufficiently appreciate the importance of nursing care to hospital patients. 1 2 3 4 5
(Kebanyakan orang tidak memberi penghargaan yang memadai terhadap kepentingan penjagaan pesakit di hospital.)

41. Staffs in other departments appreciate nursing. 1 2 3 4 5
(Kakitangan dari jabatan lain menghargai jururawat.)

42. Patients and their family acknowledge nurses’ contribution to their care. 1 2 3 4 5

(Pesakit dan keluarga mereka memperakui sumbangan jururawat dalam pejagaan mereka.)

43. I am proud to talk to other people about my job. 1 2 3 4 5
(Saya bangga bercakap tentang kerja saya kepada orang lain.)

44. I am satisfied with the status of nursing in the hospital. 1 2 3 4 5
(Saya puas hati dengan taraf jururawat dalam hospital.)

45. My work contributes to a sense of personal achievement. 1 2 3 4 5
(Kerja saya menyumbangkan kepada satu perasaan pencapaian peribadi.)

46. What I do on my job does not add up to anything really significant. 1 2 3 4 5
(Apa yang saya buat dalam kerja saya tidak menambahkan apa-apa yang benar-benar penting.)

Supportive Nursing Management/Administration (Sokongan Pengurusan Kejururawatan/Pentadbiran)

47. My nurse manager is a good manager and leader. 1 2 3 4 5
(Pengurus jururawat saya adalah seorang pengurus dan pemimpin yang baik.)

48. My nurse manager is supportive of nurses. 1 2 3 4 5
(Pengurus jururawat saya menyokong jururawat.)

49. My nurse manager backs up the nursing staff in decision making even in conflicts with doctors. 1 2 3 4 5
(Pengurus jururawat saya menyokong jururawat dalam membuat keputusan meskipun terdapat pertikaian dengan doktor.)

50. My nurse manager frequently supervises and guides nurses in their work. 1 2 3 4 5
(Pengurus jururawat saya kerap menyelia dan menunjuk ajar jururawat melakukan kerja-kerja mereka.)

51. My nurse manager often praise and recognize the good job done by staffs. 1 2 3 4 5
(Pengurus jururawat saya sering memuji dan menghargai usaha baik yang dilakukan kakitangan.)

52. My hospital administration often listens and responds to employee's concerns. 1 2 3 4 5
(Pentadbiran hospital saya sering mendengar dan mengambil tindakan terhadap terhadap hal-ehwal pekerja.)

53. I am satisfied with my nurse manager. 1 2 3 4 5
(Saya berpuas hati dengan pengurus jururawat saya.)

Working Conditions (Suasana Kerja)

54. The nursing staff have sufficient control over scheduling their own work shifts in my hospital. 1 2 3 4 5
(Kakitangan kejururawatan mempunyai kawalan yang memadai terhadap penjadualan giliran kerja di hospital saya.)

55. My work environment is pleasant, attractive and comfortable. 1 2 3 4 5
(Persekitaran tempat kerja saya menyenangkan, menarik dan selesa.)

56. Nurses in my ward do not need to float to another unit so often. 1 2 3 4 5
(Jururawat wad saya tidak perlu ditugaskan ke unit lain secara kerap.)

57. There is adequate amount of staffs to give good patient care at most of time. 1 2 3 4 5
(Terdapat bilangan kakitangan yang mencukupi untuk memberikan penjagaan pesakit yang baik kebanyakan masa.)

58. The availability of equipment and facilities in my ward is satisfactory. 1 2 3 4 5
(Peralatan dan kemudahan yang ada di wad saya adalah memuaskan.)

59. Discrimination and unfairness practices do not happen in my ward. 1 2 3 4 5
(Tidak ada diskriminasi dan amalan yang tidak adil terjadi dalam wad saya.)

60. The workload in my ward is reasonable. 1 2 3 4 5
(Beban kerja di wad saya berpatutan.)

61. The knowledge and skills of registered nurses working in my ward is satisfactory. 1 2 3 4 5
(Pengetahuan dan kemahiran jururawat berdaftar yang bekerja di wad saya memuaskan.)

Pay (Gaji)

62. My present salary is satisfactory. 1 2 3 4 5
(Gaji saya sekarang adalah memuaskan.)

63. The latest salary scheme for nursing services personnel by the government is satisfactory. 1 2 3 4 5
(Skim gaji terkini bagi kakitangan jururawat kerajaan adalah memuaskan.)

64. An up grading of pay scheme for registered nurse is not needed. 1 2 3 4 5
(Peningkatan skim gaji jururawat berdaftar tidak diperlukan.)

65. The pay and benefit I am getting for my level of responsibility is fairy good compared to private hospital. 1 2 3 4 5
(Gaji dan kemudahan yang saya perolehi adalah berpatutan dengan Tanggungjawab saya berbanding dengan gaji dan kemudahan di hospital swasta.)

66. A lot of nursing staffs in this hospital are satisfied with their pay and benefits. 1 2 3 4 5

(Kebanyakan kakitangan jururawat di hospital ini berpuas hati dengan gaji dan kemudahan yang diterima.)

67. The present salary increment system that has been practiced in my hospital is fair. 1 2 3 4 5
(Sistem kenaikan gaji yang terkini diguna oleh hospital sekarang saya adalah adil.)

Thank you (Terima Kasih)

<u>Section B</u>: Modified – Index of Work Satisfaction
(Penyesuaian – Indeks Kepuasan Kerja)
شاخص های اصلاح شده رضایت شغلی

Instruction: this section concern statement representing possible feelings or perceptions individuals might have about their job and working environment. With respect to your own feelings or perceptions about your job and your working environment, please circle the number that indicates your feeling or perceptions toward each statement by checking one of the following alternatives.

*(**Arahan:** bahagian ini berkaitan dengan kenyataan tentang perasaan dan persepsi individu yang mungkin wujud berkenaan dengan kerja dan persekitaran tempat kerja mereka. Berhubung dengan perasaan dan persepsi anda itu, sila bulatkan angka di sebelah setiap kenyataan untuk menggambarkan perasaan dan persepsi anda terhadap kenyataan yang diberikan.)*

دستورالعمل: این بخش به بیان وضعیت احساسات یا برداشتهای احتمالی که ممکن است افراد در موردشغل و محیط کاری خود داشته باشند می پردازد. لطفا با توجه به احساسات و یا برداشتهای خود در مورد شغل و محیط کارتان، دور شماره هر یک از گزینه هائی که بیانگر احساسات و برداشت شما در مورد هر یک از وضعیت های موجود است خط بکشید.

Key *(Kunci)* کلید :

1= Strongly Disagree	*(sangat tidak setuju)*	**بشدت مخالفم**
2= Disagree	*(tidak setuju)*	**مخالفم**
3= Neither Agree nor Disagree	*(tidak pasti)*	**نه موافق و نه مخالفم**
4= Agree	*(setuju)*	**موافقم**
5= Strongly Agree	*(Sangat setuju)*	**بشدت موافقم**

Task *(Gerak Kerja)* کار

I have opportunities to use my skills effectively. برای استفاده موثر از مهارت هایم فرصت هایی دارم	1	2	3	4	5
I am satisfied with the types of activities that I do on my job. با نوع فعالیت هایی که در کارم دارم راضی هستم	1	2	3	4	5
I definitely like my work. قطعاً کارم را دوست دارم	1	2	3	4	5
I am satisfied with the nursing care I provide to my patient. با مراقبت های پرستاری که به بیمار ارائه میدهم راضی هستم	1	2	3	4	5
The amount of time spent on paperwork is reasonable. مقدار زمان صرف شده برای کاغذ بازی منطقی است	1	2	3	4	5
6. I have enough time to give good direct patient care. زمان کافی برای ارائه مراقبت مستقیم به بیمار دارم	1	2	3	4	5
7. I have plenty of time and opportunity to discuss patients' problems with other nursing service personnel. زمان و فرصت زیادی برای بحث با سایر کادر خدمات پرستاری درمورد مشکلات بیماران دارم	1	2	3	4	5

Work interaction (Interaksi Semasa Bekerja) روابط شغلی

Nurse - Nurse Interaction روابط متقابل بین پرستاران

8. There is a good deal of teamwork and cooperation between various levels of nursing personnel on my service. 1 2 3 4 5
همکاری و کار گروهی خوبی در بین سطوح مختلف کادر پرستاری در محل کار من وجود دارد.

9. The nurses in my unit support each other. 1 2 3 4 5
در بخشی که من کار می کنم پرستاران از همدیگر حمایت می کنند

10. It is easy for new nurses to feel "at home" in my ward. 1 2 3 4 5
در بخشی که من کار میکنم پرستاران تازه وارد به سادگی احساس در خانه بودن می کنند

11. Nursing staff help each other when things get in a rush 1 2 3 4 5
در هنگام کارهای عجله ای کادر پرستاری به همدیگر کمک می کنند

12. I am satisfied with the interactions among the nursing staff. 1 2 3 4 5
من با روابط متقابل کادر پرستاری راضی هستم

13. There is a lot of “rank consciousness” on my unit. Nursing personnel seldom mingle with others of lower ranks. 1 2 3 4 5
در بخشی که من کار میکنم سلسله مراتب بشدت رعایت می شود و پرسنل بندرت با افراد رده های پائین تر تعامل می کنند

Nurse - Physician Interaction (Interaksi Antara Jururawat dengan Pegawai Perubatan) رابطه متقابل پزشک و پرستار

14. The doctors are general cooperative with nursing staff. 1 2 3 4 5
پزشکان عموماً با کادر پرستاری همکاری دارند

15. There is a lot of teamwork between nurses and doctors. 1 2 3 4 5
کار تیمی زیادی بین پرستاران و پزشکان وجود دارد

16. The doctors and nurses have good working relationship. 1 2 3 4 5
پزشکان و پرستاران رابطه کاری خوبی دارند

17. The doctors in this hospital generally appreciate what the nursing staffs do. 1 2 3 4 5
پزشکان این بیمارستان عموماً قدردان کادر پرستاری هستند

18. I am satisfied with my interactions with doctors. 1 2 3 4 5
من از روابط خود با پزشکان راضی هستم

19. I wish the physicians here would show more respect for the skill and knowledge of the nursing staff. 1 2 3 4 5
کاش پزشکان اینجا توجه بیشتری به مهارت و دانش کادر پرستاری نشان می دادند

Decision Making (Membuat Keputusan) تصمیم گیری

20. There is ample opportunity for nursing staff to participate in administrative decision-making at ward level. 1 2 3 4 5
فرصت های زیادی برای شرکت پرستاران در تصمیم گیری های اداری در سطح بخش وجود دارد

21. I am satisfied with level of nurse's participation in decision-making in my ward. 1 2 3 4 5
من از میزان مشارکت پرستاران در تصمیم گیری های بخشی که در آن کار می کنم راضی هستم

22. I have all the voice I want in planning policies and procedure for my ward. 1 2 3 4 5
من تمام تحکم لازم برای سیاست گذاری و اداره بخش خودم را دارم

23. I have the freedom to make important decisions in my work. 1 2 3 4 5
آزادی لازم برای اتخاذ تصمیم های مهم در کارم را دارم

24. Nursing administrators generally consult with the staffs on daily problems. 1 2 3 4 5
مدیران پرستاری عموما در مورد مشکلات روزانه با کادر پرستاری مشاوره می کنند

25. I can count on nursing administrators to back me up. 1 2 3 4 5
من روی حمایت مدیران پرستاری حساب می کنم

26. Administrative decisions at this hospital interfere too much with patient care. 1 2 3 4 5
تصمیمات مدیریتی در این بیمارستان تداخل زادی با مراقبت بیمار دارد

Autonomy (autonomi) استقلال

27. I have good control over my own work. 1 2 3 4 5
من کنترل خوبی بر کارم دارم

28. I have freedom to make important patient care and work decisions. 1 2 3 4 5
در تصمیم گیری برای مراقبت از بیمار و کارم آزاد هستم

29. I receive sufficient information regarding my patient care plan. 1 2 3 4 5
اطلاعات کافی درخصوص برنامه مراقبتی بیمارم دریافت می کنم

30. I am free to adjust my daily practice to fit patients' needs. 1 2 3 4 5
من در اعمال تغییر در کارهای روزانه بمنظور هماهنگی با نیازهای بیماران **آزادم**

31. I actively participate in developing my work schedules (days off and shifts duties). 1 2 3 4 5
من در برنامه ریزی شیفت های کاری ام (کشیک ها و آف ها) شرکت فعال دارم

32. I have not being placed in a position of having to do things that are against my nursing judgment. 1 2 3 4 5
تا کنون در وضعیتی که در تعارض با قضاوت پرستاری ام باشد قرار نگرفته ام

Professional Development (Peningkatan Profesional) توسعه حرفه ای

33. I have access for continuing professional education in nursing. 1 2 3 4 5
من دسترسی به ادامه تحصیلات تکمیلی حرفه ای در رشته پرستاری دارم

34. If I perform well, I have opportunities for career development. 1 2 3 4 5
اگر کارم خوب باشد فرصت ارتقاء شغلی دارم

35. I have fair opportunity to attend seminar/conferences or workshop. 1 2 3 4 5
من بخوبی فرصت شرکت در سمینارها، کنفرانس ها و کارگاهها را دارم

36. I have opportunity to learn new skills. 1 2 3 4 5
من فرصت یادگیری مهارت های جدید را دارم

37. There is a quality preceptor program for newly qualified nurses. 1 2 3 4 5
برای پرستاران جدید برنامه آموزشی با کیفیت وجود دارد

38. The opportunity for promotion or career advancement based on achievement of "Annual Work Target" is fair. 1 2 3 4 5
بمظور دستیابی به "هدف سالانه کار" **فرصت** منصفانه برای ارتقاء و یا پیشرفت حرفه ای **وجود دارد**

Professional Status (Taraf Profesionl) وضعیت حرفه ای

39. If I had the choice again, I would still choose nursing as my career. 1 2 3 4 5
اگر شانس انتخاب مجدد میداشتم، باز هم پرستاری را بعنوان شغل انتخاب میکردم

40. Most people do not sufficiently appreciate the importance of nursing care to hospital patients. 1 2 3 4 5
اکثر مردم به اندازه کافی قدر مراقبتهای پرستاری برای بیماران بستری در بیمارستان را نمی دانند

41. Staffs in other departments appreciate nursing. 1 2 3 4 5
کارکنان سایر بخش ها قدر پرستاری را می دانند

42. Patients and their family acknowledge nurses' contribution to their care. 1 2 3 4 5
پرستاران و خانواده هایشان قدردان نقش پرستاران در مراقبتهایشان هستند

43. I am proud to talk to other people about my job. 1 2 3 4 5
من با افتخار در مورد شغلم با دیگران حرف می زنم

44. I am satisfied with the status of nursing in the hospital. 1 2 3 4 5
من از وضعیت پرستاری در بیمارستان راضی هستم

45. My work contributes to a sense of personal achievement. 1 2 3 4 5
شغل من موجب ایجاد حس موفقیت در من می شود

46. What I do on my job does not add up to anything really significant. 1 2 3 4 5
کاری که من می کنم موجب هیچگونه ارتقاء واقعاً مهمی نمی شود

Supportive Nursing Management/Administration
(Sokongan Pengurusan Kejururawatan/Pentadbiran) مدیریت پرستاری حمایتی

47. My nurse manager is a good manager and leader. 1 2 3 4 5
مدیر پرستاری ما مدیر و رهبر خوبی است

48. My nurse manager is supportive of nurses. 1 2 3 4 5
مدیر پرستاری ما از پرستاران حمایت می کند

49. My nurse manager backs up the nursing staff in decision making even in conflicts with doctors. 1 2 3 4 5
مدیر پرستاری ما در تصمیم گیری ها و حتی در مواقع تعارض با پزشکان هم حمایت می کند

50. My nurse manager frequently supervises and guides nurses in their work. 1 2 3 4 5
مدیر پرستاری ما مکرراً بر کار پرستاران نظارت داشته و آنها را راهنمائی می کند

51. My nurse manager often praise and recognize the good job done by staffs. 1 2 3 4 5
مدیر پرستاری ما اغلب کار خوب انجام شده بوسیله کارکنان را شناخته و می ستاید

52. My hospital administration often listens and responds to employee's concerns. 1 2 3 4 5
مدیربیمارستانی ما اغلب به دغدغه های پرستاران گوش داده و به آنها پاسخ می دهد

53. I am satisfied with my nurse manager. 1 2 3 4 5
من از مدیر پرستاری مان راضی هستم

Working Conditions (Suasana Kerja) شرایط کاری

54. The nursing staff have sufficient control over scheduling their own work shifts in my hospital. 1 2 3 4 5
در بیمارستان ما پرستاران کنترل کافی بر برنامه ریزی شیفت های کاریشان دارند

55. My work environment is pleasant, attractive and comfortable. 1 2 3 4 5
محیط کاری من راحت، جذاب و دلپذیر است

56. Nurses in my ward do not need to float to another unit so often. 1 2 3 4 5
اغلب نیازی به رفتن پرستاران بخش من به سایر بخش ها وجود ندارد

57. There is adequate amount of staffs to give good patient care at most of time. 1 2 3 4 5
اکثر اوقات تعداد پرستار کافی برای ارائه خدمات مطلوب به بیماران وجود دارد

58. The availability of equipment and facilities in my ward is satisfactory. 1 2 3 4 5
میزان دسترسی به تجهیزات و تسهیلات در بخش ما راضی کننده است

59. Discrimination and unfairness practices do not happen in my ward. 1 2 3 4 5
تبعیض و بیعدالتی در بخش ما وجود ندارد

60. The workload in my ward is reasonable. 1 2 3 4 5
حجم کار در بخش ما منطقی است

61. The knowledge and skills of registered nurses working in my ward is satisfactory. 1 2 3 4 5
دانش و مهارت های پرستاران تحصیلکرده شاغل در بخش ما راضی کننده است

Pay (Gaji) حقوق پرداختی

62. My present salary is satisfactory. 1 2 3 4 5
حقوق فعلی من راضی کننده است

63. The latest salary scheme for nursing services personnel by the government is satisfactory. 1 2 3 4 5
آخرین طرح حقوق و دستمزد برای کارکنان خدمات پرستاری توسط دولت رضایت بخش می باشد

64. An up grading of pay scheme for registered nurse is not needed. 1 2 3 4 5
نیازی به ارتقاء میزان حقوق پرداختی به پرستاران تحصیلکرده نیست

65. The pay and benefit I am getting for my level of responsibility is fairy good compared to private hospital. 1 2 3 4 5
میزان حقوق و مزایائی که من برای سطح و مسئولیتم دریافت میکنم در مقایسه به بیمارستان خصوصی حقاً منصفانه است

66. A lot of nursing staffs in this hospital are satisfied with their pay and benefits. 1 2 3 4 5
بسیاری از کارکنان پرستاری این بیمارستان از میزان حقوق و مزایای دریافتی شان راضی هستند

67. The present salary increment system that has been practiced in my hospital is fair. 1 2 3 4 5
نحوه افزایش حقوق در بیمارستان ما منصفانه است

Thank you متشکرم

APPENDIX B

NURSE INFORMATION SHEET

Please read the following information carefully, do not hesitate to discuss any questions you may have with the researchers.

Study Title

Factors Identification related to the Nursing Job satisfaction

Introduction

Job plays an important role in our lives. It supports the economic basis for our life style. Job satisfaction is a good indictor about how employers feel about their job. The definition of job satisfaction differs from person to person and even for one person from time to time. With the state of health care today it is very important to determine the level of job satisfaction among nurses as they are key members of the health care team.

What is the purpose of this study?

The purpose of this study is to gather data to identify the factors related to nursing job satisfaction. The findings hope to provide some basic information for hospital administrators in planning effective and efficient policy to improve nursing job satisfaction in order to increase quality of patients care and decrease of nursing turnover.

What are the procedures to be followed?

You need to complete a questionnaire which will take 20-30 minutes to complete. If you agreed you will be contacted to join a group discussion to discuss on factors influencing job satisfaction/or dissatisfaction.

The plan is to have 5-8 registered nurses focus group discussion. Focus group sessions will involve 60 to 90 minutes.

The record of this study will be kept under lock and only the researcher and her team will have access to these records. Confidential information such as respondents name will not be disclosed to any person nor will it be published in any document without the prior permission of the respondent.

Who should not enter the study?

Nurses who did not consent for the study will not be included in the study.

What will be benefits of the study?

- **To you as the subject?**

  The result of this study can help nursing administrators to plan strategies to improve nursing job satisfaction to prevent nursing turnover and increase quality of patient care.

- **To the investigator?**

  It will help the researcher to identify factors that affect to registered nurses' job satisfaction and suggest strategies that will enhance job satisfaction which could lead to better patient care in the organization.

What are the possible drawbacks?

There are no risks to you.

Can I refuse to take part in the study?

Your participation in this study is voluntary. Your decision to participate or otherwise will not affect your current or future relationships with the medical centre in any way. In

addition if after you join the study and later you decide to withdraw, you are free to do so at any time**.**

Who should I contact if I have additional questions during the course of the study?

If you have any question or need clarification about this study feel free to contact me.

nilofaratefi@yahoo.com

PhD Student Name: Narges Atefi

APPENDIX C

INFORMED CONSENT FOR PARTICIPANTS

Dear Colleague

I am a post graduate student in University of Malaya working on a Doctorate in Nursing. I am conducting a research study entitled Factors Identification Related to the Nursing Job Satisfaction. The purpose of the research study is to identify the factors related to nursing job satisfaction. This research study is in two parts, a surveys and focus group sessions.

You can choose to sign this consent form for survey participation only, focus group participation only, or survey and focus group participation. Your participation will involve completing questionnaire that will take approximately 15-20 minutes to complete. The focus group sessions will involve a 60 to 90 minutes taped interview in a group of staff nurses to discuss on factors related to nursing job satisfaction. The discussion will address what make you satisfied and/or dissatisfied about your job. The record of this study will be kept private and only the researcher will have access to the data. Research records will be kept in a locked file and destroyed at the end of the study.

Your participation in this study is voluntary and your decision whether or not to participate will not affect your current or future relationships within your work environment. If you decided to participation you are free to withdraw at any time without affecting those relationships. The results of the research study may be published but your name will not be used and your individual and hospital information will be maintained in confidence. In this research, there are no any risks to you during the survey and focus group process. Although there may be no direct benefit to you, the

possible benefit of your participation is a contribution to knowledge of factors leading to nurse job satisfaction in the work place.

It will help us to plan strategies in improving nurse retention and better patient care. Please read the following statement and sign your name and date where indicated. By signing this form I acknowledge that I understand the nature of the study, the potential risks and benefits to me as a participant, and the means by which my identity and information will be collected, stored, destroyed, and kept confidential. I understand that I may choose to withdraw my participation in the study without penalty. I am 18 years old or older, and that I give my permission to voluntarily serve as a participant in the study described.

Thanks for your participation.

Student Researcher Name ……. Student Researcher Signature and Date

_____ _____

Participant Name …….. Participant Signature and Date

_____

Participant Phone Number if agreed to participate in (focus group session)

Email: email address: _____

If you have any questions concerning the research study, you can reach me at the following numbers and email:

Yours Sincerely,

Narges Atefi.

APPENDIX D

ETHIC APPROVAL FORM

A Copy of Iran Ethic Approval

Ref: ۹۰/۲۹۷۹۵۶ شماره
Date: ۱۳۹۰/۰۷/۲۷ تاریخ

Mashhad University of Medical Sciences

معاونت پژوهشی
Vice Chancellor for Research

باسمه تعالی

«سال ۹۰ - سال جهاد اقتصادی»

مقام معظم رهبری

مدیر عامل و ریاست محترم مرکز آموزشی، پژوهشی و درمانی بیمارستان امام رضا(ع)
جناب آقای دکتر محمد عباسی تشنیزی

با سلام و احترام

به اطلاع می رساند با توجه به تصویب طرح تحقیقاتی ۹۰۰۲۵۴ با عنوان:

"بررسی رضایت شغلی پرستاران و عوامل مرتبط با آن: یک مطالعه تلفیقی"

در جلسه شورای پژوهشی دانشگاه مورخ ۱۳۹۰/۰۷/۰۶ مربوط به مجری محترم طرح جناب آقای دکتر سیدرضا مظلوم مستدعی است با توجه به درخواست نامبرده با ایشان و همکار طرح سرکار خانم نرگس عاطفی جهت اجرای طرح فوق، مساعدت لازم به عمل آید. ۱۴۰۸۴۱۲/

دکتر جلیل رحیم‌آبادی
معاون پژوهشی دانشگاه

رونوشت :
- جناب آقای دکتر سیدرضا مظلوم
- سرکار خانم نرگس عاطفی
- مدیریت امور پژوهشی دانشگاه

MASHHAD-IRAN Tel:+98 511 8411538 P.O.Box:91735-951 Fax:+98 511 8430249 www.mums.ac.ir/research E-mail:vcresearch@mums.ac.ir

A Copy of Malaysia Ethic Approval

UNIVERSITI MALAYA
KUALA LUMPUR
PUSAT PERUBATAN UM

يونيڤرسيتي ملايا

No. Rujukan:- PPUM/UPP/300/02/02

08 Jamadilawal 1431H
23 April 2010

Miss Nargaes Átefi
Jabatan Sains Kejururawatan
Pusat Perubatan Universiti Malaya

Puan,

SURAT PEMAKLUMAN KEPUTUSAN PERMOHONAN MENJALANKAN PROJEK PENYELIDIKAN
Factors Identification Related To The Nursing Job Satisfication
Protocol No:
MrC Ref. No: 782.7

Dengan hormatnya saya merujuk kepada perkara di atas.

Bersama-sama ini dilampirkan surat pemakluman keputusan Jawatankuasa Etika Perubatan yang bermesyuarat pada 21 April 2010 untuk maklumat dan tindakan puan selanjutnya.

2. Sila maklumkan kepada Jawatankuasa Etika Perubatan mengenai butiran kajian samada telah tamat atau diteruskan mengikut jangka masa kajian tersebut.

Sekian, terima kasih.

Yang benar,

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