



**Quality of Work Life and Turnover Intention in Primary
Healthcare Organisations: A Cross-Sectional Study of
Registered Nurses in Saudi Arabia**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah, the Most Gracious, the Most Merciful

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

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Dedication

To my father, Jubran, and my mother, Ghamia.

To my wife, Jumah, and my children, Maram, Sami and Rhaghad.

To my uncles, Saeed and Farhan, and my brother-in-law, Mater, who passed away while I was away from my country working on this thesis.

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Abstract

Purpose: The purpose of this study was to improve the retention of primary healthcare (PHC) nurses through exploring and assessing their quality of work life (QWL) and turnover intention.

Design and methods: A cross-sectional survey design was used in this study. Data were collected using a questionnaire comprising four sections (Brooks' survey of Quality of Nursing Work Life [QNWL], Anticipated Turnover Intention, open-ended questions and demographic characteristics). A convenience sample was recruited from 143 PHC centres in Jazan, Saudi Arabia. A response rate of 87% ($n = 508/585$) was achieved. The SPSS v17 for Windows and NVivo 8 were used for analysis purposes. Procedures and tests used in this study to analyse the quantitative data were descriptive statistics, *t*-test, ANOVA, General Linear Model (GLM) univariate analysis, standard multiple regression, and hierarchical multiple regression. Qualitative data obtained from responses to the open-ended questions were analysed using the NVivo 8.

Findings: Quantitative findings suggested that PHC nurses were dissatisfied with their work life. Respondents' scores ranged between 45 and 218 (mean = 139.45), which is lower than the average total score on Brooks' Survey (147). Major influencing factors were classified under four dimensions. First, *work life/home life factors*: unsuitable working hours, lack of facilities for nurses, inability to balance work with family needs and inadequacy of vacations' policy. Second, *work design factors*: high workload, insufficient workforce numbers, lack of autonomy and undertaking many non-nursing tasks. Third, *work context factors*: management practices, lack of development opportunities, and

inappropriate working environment in terms of the level of security, patient care supplies and unavailability of recreation room. Finally, *work world factors*: negative public image of nursing, and inadequate payment. More positively, nurses were notably satisfied with their co-workers. Conversely, 40.4% ($n = 205$) of the respondents indicated that they intended to leave their current employment.

The relationships between QWL and demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, nursing tenure, organisational tenure, positional tenure, and payment per month were significant ($p < .05$). The eta squared test for these demographics indicates a small to medium effect size of the variation in QWL scores. Using the GLM univariate analysis, education level was also significantly related to the QWL ($p < .05$). The relationships between turnover intention and demographic variables including gender, age, marital status, dependent children, education level, nursing tenure, organisational tenure, positional tenure, and payment per month were significant ($p < .05$). The eta squared test for these demographics indicates a small to moderate effect size of the variation in the turnover intention scores. Using the GLM univariate analysis, the dependent adults' variable was also significantly related to turnover intention ($p < .05$).

Turnover intention was significantly related to QWL. Using standard multiple regression, 26% of the variance in turnover intention was explained by the QWL $F(4,491), 43.71, p < .001$, with $R^2 = .263$. Further analysis using hierarchical multiple regression found that the total variance explained by the model as a whole (demographics and QWL) was 32.1%, $F(17.433) = 12.04, p < .001$. QWL explained an additional 19% of the variance in turnover intention, after controlling for demographic variables, R squared change = .19, F change (4,

433) = 30.190, $p < .001$. The work context variable makes the strongest unique contribution (-.387) to explain the turnover intention, followed by the work design dimension (-.112).

The qualitative findings reaffirmed the quantitative findings in terms of QWL and turnover intention. However, the home life/work life and work world dimensions were of great importance to both QWL and turnover intention. The qualitative findings revealed a number of new factors that were not included in the survey questionnaire. These included being away from family, lack of family support, social and cultural aspects, accommodation facilities, transportation, building and infrastructure of PHC, nature of work, job instability, privacy at work, patients and community, and distance between home and workplace.

Conclusion: Creating and maintaining a healthy work life for PHC nurses is very important to improve their work satisfaction, reduce turnover, enhance productivity and improve nursing care outcomes. Improving these factors could lead to a higher QWL and increase retention rates and therefore reinforcing the stabilisation of the nursing workforce.

Significance of the research: Many countries are examining strategies to attract and retain the health care workforce, particularly nurses. This study identified factors that influence the QWL of PHC nurses as well as their turnover intention. It also determined the significant relationship between QWL and turnover intention. In addition, the present study tested Brooks' survey of QNWL on PHC nurses for the first time. The qualitative findings of this study revealed a number of new variables regarding QWL and turnover intention of PHC nurses. These variables could be used to improve current survey instruments or to develop new research surveys. The study findings could be also used to

develop and appropriately implement plans to improve QWL. This may help to enhance the home and work environments of PHC nurses, improve individual and organisational performance, and increase nurses' commitment.

This study contributes to the existing body of research knowledge by presenting new data and findings from a different country and healthcare system. It is the first of its kind in Saudi Arabia, especially in the field of PHC. It has examined the relationship between QWL and turnover intention of PHC nurses for the first time using nursing instruments. The study also offers a fresh explanation (new framework) of the relationship between QWL and turnover intention among PHC nurses, which could be used or tested by researchers in other settings.

Implications for further research: Review of the extant literature reveals little in-depth research on the PHC workforce, especially in terms of QWL and organisational turnover in developing countries. Further research is required to develop a QWL tool for PHC nurses, taking into consideration the findings of the current study along with the local culture. Moreover, the revised theoretical framework of the current study could be tested in further research in other regions, countries or healthcare systems in order to identify its ability to predict the level of PHC nurses' QWL and their intention to leave. There is a need to conduct longitudinal research on PHC organisations to gain an in-depth understanding of the determinants of and changes in QWL and turnover intention of PHC nurses at various points of time. An intervention study is required to improve QWL and retention among PHC nurses using the findings of the current study. This would help to assess the impact of such strategies on reducing turnover of PHC nurses.

Focusing on the location of the current study, it would be valuable to conduct another study in five years' time to examine the percentage of actual turnover among PHC nurses compared with the reported turnover intention in the current study. Further in-depth research would also be useful to assess the impact of the local culture on the perception of expatriate nurses towards their QWL and their turnover intention. A comparative study is required between PHC centres and hospitals as well as the public and private health sector agencies in terms of QWL and turnover intention of nursing personnel. Findings may differ from sector to sector according to variations in health systems, working environments and the case mix of patients.

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Key to Abbreviations

- ATS Anticipated Turnover Scale
- ICN International Council of Nurses
- KFSHRC King Faisal Specialist Hospital and Research Centre
- MOH Ministry of Health
- MOHE Ministry of Higher Education
- PHC Primary Health Care
- PHC nurses Nurses who work in the primary health care centres
- QNWL Quality of Nursing Work Life
- QWL Quality of Work Life
- RN Registered Nurse
- SCFHS Saudi Commission for Health Specialists
- SHS Saudi Healthcare System
- UK United Kingdom
- USA United States of America
- WHO World Health Organisation

Chapter 1: Introduction

1.1 INTRODUCTION

This thesis explores and assesses the experience of quality of work life (QWL) and turnover intention among employees (nurses) of primary healthcare (PHC) centres within the Saudi healthcare system. Healthcare systems and health organisations in many countries, including Saudi Arabia, are faced with a number of challenges such as a shortage of health professionals, low productivity and high rates of turnover, most specifically among nurses. Previous research on the working environment in various industries, including health care, has argued the importance of QWL to tackle such challenges (Gifford, Zammuto, & Goodman, 2002; Hsu & Kernohan, 2006; Huang, Lawler, & Lei, 2007; Lees & Kearns, 2005). A significant portion of QWL research on healthcare organisations has come from hospitals in developed countries. However, previous research has not to date addressed QWL in PHC centres in spite of their importance to basic health care in many health systems worldwide, including the Saudi system. Since its foundation in 1980, the PHC plays an important role in improving public health in Saudi Arabia. It provides basic health care services (environmental, preventive and curative) to a large segment of the population in rural and urban areas compared to hospital services that are concentrated in cities. Given the importance of the PHC as a basic unit of the Saudi healthcare system (SHS), this researcher decided to conduct the current study to explore and assess QWL and turnover intention within the PHC organisation in Saudi Arabia. This research will contribute to the scholarly research

literature by providing valuable information on QWL and turnover intention in the field of PHC from a different healthcare system and culture to that of western societies.

This chapter commences with a background and context to the research topic. It also provides the questions, hypotheses, purpose and objectives of this research. Additionally, the chapter discusses the significance of the study and presents the framework for the research. It also explores key terms used in the QWL and turnover intention literature. Finally, it provides an outline of the remaining chapters of the thesis.

1.2 BACKGROUND

In almost all countries, nurses constitute the largest healthcare provider group (International Council of nurses [ICN], 2005), which delivers the highest percentage of patient care, both preventive and curative (Oulton, 2006). It has been argued, “nurses are the nucleus of the healthcare system. Without the nucleus, the cell will not survive...” (AbuAlRub, 2007, p. 117). Despite being the largest provider group, healthcare organisations experience a severe shortage of qualified Registered Nurses (RNs). This shortage has been attributed to a number of factors including increased demand for health care due to advances in medical technology, increased population growth, increased life expectancy, and increased numbers of chronically and critically ill patients (Abu-Zinadah, 2005b; Buchan & Seccombe, 2003; Mayo, 2004). Additionally, nurses’ roles have expanded significantly to include a number of tasks previously performed by physicians (Coomber & Barriball, 2007). Unfortunately, a shortage of nurses is notable as a global problem affecting the delivery of health care (Chan & Morrison, 2000; Fochsen, Josephson, Hagberg, Toomingas, & Lagerstrom, 2006), and many countries are struggling to provide a minimum level of nurse staffing (Buchan & Calman, 2004). In tandem to this

issue are the high rates of turnover among RNs (Gifford et al., 2002), which contributes to major administrative problems, is costly, interrupts organisational plans and results in poor service delivery (Fang, 2001; Strachota, Normandin, O'Brien, Clary, & Krukow, 2003). These issues constitute a serious challenge to the efficiency and effectiveness of many healthcare delivery systems (Fang, 2001).

Nursing shortages and turnover are major challenges for the nursing workforce, nursing executives, health leaders and health organisations, with these issues are expected to continue and likely intensify in the future. Recent research in the health field has focused on finding solutions to these issues and their related causes (Brooks et al., 2007; Chaaban, 2006; Coomber & Barriball, 2007). A number of recent studies have emphasised the importance of the QWL of nurses and its relationship to work satisfaction (Brooks & Anderson, 2004, 2005; Brooks et al., 2007; Hsu & Kernohan, 2006). However, the majority of these studies have concentrated on hospital nurses in developed countries. To the author's knowledge, no such studies which concentrate on QWL and retention behaviours together have been conducted in PHC centres focusing on RNs, neither in developed nor developing countries. In Saudi Arabia, the PHC centres provide a large part of the basic health provision to the Saudi community. According to the Ministry of Health (MOH) (2006), 82% of the total visits to MOH institutions during 2006 occurred in PHC centres. PHC nurses provide, in collaboration with other health professionals, a broad range of health care services including public health education, maternal and child health services, immunisation, wound care, chronic care management, family health care, emergency services, especially in rural areas, and health promotion activities. Given the critical role of PHC nurses in the PHC centres as well as the Saudi health system, studies that assess their perception of QWL, explore their turnover intention, and examine the

relationship between these concepts are very important. This importance increases in light of the current nurses' shortage in Saudi health organisations, which is exacerbated by low job satisfaction and high turnover rates (Abu-Zinadah, 2006).

1.3 STATEMENT OF THE PROBLEM

A review of the literature suggests that there is a significant increase in the rate of nurse organisational turnover accompanied by minimal increase in nursing supply (Mayo, 2004; Miller, 2007, 2008). Turnover action is critical to health organisations since it consumes a large portion of resources that could otherwise be used to improve services (Jones, 2004). For instance, replacing one nurse in the United States of America (USA) has been found to cost an organisation up to USD 46,000 (Strachota et al., 2003).

High rates of nurse turnover and the chronic shortage of nurses are serious challenges for healthcare organisations. Many studies have been undertaken in an effort to understand and address these challenges (Brady-Schwartz, 2003; Brooks et al., 2007; Chaaban, 2006; Coomber & Barriball, 2007; Flinkman, Laine, Leino-Kilpi, Hasselhorn, & Salanterä, 2008; Onuorah, 2001). A number of these studies have argued the importance of nurses' QWL to these challenges.

Several authors have suggested different definitions and explanations of QWL. The most quoted definition in recent nursing studies is that provided by Brooks (2001), which has been used as a basis for current studies focusing on QWL among nurses (Brooks, 2001; Brooks & Anderson, 2004, 2005; Brooks et al., 2007). Brooks explained the quality of nursing work life as "the degree to which registered nurses are able to satisfy important personal needs through their experiences in their work organisation while achieving the

organisation's goals" (p. 9). The researcher believes this definition considers the needs of RNs as well as the goals of their organisations. According to Abo-Znadh (1998), poor QWL is a deterrent to continued employment in the workplace and is a barrier to entry into nursing. Therefore, examining QWL and exploring related factors can assist health organisations to better understand how nurses' work life and productivity are affected by work and home-related factors (Brooks & Anderson, 2005; Brooks et al., 2007). While there is existing research examining QWL among nurses in several health settings, to date no such studies focus specifically on PHC nurses. Nor is there any published research on the relationship between QWL and turnover intention among this category of nurses. According to Hsu and Kernohan (2006), further examination of the QWL of nurses across different settings is necessary. Therefore, research that assesses the perception of PHC nurses towards their QWL, that identifies major factors affecting the QWL, and examines QWL in relation to turnover intention would address a void in the scholarly literature and provide a clearer picture of these issues among this type of nurse.

1.4 JUSTIFICATION FOR CHOOSING SAUDI ARABIA

A number of studies have explored the QWL among nurses; however, the majority come from hospital-based research in western countries. There is a real need to conduct further studies of QWL in different health settings, including PHC facilities. This need is increased in Saudi Arabia, which has a chronic shortage of Saudi healthcare professionals, especially nurses, which is accompanied by a high level of turnover (Abu-Zinadah, 2006; World Health Organisation [WHO], 2006a). Moreover, Saudi Arabia is one of the leading countries that has accepted and implemented the PHC concept in the Middle East (Al-Khaldi, Al-Sharif, Al-Jamal, & Kisha, 2002). The current number of PHC centres is 1,986,

compared to 1,884 in 2005 and 1,792 in 2001, and is expected to double within the next few years (MOH, 2008a).

The MOH has launched the Project of Custodian of the Two Holy Mosques for PHC development during the past few years. It aims to establish a series of 2,000 PHC centres in different regions of the nation and to update the existing ones (MOH, 2008b). Serious shifts toward PHC and the emphasis on its role in the Saudi healthcare system as a way to provide appropriate care were based on statistics of visitors to the PHC centres and other health organisations. Eighty-two percent of the total visits to MOH institutions during 2006 occurred in PHC centres (MOH, 2006). These centres are operated by approximately 24,000 healthcare workers, of whom 53.4% are nurses. Saudi nurses, however, comprise about 67% of the total PHC nursing workforce (MOH, 2008a). A large number of them perform non-nursing tasks while they are, statistically, part of the nursing workforce (Abu-Zinadah, 2005b; Al-Osaimy, 1994). This proportion is expected to drop to very low levels in the next few years due to the dramatic increase of PHC centres, and low numbers of nursing graduates compared to actual needs, accompanied with a high turnover rate of graduate nurses that is estimated to be 50% per annum (Abu-Zinadah, 2006; Alamri, Rasheed, & Alfawzan, 2006; Alhusaini, 2006).

Expatriate nurses form a large proportion of nurses working in PHC centres (33%) (MOH, 2008a). They come from various countries and cultures, some of which are incompatible with the culture of Saudi Arabia. According to Al-Nuaim (2004), El-Gilany and Al-Wehady (2001) and the WHO (2006a), non-Arabic-speaking nurses are at a disadvantage as care providers for people in the community because of the language barrier (poor health communication) and cultural differences. Such challenges for

expatriate nurses together with other factors related to the work and organisation create a high level of stress that reflects negatively on the quality of their working lives, pushing them to leave their jobs and the country when the opportunity arises. Alhusaini (2006) and Alamri et al. (2006) stated that the majority of foreign nurses leave to developed countries after gaining 'enough' knowledge, training and experience. This results in a high rate of nurses' turnover (WHO, 2006a).

Findings from a few studies conducted in the major cities of Saudi Arabia have indicated that nurses, particularly PHC nurses, are dissatisfied with their work (Al Juhani & Kishk, 2006; El-Gilany & Al-Wehady, 2001). According to Al Juhani and Kishk (2006), in a survey study conducted in the Al-Madinah region to assess the level of work satisfaction among PHC professionals, 52.4% of staff nurses were highly dissatisfied. This dissatisfaction among PHC nurses can have a negative impact on their performance and in turn affect the quality of healthcare outcomes. Furthermore, it can result in a behavioural intention to leave their work, which they may do ultimately.

Previous studies of PHC nurses in Saudi Arabia focused on job satisfaction only, omitting other important factors such as work life/home life, work design, work context and work world factors, which form the QWL approach (Brooks & Anderson, 2005). Consequently, there is a need to conduct a research study to explore and assess QWL and related factors among PHC nurses in the SHS. The findings may assist to develop strategies to attract and retain more nurses to PHC organisations, particularly during this era of transition into PHC. Otherwise, in light of competition to attract qualified nurses, PHC centres in Saudi Arabia may lose skilled nurses who may prefer to work for other systems and organisations, either nationally or internationally, that provide appropriate working

environments. According to Alamri et al. (2006), a number of expatriate nurses leave Saudi Arabia as soon as they have obtained sufficient experience to work in developed countries.

1.5 PURPOSE AND OBJECTIVES

The purpose of this study is to provide evidence-based information that will improve the retention of PHC nurses through exploring and assessing the quality of work life and their turnover intention. The objectives for this study are:

1. To assess the perception of PHC nurses towards their QWL.
2. To explore the turnover intention among PHC nurses.
3. To examine the relationship between QWL and PHC nurse demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month.
4. To examine the relationship between turnover intention and PHC nurse demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month.
5. To examine whether QWL dimensions (i.e. work life/home life, work design, work context and work world) are useful in predicting the turnover intention of PHC nurses.

6. To present recommendations for healthcare executives and nursing leaders on strategies to improve the QWL among nurses of the PHC centres in order to attract and retain qualified nurses in the current competitive environment.

1.6 RESEARCH QUESTIONS

This research will provide answers to the following questions:

1. What is the perception of QWL among PHC nurses?
2. What is the perception of turnover intention among PHC nurses?
3. Are there significant relationships between QWL and demographic variables of PHC nurses (i.e. gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month)?
4. Are there significant relationships between turnover intention and demographic variables of PHC nurses (i.e. gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month)?
5. Are the QWL dimensions (i.e. work life/home life, work design, work context and work world) useful in predicting turnover intention?

1.7 SIGNIFICANCE

The ongoing nursing shortage and high turnover of nurses is a critical challenge to the healthcare industry (Miller, 2007). These issues have high costs for health services,

patients, the organisations, and the nurses themselves. Compounding the problem is the strong competition among almost all healthcare organisations to retain and recruit qualified nurses from around the world. Some recent reports have confirmed that these challenges will continue during coming decades due to large population growth in many countries, particularly developing countries (Abu-Zinadah, 2005b; Buchan & Seccombe, 2003). According to Brooks et al. (2007), the retention of qualified nurses is vital if health organisations are to survive. In addition, these authors suggested that one promising method to understand nurse retention is to assess QWL and related factors. Such assessment improves the understanding of health organisations regarding the impacts of work environments and other related factors on the nurses' work life as well as organisational productivity (Brooks & Anderson, 2005; Brooks et al., 2007). Thus, this study will address a gap in the research literature and may provide findings to benefit primary and community healthcare organisations, nursing professionals, clients, and the SHS. Finally, it will add to the existing body of knowledge.

The PHC centres and similar organisations will likely benefit from this research, as they will become aware of factors affecting the QWL of their nurses. Moreover, they will be knowledgeable about the current intention of their nurses to leave their organisations. This awareness will help healthcare leaders in those organisations to design and put into practice strategies to improve the working environments of their nurses. Such developments will likely improve the general condition of nurses, increase their job satisfaction and in turn, improve their performance. Accordingly, the organisational productivity and quality of patient care may be increased. All these achievements can assist to retain PHC nurses and minimise their turnover intentions.

It is expected that the SHS will also benefit from this study, as it will assess and explore QWL and associated factors among PHC nurses to provide a clear picture of the situation in Saudi Arabia. Moreover, it will involve both Saudi and non-Saudi nurses working in PHC centres. The results of this comprehensive study should assist decision-makers and executives in recognising the factors that affect the QWL of those professionals and their relationship to the turnover intention. Findings from this study can help to informing the development of appropriate and effective strategies to retain current nursing staff and to attract more to the SHS. Addressing this issue can advance the quality of PHC centres, particularly during this transition period. Consequently, both the community and the PHC nurses in Saudi Arabia and other countries will benefit from these results.

Finally, by focusing on QWL, related factors and turnover intention among PHC nurses, this research will add to the body of knowledge in the healthcare industry, particularly regarding PHC. Moreover, this study should be the foundation for further studies in the Saudi context as well as worldwide. It is anticipated that it will offer valuable and currently unavailable data. The findings of this study should be beneficial in helping to combat the nursing shortage and high turnover rates as PHC centres continue to strive to provide quality patient care in a competitive environment.

1.8 A CONCEPTUAL FRAMEWORK

A particular model (QWL and Turnover Intention Model) to guide and analyse the results of this study was developed by the author based on data provided in the literature (see Figure 1.1). It incorporates elements of Brooks' framework for factors of nursing work life (Brooks & Anderson, 2005) as well as a set of demographic variables that were reported in the literature as variables commonly correlated with nurses' satisfaction and

turnover intention. Brooks' Model categorises factors under four main dimensions: work life/home life, work design, work context, and work world.

The 'work life/home life' dimension refers to "the interface between the life experiences of nurses in their place of work and in the home", while 'work design' is "the composition of nursing work, and describes the actual work nurses do" (Brooks & Anderson, 2005, p. 323). The third dimension of 'work context' encompasses "the practice settings in which nurses work and explores the impact of the work environment on both nurse and patient systems", while 'work world' takes account of "the effects of broad societal influences and changes on the practice of nursing" (Brooks & Anderson, 2005, p. 323).

Demographic variables incorporated into the QWL and Turnover Intention Model include gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month. Demographic variables are frequently used in nursing research as predictors of turnover and turnover intention (Mor Barak, Nissly, & Levin, 2001). According to Bluedom (1982), demographic variables display independent effects: thus, they could not be omitted as contributors to turnover.

The proposed model assumes a correlation among work life related factors, employees' demographic characteristics, QWL level and turnover intention. QWL is affected by work life factors as presented by Brooks and Anderson (2005) as well as a number of demographic factors, leading to a high or poor level of QWL which can result in critical changes in the behavioural intention of the nursing employee. This intention is translated into the behaviour action of staying with the current organisation or leaving. The

correlation between the level of QWL and the employees' behaviour action, however, can be further affected by the selected employees' demographic factors. For example, when QWL is low, it is expected that this would lead to turnover intention, and finally, to actual turnover. In some cases, besides the QWL level, the employees' demographic factors may have a significant impact on the final decision of turnover (see Figure 1.1).

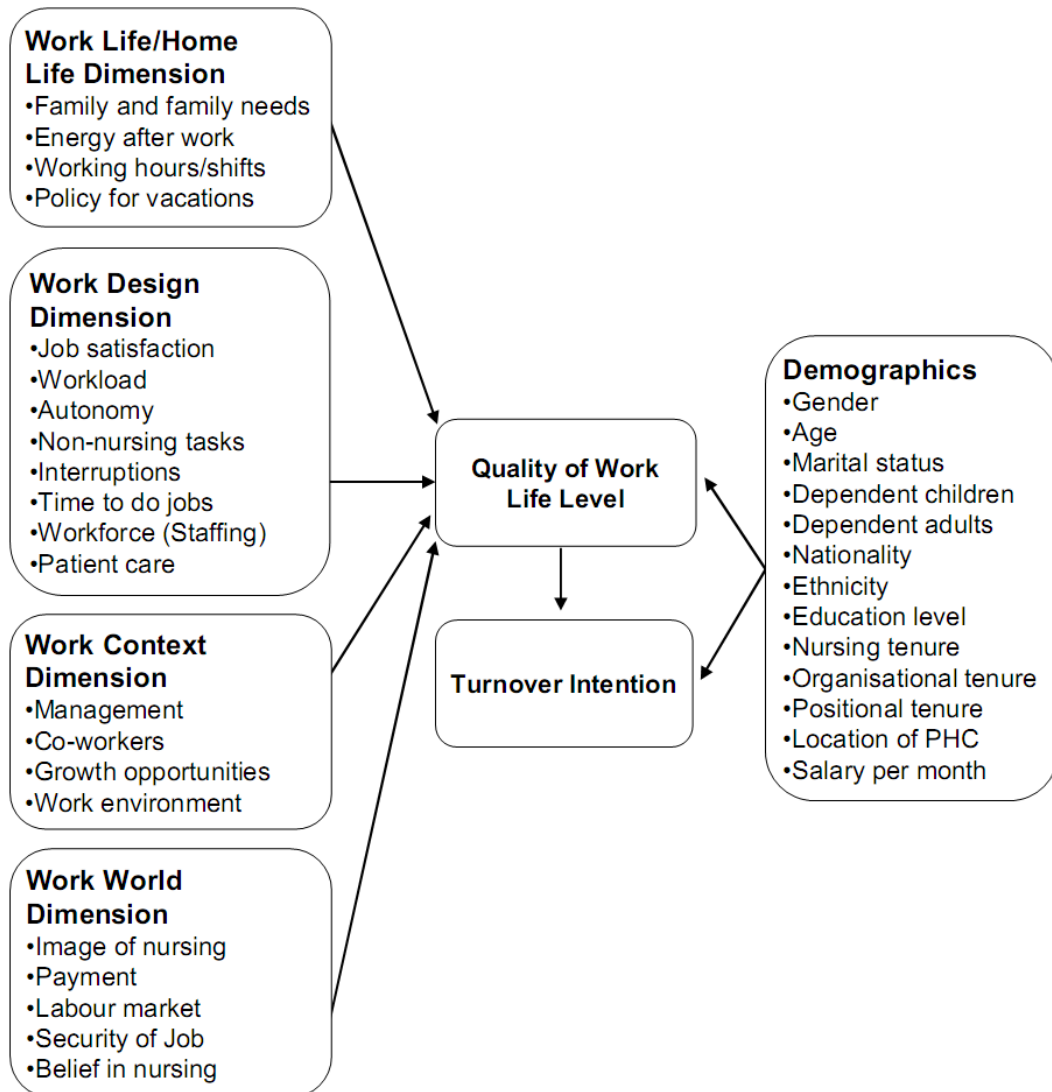


Figure 1.1. QWL and turnover intention framework.

1.9 RESEARCH STRUCTURE

In order to manage the project within the required time-frame, the research was conducted according to seven planned stages. These stages are illustrated in Figure 1.2, with each of the seven stages is described in more detail below.

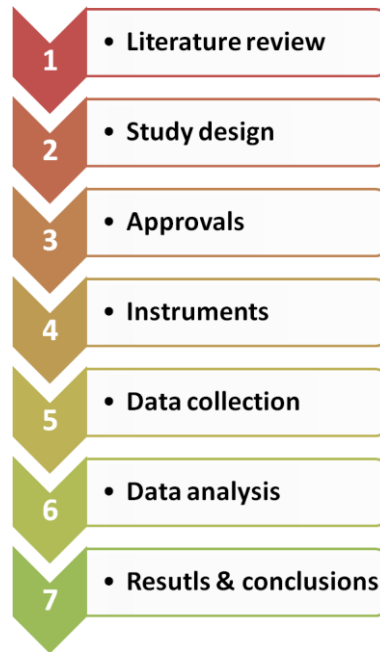


Figure 1.2. Research structure.

Stage one involved a detailed review of the literature in relation to the healthcare system in Saudi Arabia, the nursing profession in Saudi Arabia, QWL and the factors influencing the intention of nurses to leave their employment. This comprehensive approach to the literature review enabled gaps in the literature to be distilled and informed the research questions and methods.

In stage two, the research questions, objectives, hypotheses, methods and instruments to be used were identified and formulated. The research questions were developed from

identifying gaps in the available literature. To answer the research questions, a cross-sectional design was employed and a number of hypotheses were developed. A range of available survey tools were reviewed and the decision was made to use two instruments: Brooks' Survey of QNWL which was developed by Brooks (2001), and the Anticipated Turnover Scale (ATS) developed by Hinshaw and Atwood in 1978 (Hinshaw & Atwood, 1984). The justification for using these two instruments is presented in section 6.5.

Stage three involved gaining the appropriate ethics approvals. Ethical clearance was obtained from the Human Research and Ethics Committee at the Queensland University of Technology (No: 0800000406) (see Appendix D). Permission to use the premises of the PHC was obtained from the Directorate General of Primary Health Centres in the Jazan region, Saudi Arabia (see Appendix C). Approvals to use copyrighted materials (Brooks' QNWL Survey and ATS) were obtained from the original authors (see Appendix E).

Stage four involved the development of two instruments, one which focussed on the demographic characteristics of the participants and a second instrument which included open-ended questions on the QWL and turnover intention. Then, these two instruments as well as the other two adapted survey instruments (Brooks' Survey of QNWL and the ATS) were tested for content validity, reliability and clarity prior to the final survey distribution. More details about the pilot study are presented in section 6.5.5.

Stage five involved the data collection phase of the study. Questionnaires were distributed to nurses in the PHC in the Jazan region through the PHC Department in Jazan, the administrative authority for the PHC facilities in the whole region. Details of the recruitment strategy and sample are described in section 6.2.

Stage six involved the analysis of the data. Quantitative data were analysed using the Statistics Product and Solutions Services (SPSS) for Windows, v.17. The NVivo software (a Computer-Assisted Qualitative Data Analysis Software - CAQDAS) was used to store, organise, manage, and analyse the qualitative data obtained from responses to the open-ended questions. Stage seven focussed on interpreting the results, summarising the findings, drawing conclusions and providing the recommendations.

1.10 BRIEF SUMMARY OF STUDY SAMPLE AND DESIGN

This study used a descriptive research design, namely, cross-sectional survey, to investigate the perception of QWL and the intention to leave among nurses working in PHC centres in Saudi Arabia. The target population for this study consisted of RNs who worked in the PHC centres in the Jazan region, Saudi Arabia (134 PHC centres) (MOH, 2007b). All RNs working in PHC centres were eligible for inclusion in the study. The PHC centres are distributed throughout urban and rural areas, and they employ approximately 585 Saudi and non-Saudi nurses.

The Jazan region is located in the southern part of Saudi Arabia. The PHC centres in all regions of Saudi Arabia are operated and headed by the same healthcare authority (Ministry of Health) which is responsible for supplying them with health personnel, including RNs. The characteristics of those nurses, therefore, are almost similar in such types of health care organisations. Although there were well-recognised gaps among the various regions in terms of social, health and economic developments in the past, vast efforts have been recently undertaken by the government as well as the community to minimise these differences. Numerous multi-type projects have been established in almost all regions of Saudi Arabia, with special focus on areas that are late in development. In

Jazan, for example, many such projects and programs have been launched (e.g. Jazan Economic City, Jazan University, Jazan Medical City, a variety of health facilities, various infrastructural projects, and scores of public, higher and health educational institutions). In view of that, the nurses in one region may be considered as being a representative sample for others. Based on this, it could be argued that the obtained findings from this study can be, to some extent, generalised to all PHC centres in Saudi Arabia.

1.11 DEFINITION OF TERMS

A number of terms are used throughout the thesis. A definition of each term follows in order to assist the reader.

- *Nursing tenure* – the number of years in the nursing profession.
- *Organisational tenure* – the number of years in the current PHC organisation.
- *Position tenure* – the number of years in the current position in the PHC organisation.
- *Primary Health Care (PHC) centre (organisation)* – the basic health unit or the first point of contact between the community and the healthcare system. It provides a set of healthcare services including prevention programs, treatment of simple diseases, chronic care management, maternal and child health services (including immunisation), environmental health and public health education.
- *Quality of Work Life (QWL)* – the degree to which employees (nurses) are able to satisfy important personal needs through their experiences in their work organisation while achieving the organisation's goals (Brooks, 2001).
- *Registered Nurse (RN) (in Saudi Arabia)* – the nurse who has graduated from a recognised program of nursing education (Diploma school, Associate Degree,

Baccalaureate program or higher levels) and is currently registered with and licensed by the Saudi Commission for Health Specialists to practice as a professional nurse.

- *Turnover* – the action of employees transferring from one organisation to another or leaving the career profession as a whole. The focus of this study is the organisational turnover.
- *Turnover intention* – the seriously consideration of leaving one’s current job (Mor Barak et al., 2001).
- *Work life/home life* – “the interface between the life experience of nurses in their place of work and in the home” (Brooks & Anderson, 2005, p. 323).
- *Work design* – “the composition of nursing work, and describes the actual work nurses do” (Brooks & Anderson, 2005, p. 323).
- *Work context* – “the practice settings in which nurses work, and explores the impact of the work environment on both nurse and patient systems” (Brooks & Anderson, 2005, p. 323).
- *Work world* – “the effects of broad societal influences and changes on the practice of nursing” (Brooks & Anderson, 2005, p. 323).

1.12 OVERVIEW OF THE STUDY

This study is structured into 10 chapters. The first includes an introduction, statement of the problem, the purpose and objectives, research questions and significance of the study. It also includes a definition of terms, a conceptual framework, and structure of the study. The second chapter provides an overview of the healthcare system in Saudi Arabia, including its potentials and challenges. Additionally, it presents relevant data focusing on

demographic patterns and the economic circumstances of Saudi Arabia. Chapter 3 outlines the nursing profession in Saudi Arabia, providing an overview of its history, educational development, nursing regulations, workforce challenges, and professional practice. Chapter 4 presents a literature review on QWL, including nursing working life. Chapter 5 provides an overview of turnover and turnover intention among RNs. It also presents a review of the literature, focusing on the impact of work life components and the demographic characteristics on the 'turnover intention' of RNs in healthcare facilities. Chapter 6 describes the research design, data collection methods, setting, population and study sample. It also addresses the ethical implications of the study. Chapters 7 and 8 provide the quantitative and qualitative results, respectively. Chapter 9 presents the discussion of the study findings. Chapter 10 provides the conclusions of the research, its limitations, suggestions for future research, its unique contribution, and a number of recommendations to improve the QWL and retention of PHC nurses.

Chapter 2: The Saudi Healthcare System

2.1 INTRODUCTION

This chapter presents information relevant to the Kingdom of Saudi Arabia as the location of the study. Literature research and documents in both English and Arabic were examined. The chapter presents a brief impression of the demographic and economic patterns of Saudi Arabia. It also provides an overview on the Saudi Healthcare System (SHS), with a particular focus on PHC strategy and some of the challenges that the health system is facing. Historical perspective, current context and workforce of the SHS have been considered. Finally, the chapter provides a brief summary. Data relating to the SHS were extracted from published literature and identified through a search of a range of publically available databases such Medline, Google Scholar, Saudi health databases, Saudi health journals, government reports and relevant texts. Information published in Arabic was considered in this review to enhance the knowledge of readers regarding factors and conditions related to the SHS and the study location.

2.2 BACKGROUND

Healthcare services in Saudi Arabia have been given a high priority by the government. During the past few decades, health and health services have improved significantly in terms of quantity and quality. Gallagher (2002) stated that

Although many nations have seen sizable growth in their healthcare systems, probably no other nation [other than Saudi Arabia] of large geographic expanse and population has, in comparable time, achieved so much on a broad national

scale, with a relatively high level of care made available to virtually all segments of the population. (p. 182)

According to the WHO (2000), the SHS is ranked as 26th amongst 190 of the world's health systems. It comes before many other international healthcare systems such as Canada (30), Australia (32), New Zealand (41), and regional systems such as the United Arab Emirates (27), Qatar (44), and Kuwait (45). Despite these achievements, the SHS faces many challenges which require new strategies and policies by the MOH as well as effective cooperation with other sectors. This review outlines the historical development and current structure of the SHS. A particular emphasis has been given to the public health sector, the major provider of health services (e.g. PHC) that is operated by the MOH, including key opportunities and challenges. In addition, this review highlights demographic changes and the economic context of Saudi Arabia in relation to the SHS.

2.3 DEMOGRAPHIC AND ECONOMIC PATTERNS OF SAUDI ARABIA

The last official census (2004) placed the population of Saudi Arabia at 22.7 million, compared to 18.5 million in 1997 (Central Department of Statistics and Information [CDSI], 2006). The annual population growth rate for 2000 to 2005 was 2.7% per annum (United Nations, 2008), and the total fertility rate was 3.04 (MOH, 2008a). Saudi citizens comprise approximately 72.88% of the total population; 50.14% are male and 49.86% female. According to United Nations projections, it is estimated that the population of Saudi Arabia will reach 39.8 million by 2025, and 54.7 million by 2050 (United Nations, 2003). This unprecedented growth will increase the demand for essential services and facilities, including health care, whilst at the same time creating economic opportunities.

Approximately 62.90% of the population are under the age of 30 years, and about 37% have not reached 15 years of age. On the other hand, the population over the age of 60 is estimated to comprise 4.5% (CDSI, 2006). This is a natural outcome of the high birth rate (24.1/1000 population), increased life expectancy (72.4 years for men, 74.5 years for women) (MOH, 2008a), and declining mortality rates among infants and children (Gallagher, 2002). The mortality rate for those aged under 5 years was 20.6 per 1000 live births by 2008 (MOH, 2008a), down from 250 per 1000 in 1960 (Aldossary, While, & Barriball, 2008). Apart from advancements in health care and social services, these improved statistics can mostly be attributed to the compulsory childhood vaccination program implemented by the government since 1980 (Aldossary et al., 2008).

Saudi Arabia is one of the richest and fastest growing countries in the Middle East. It is the world's largest producer and exporter of oil, which constitutes the major portion of the country's revenues (Ministry of Finance, 2010; Oil & Gas Directory Middle East, 2011). In recent decades, however, Saudi Arabia has diversified its economy, and today produces and exports a variety of industrial goods all over the world. The sound economy and well-established industry base affects the Saudi community by increasing their income, leading to a per capita income of USD 22,935 in 2007 (United Nations, 2009), compared to USD 14,724 in 2006, USD 13,639 in 2005 (Ministry of Economy and Planning, 2007), and USD 8,150 in 2000 (World Bank Group, 2010). Based on information from 2010, Saudi Arabia is ranked at a high level in the Human Development Index (0.752), which ranks the country at 55 out of 194 countries (United Nations, 2010). The improvement of the national income is expected to impact positively on a range of services, including the healthcare services.

2.4 BRIEF OVERVIEW OF HEALTH SERVICES DEVELOPMENT

Health services in Saudi Arabia have increased and improved significantly during the last decades (Walston, Al-Harbi, & Al-Omar, 2008). The first Public Health Department was established in Makkah in 1925 based on a Royal decree from King Abdulaziz (Alharthi, Alenad, Baitalmal, & Alkhurashi, 1999). This department was responsible for sponsoring and monitoring free health care for the population and pilgrims through establishing a number of hospitals and dispensaries. Establishing the Health Department was the first step in providing curative health services; however, the delivered care was insufficient and the majority of the people continued to depend on traditional medicine. At that time, the national income was not sufficient to achieve major advances in health care. As a result, the incidence of epidemic diseases was high among the population and pilgrims (Alharthi et al., 1999). As a critical step, the MOH was established in 1950 under the Royal decree (8697/11/5) (Alharthi et al., 1999). Twenty years later, the Five-Year Development Plans were introduced by the government (Mufti, 2000). These plans aimed at planning for and improving all sectors of the nation, including the SHS. Since then, substantial improvements have been achieved in Saudi Arabia.

2.5 CURRENT STRUCTURE OF HEALTH SERVICES

Presently, a number of health services in Saudi Arabia are provided and financed by the MOH and other governmental bodies. The MOH is the major government provider of healthcare services with a total of 231 hospitals (31,720 beds) and 1986 PHC centres (MOH, 2008a). These services comprise about 60% of the total health services in Saudi Arabia (MOH, 2008a). The other government bodies include referral hospitals (e.g. King Faisal Specialist Hospital and Research Centre [KFSH & RC]), Security Forces Medical

Services, Army Forces Medical Services, National Guard Health Affairs, Ministry of Higher Education hospitals (university hospitals), ARAMCO hospitals, Royal Commission for Jubail and Yanbu health services, school health units of the Ministry of Education and the Red Crescent Society. With the exception of referral hospitals, the Red Crescent Society and the university hospitals, each of these agencies provides services to a defined population, usually employees and their dependants. Additionally, all of them provide health services to all residents during crises and emergencies (Mufti, 2000). Jointly, the governmental bodies operate 39 hospitals with a capacity of 10,806 beds (MOH, 2008a). The private sector also contributes to the delivery of healthcare services, especially in cities and large towns, with a total of 123 hospitals (11,362 beds) (see Figure 2.1) (MOH, 2008a).

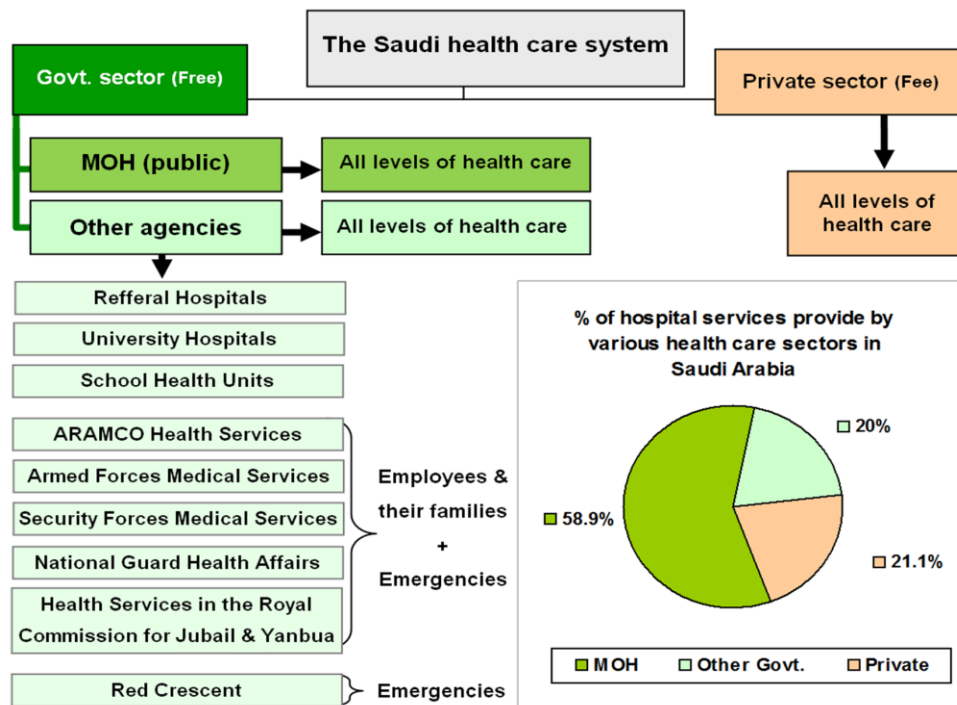


Figure 2.1. The current structure of the healthcare sectors in Saudi Arabia.

The advancement in health services, combined with other factors such as improved and more accessible public education, increased health awareness among the community and better life conditions which have contributed to significant improvement in health indicators . For example, the average life expectancy for Saudi people has increased from 57 years in 1973 to 73.4 years in 2008, and the infant mortality rates have declined from 57/1000 live births in 1982 to 17/1000 in 2008 (MOH, 2008a; Mufti, 2000).

Alhusaini (2006) stated that, despite the multiplicity of health service providers, there is no coordination or clear communication arrangements among them, resulting in a waste of resources and duplication of effort. For example, there are considerable opportunities to take advantage of equipment, laboratories, training aids, and well-trained personnel who have come from different countries. However, as a result of poor coordination, the benefit of these opportunities is limited to each sector. In order to overcome this problem and to provide the population with up-to-date, equitable, affordable, organised and comprehensive health care, a Royal decree was issued in 2002 which established the Council of Health Services. This council is headed by the Minister of Health and comprises representatives of other governmental and private health sectors (WHO, 2006b). The essential aim of this Council is to develop a policy for coordination and integration among all authorities of healthcare services in Saudi Arabia (Council of Health Services, 2009). It is reported that no significant progress has been achieved yet in the area of coordination and integration among public healthcare providers in Saudi Arabia (Alkhazem, 2009).

2.6 PUBLIC HEALTHCARE SYSTEM (MINISTRY OF HEALTH)

In accordance with the Saudi Constitution, the government provides all citizens and expatriates working within the public sector with full and free access to all public healthcare services (Aldossary et al., 2008; Jannadi, Alshammari, Khan, & Hussain, 2008). The government expenditure on the MOH increased from 2.8% in 1970 (WHO, 2006b), to 6.2% in 2008 (see Table 2.1) (MOH, 2008a). According to the WHO (2011), the total expenditure on public health during 2006 was 3.4% of the GDP. The MOH is responsible for managing, planning, and formulating health policies, supervising health programs, as well as monitoring health services in the private sector (Al-Yousuf, Akerele, & Al-Mazrou, 2002). It is also responsible for advising other government agencies and the private sector on ways to achieve the government's health objectives (Mufti, 2000).

Table 2.1
The budget appropriations for the MOH in relation to the government (by Saudi Riyals* 1,000), 2002-2008

Year	Government Budget	MOH Budget	% **
2002	209,000,000	13,857,430	6.6
2003	230,000,000	14,756,350	6.4
2004	280,000,000	16,870,750	6.0
2005	335,000,000	19,683,700	5.9
2006	380,000,000	22,808,200	6.0
2007	450,000,000	25,220,200	5.6
2008	457,000,000	29,518,700	6.2

* 1 USD = 3.75 SR. **As % of the Total Government Budget.

Source of data: Ministry of Health (2008a). *Health statistical year book*. Ministry of Health, Riyadh.

The MOH supervises 20 regional Directorates-General of health affairs distributed in various parts of the country (WHO, 2006b). Each regional health Directorate has a number of hospitals and health sectors, and every health sector supervises a number of PHC centres. The role of these 20 Directorates includes implementing the policies, plans and programs of the Central MOH; managing and supporting its health services; supervising and organising the private sector services; coordinating with other government agencies; and coordinating with other relevant bodies (Al-Yousuf et al., 2002). Figure 2.2 demonstrates the organisational structure and the relationship of departments within the SHS, beginning with the community and ending with the Ministry.

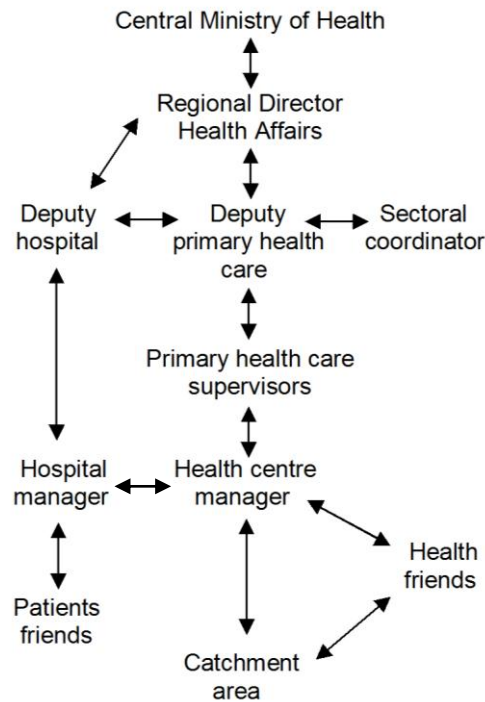


Figure 2.2. Organisational structure of the MOH (public) healthcare system in Saudi Arabia.

Adapted and modified with permission from: Baldo, M. H., Khoja, T. A., Al-Mazrou, Y. Y., & Basulaiman, M. O. (1998). Augmenting hospital support of maternal and child health care, Saudi Arabia. *Eastern Mediterranean Health Journal*, 4(1), 11-20. Copyright 1998 by the *Eastern Mediterranean Health Journal*.

‘Health friends’ is a select committee consisting of useful and influential community members who are knowledgeable about the common social norms and at the same time able to exploit the community potentials to the maximum. This committee should include representatives from PHC centres. The essential role of this committee is to liaise between the PHC centre and the surrounding community (Al Mazrou, Al-Shehri, & Rao, 1990; Al Mazrou & Salem, 2004). The health centre manager leads one PHC centre and is considered as being at the lowest level of PHC management. The PHC supervisor is the manager of one health sector that usually consists of a number of PHC centres and this person connects these centres to the Regional Directorate of Health Affairs.

2.6.1 Levels of healthcare services

The MOH provides health services at three levels: primary, secondary and tertiary (see Figure 2.3). Primary care services, both preventive and curative, are supplied through PHC centres. By using a referral system, cases that require higher care are referred to public hospitals (the second level of care). Additionally, cases that need more complex levels of care are transferred to central or specialised hospitals (the third level of health care). The top-to-down relationship between healthcare organisations at various levels is not clearly organised. For example, there are no communication channels or planned regulations for sending patients back to PHC services from specialist or secondary care sectors. More efforts are needed to reform this gap of the healthcare system in order to reduce the overloading of the specialist and secondary services.

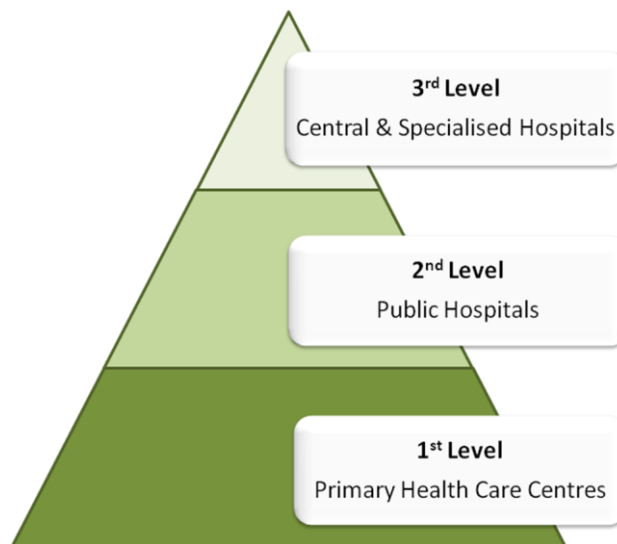


Figure 2.3. Levels of the MOH (public) healthcare system in Saudi Arabia.

2.6.2 Transition into PHC services

Until 1980, health services were largely curative. Most of the health facilities were remedial, emphasising the provision of treatment for existing health problems. Furthermore, there was a common expectation of curative care among the population (WHO, 2002; 2006b). The curative care model was costly to health providers, despite the fact that many cases could be prevented or minimised through fostering a preventive strategy. Various preventive measures were run by the MOH through former health offices and to some extent through maternal and child healthcare centres. A number of disease control activities were performed by the vertical programs, e.g. malaria, tuberculosis, and leishmaniasis (Al-Yousuf et al., 2002; WHO, 2006b).

Al-Ahmadi (2005) stated that the Alma Ata Declaration issued by the WHO General Assembly identified PHC as the means to achieve Health for All. In accordance with this declaration, the MOH decided to activate and develop the role of preventive health services by adopting the approach of PHC as one of its most important health strategies. Consequently, in 1980, a ministerial decree [No. 257/1459/50, dated 17/8/1400H] aimed at establishing PHC centres, was issued. To operationalise this decision, several steps were undertaken by the MOH. In the first instance, premises suitable to the new strategy were established around the country. Existing facilities located in the same area were integrated into a single unit. These included former health offices, maternal and child health centres and dispensaries. The health posts in small and rural districts were upgraded to PHC centres (Al-Yousuf et al., 2002; World Health Organisation, 2006b). The health centres have been committed to the eight elements of the PHC approach, which include: 1) educating the population concerning prevailing health problems and the methods of preventing and controlling them; 2) provision of adequate supply of safe water and basic

sanitation; 3) promotion of food supply and proper nutrition; 4) provision of comprehensive maternal and child health care; 5) immunisation of children against major communicable diseases; 6) prevention and control of local endemic diseases; 7) appropriate treatment of common diseases and injuries; and 8) provision of essential drugs (Al Mazrou et al., 1990; Al Mazrou & Salem, 2004).

According to Al-Yousuf et al. (2002), focusing on a PHC strategy and applying a patient referral system has helped to reduce the number of visits to outpatient clinics. The creation of individual and family health records inside each PHC centre reduced duplication of consultations. The use of the essential drugs list and documentation of prescriptions in patient health files has not only reduced costs of medications, but also improved prescription and medication practices. Adopting and implementing the PHC strategy has improved the public health and reduced the overall cost of care.

In recent years, the MOH has prepared plans to shift gradually towards PHC services. About 82% of client visits to the MOH facilities during 2006 were to PHC centres (MOH, 2006). The total number of PHC clients during 2006 was more than 50 million (MOH, 2008b). Therefore, the Ministry has initiated many contemporary projects aimed at developing health care in general and PHC in particular. For example, the project of the Custodian of the Two Holy Mosques aims to establish 2,000 advanced PHC centres and to develop the existing ones in terms of buildings, workforce and services (see Figure 2.4).

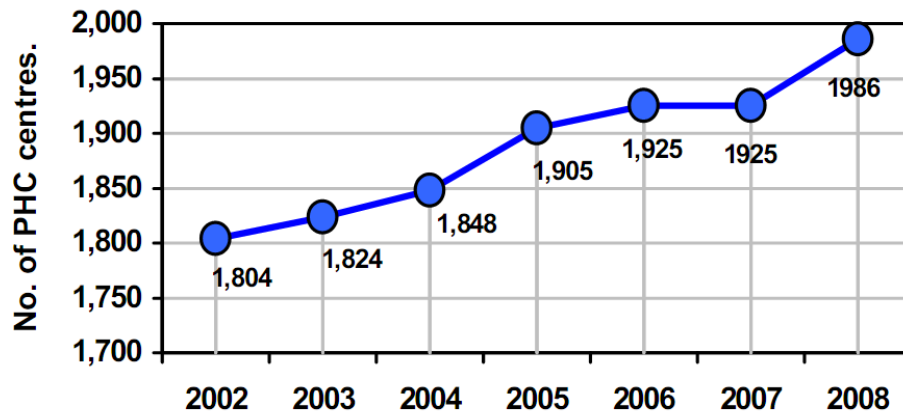


Figure 2.4. Trends in the number of PHC centres in the MOH, 2002-2008.

2.6.3 Health services in the pilgrimage (Hajj) season

Saudi Arabia has a unique position in the Islamic world, as it embraces the two holy cities in Islam, Makkah and Al-Madinah. About two million pilgrims perform the hajj annually, and they come from almost all over the world. During the 2008 season, the number of pilgrims was 2.4 million. Of these, 71.8% came from foreign countries (MOH, 2008a). Hosting such an event annually is a major challenge that requires a planned and organised effort across numerous agencies and departments to ensure the adequacy of essential services, such as housing, transport, safety, and health care (Jannadi et al., 2008). Healthcare services in the Hajj season provide preventive and curative care for all pilgrims, irrespective of their nationalities. The preventive care includes health education programs, vaccination and chemoprophylaxis for all pilgrims via quarantine services at airports and land ports. The provision of emergency and curative services takes place through a net of healthcare facilities. For example, in 2008, there were 18 hospitals of which seven were seasonal, with a total of 3,368 beds, and 253 beds for emergency admissions. There were also 133 PHC centres, of which 99 were seasonal. On average, each PHC centre treated 18,112 pilgrims. The total workforce recruited to work in these facilities during 2008 was

17,382. Of these, 64.4% were physicians, nurses, and allied health personnel (MOH, 2008a). On average, each physician treated about 676 pilgrims, while each nurse treated about 415.

Every year, the Saudi healthcare agencies, particularly the MOH, seek to improve the pilgrims' healthcare services through expanding its efforts and resources (Jannadi et al., 2008). All these services are provided free of charge for all pilgrims, which creates considerable pressure on the budget of the healthcare services. Thus, there is an urgent need to find suitable alternatives to provide better services at a lower cost. One suggestion is to introduce a seasonal health insurance for all international pilgrims.

2.7 CHALLENGES FOR HEALTHCARE REFORM

While considerable steps have been undertaken by MOH to reform the SHS, a number of challenges remain. These challenges relate to the health workforce, financing and expenditure, changing patterns of diseases, accessibility to healthcare services, introducing cooperative health insurance (CHI), privatisation of public hospitals, utilisation of electronic health (e-health), and the development of a national system for health information (Almalki, Fitzgerald, & Clark, 2011a).

2.7.1 Health workforce

The SHS is challenged by the shortage of local healthcare professionals, such as physicians, nurses, and pharmacists. The majority of health personnel are expatriates with a high rate of turnover (Abu-Zinadah, 2006). Consequently, the SHS is faced with considerable workforce instability (WHO, 2007). According to the MOH (2008a), the total health workforce in Saudi Arabia, including all other sectors, is about two hundred

thousand (210,062); more than half (105,512) work in the MOH. Saudis constitute 50.2% of the total workforce. Of these, 19% are physicians, while 44.5% are nurses. The rates of physicians and nurses per 10,000 of population in Saudi Arabia are 10 and 22.3, respectively. The proportion of Saudi health professionals in the MOH is expected to decrease in the future as a result of the considerable expansion in healthcare facilities around the country (see Figure 2.5) (Alamri et al., 2006; Alhusaini, 2006), which may have the effect of spreading a scare resource even more thinly.

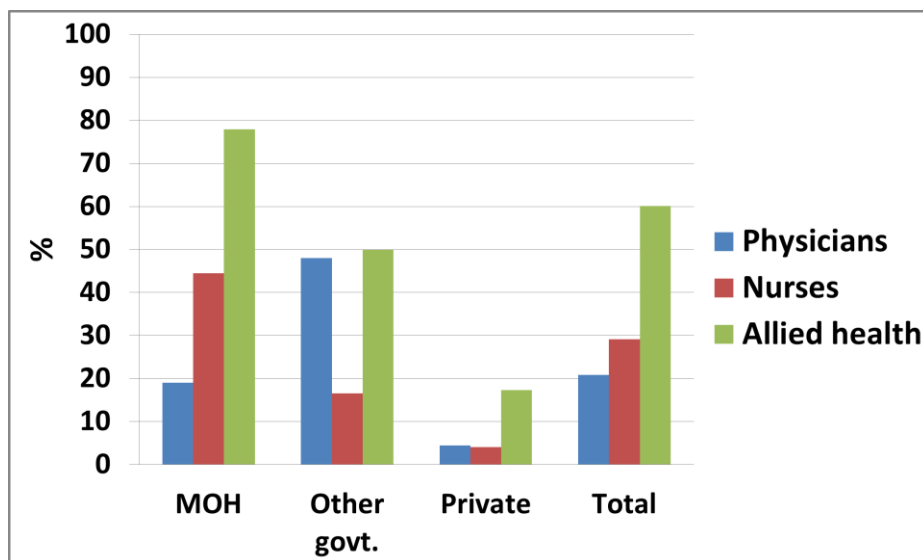


Figure 2.5. The Saudi health personnel in the health care sectors in Saudi Arabia, 2008.

The ability to formulate and apply practical strategies to retain and attract more Saudis into medical and health professions, particularly nursing, is a clear priority for effective reform of the SHS. Many efforts have been taken by the government to teach and train Saudis for health professional jobs. Since 1958, a number of medical, nursing and health schools have been opened around the nation to meet this goal (Aldossary et al., 2008). Apart from private colleges and institutes, there are a total of 62 colleges for medicine,

health and nursing as well as four health institutes in Saudi Arabia (MOH, 2007b). Efforts for establishing such colleges are in accordance with the Saudisation training programs that aim to substitute the largely expatriate workforce with qualified Saudis in all sectors, including health (WHO, Tumulty, 2001; 2006b). The budget allocation for training and scholarships has increased; thus, many of the MOH employees are offered a chance to pursue their studies abroad (WHO, 2006b). This strategy should improve the skills of current employees and raise the quality of health care. Moreover, it may decrease the rate of turnover among health professionals (Rambur, Palumbo, McIntosh, & Mongeon, 2003). However, all these efforts are not enough to solve this continuing challenge. More realistic plans and long-term strategies need to be consolidated by the MOH in cooperation with other governmental sectors and the private sector. A good example of such cooperation is the Program of King Abdullah for International Scholarship that was established by the MOHE. In its stage 4, priority has been given to medical specialists including medicine, nursing, pharmacy and other health majors (MOHE, 2008). However, more colleges, schools and programs need to be established around the country. New laws and regulations to develop and reorganise the human resources system at the MOH are required immediately.

2.7.2 Reorganisation and restructuring of the MOH

The public health sector is overwhelmingly financed, operated, controlled, supervised and managed by the MOH (WHO, 2006a). These multi-roles certainly interact with each other and, in one way or another, impact on the quality of services. Such a traditional health system may not be able to meet the population's healthcare needs into the future unless serious and well-planned steps are taken to separate these tasks. Such plans may include

giving more authority to the regional Directorates, applying the CHI and encouraging privatisations of public hospitals.

2.7.3 Decentralisation of health services and autonomy of hospitals

To meet increasing pressure on the MOH, more autonomy has been given to the regional Directorates in terms of planning, recruitment of professional staff, formulating agreements with health service providers (operating companies) and some limited financial discretion. However, the “functioning of the regional Directorates is adversely affected by the lack of individual budgets and spending authority” (Mufti, 2000, p. 10). The expenditure for most activities must be authorised by the MOH, affecting the autonomy of regional Directorates in taking the right decision at the right time.

In terms of hospital autonomy, the MOH has tried many strategies for operating public hospitals during past decades, including direct operation by the MOH, cooperation with other governments such as in Holland, Germany and Thailand, partial operation by healthcare companies, comprehensive operation by healthcare companies, and finally, the autonomous hospital system (Al-Ateeq, 2002). Considering the advantages and disadvantages of these approaches, the MOH has standardised the autonomous hospital system for 31 public hospitals in various regions (MOH, 2007b). An autonomous hospital system for public hospitals is expected to raise the efficiency of performance in the medical and managerial aspects, achieve financial and administrative flexibility through adopting a direct budget strategy, apply quality insurance programs, and simplify the contract process with qualified health professionals (Al-Ateeq, 2002). In 2009, the MOH issued a new regulation for the autonomous hospital system to ensure a high level of management practices and to improve quality of services provided (Al-Zahrani, 2009). Giving more

autonomy to hospitals will help the transition to privatisation of public hospitals in Saudi Arabia. It gives public hospitals more experience in the management of their budget, healthcare quality, and workforce.

2.7.4 Health insurance in Saudi Arabia

Funding healthcare services is a central challenge faced by the MOH (WHO, 2006a). Since the total expenditure on public health services comes from the government and the services are free-of-charge, costs lead to considerable pressure being placed on the government, particularly in view of rapid population growth, high prices for new technology and increasing awareness of health and disease among the community (Walston et al., 2008). To meet the growing demands for health care and to ensure the quality of services provided, the Council for Cooperative Health Insurance was established by the government in 1999 (Council of Health Services, 2009). The main role of this Council is to introduce, regulate and supervise the health insurance strategy in the Saudi healthcare market.

The implementation of health insurance was planned over three stages. In the first stage, health insurance was applied for non-Saudis and Saudis in the private sector where their employers have to pay for health cover costs. In the second stage, health insurance is to be applied for Saudis and non-Saudis working in the governmental sector. The government will pay the health insurance costs for this category of employee. In the final stage, health insurance will be applied to other groups, such as pilgrims (Alsharif, 2008). Only the first stage has been implemented to date, with health insurance being implemented gradually by use of a three-phase program to employees in the private sector and their dependents (Al-Shaikh, 2006; Walston et al., 2008). The first phase covered companies with 500 or more

employees, while the second phase applied to employers with more than 100 workers. The third phase included employees of all companies in Saudi Arabia as well as domestic workers (Al-Shaikh, 2006; Walston et al., 2008). The government is now working systematically to apply the remaining two stages, for employees in governmental sector and for pilgrims, before they privatise state-owned healthcare facilities (Walston et al., 2008). No information is available yet regarding health insurance for the population of Saudi Arabia other than employees and expatriates.

While the market for health insurance in Saudi Arabia started only with one company in 2004, it currently involves about 25 companies. The health insurance companies were expected to increase to 30 by 2010 (Al-Sakran, 2009). The introduction of health insurance is intended to decrease the financial burden placed on Saudi Arabia because of the costs associated with providing health services free-of-charge. Additionally, this will give more opportunity for people to have and choose the health services they require (Walston et al., 2008). The challenge for policy-makers of health insurance in Saudi Arabia is to introduce a comprehensive, fair, and affordable service for the whole population. Clearly, lessons can be learned from the experiences of other countries, including the advantages and disadvantages.

2.7.5 Privatisation of public hospitals

Privatisation of public hospitals has been seen by policy-makers and researchers as the best way to reform the SHS (MOH, 2009; Saati, 2003). Steps to implement a privatisation strategy have been initiated and related regulation has been passed by the government. As a result, a number of public hospitals are likely to be sold or rented to private firms during the next few years (Walston et al., 2008). Privatisation of hospitals is expected to bring a

number of advantages to the government and to the nation; however, it has its costs too. Privatisation will possibly assist in speeding up decision-making, reducing the government's annual expenditure on health care, producing new financial sources for the MOH and improving healthcare services (Saati, 2003).

On the other hand, privatisation may affect the current integrated system between hospitals and PHC facilities (Walston et al., 2008). As hospitals become privatised, they will focus on attracting patients, even if they do not necessarily require hospital services. Moreover, people with health cover may prefer to access big hospitals directly instead of a PHC or community hospital. Additionally, private hospitals will have incentives to shift non-refundable costs back to the public PHC (Walston et al., 2008). Such practices will put some financial burdens on the government. A further drawback of privatisation is that the traditional state-public hospitals will not be able to absorb sufficient share of the healthcare market compared to private organisations, unless they are upgraded at all levels (e.g. management, infrastructure, and workforce) before starting to privatise (Walston et al., 2008). In the move to privatisation, private organisations are likely to focus their activities within cities and large communities so that people in rural areas will still be disadvantaged. The government should set regulations and plans that protect the rights of rural communities and provide them with fair and equitable healthcare services. Finally, if the government does not apply adequate control over the healthcare market, expenditure on health care may increase dramatically as a result of higher pricing and profit-seeking behaviour (Walston et al., 2008).

2.7.6 Accessibility to health services

Accessibility to healthcare services is based on equity in distribution of healthcare facilities throughout the nation, and equity of access to health professionals, and transportation to services and providers. Accessibility is also impacted by the level of cooperation between the related sectors (Al-Yousuf et al., 2002; MOH, 2009). The current statistics by the MOH have indicated that there is a misdistribution of healthcare services and health professionals in particular geographic areas (MOH, 2008a). People are also experiencing long waiting lists for many healthcare services and facilities (Walston et al., 2008). Additionally, there is a dearth of services for disadvantaged groups such as the elderly, adolescents, and people with special needs such as disability, particularly in rural areas (MOH, 2009). Finally, many people do not have the ability to access healthcare facilities, particularly those living in border and remote areas. In order to improve accessibility to healthcare services in all parts of the country, a holistic strategy for the redistribution of healthcare services, including PHC centres, general hospitals, central and specialist hospitals as well as the health professionals should be adopted by the MOH. The MOH should also organise with other sectors such public education, transportation, the water and power corporation, and social security to develop poor areas and to care for people in need.

2.7.7 Patterns of diseases

Change in disease patterns from communicable to non-communicable diseases is another challenge that needs more attention from the MOH (Jannadi et al., 2008). There is an alarming increase in chronic diseases (e.g. diabetes, hypertension, and heart diseases), cancer, genetic blood disorders and childhood obesity (Al-Qurashi, El-Mouzan, Al-Herbish, Al-Salloum, & Al-Omar, 2008; Al-Turki, 2000; WHO, 2007). Treatment of

chronic diseases is costly and in some cases is ineffective (Al-Qurashi et al., 2008). For example, the annual cost for treatment of diabetes mellitus in Saudi Arabia was estimated to be 7 Billion Saudi Riyal (SR) (USD1.87 B) (MOH, 2007a). Early prevention is the appropriate way to reduce the prevalence of chronic diseases and the associated costs and difficulty of late treatment. Any projected reform must involve effective plans to address this change in emphasis.

2.7.8 Promotion and prevention programs for crises

Development and implementation of practical plans and procedures to meet national crises, such as wars, earthquakes, and fires and explosions of petroleum factories, are a further significant need. Road traffic accidents, for example, have killed more than 39,000 and injured about 290,000 people between 1995 and 2004 (Assaied, 2008). According to the WHO (2006a), road traffic accidents are now the largest cause of death, injury and disability in adult males aged 16 to 36 years in Saudi Arabia. Caring for people affected by road accidents consumes a significant proportion of the MOH financial allocations; for instance, the cost of treating injured people during 2002 was estimated to be SR 652.5 million (USD174 million) (Assaied, 2008). These funds could be used to develop the health system and improve services. Plans to manage issues of this kind need to be comprehensive and well-coordinated among the related sectors in order to be achievable.

2.7.9 e-Health and national health information system

There is an increasing intention towards e-health in the SHS. Implementation has already started in a number of hospitals and organisations such as the KFSH & RC, the National Guard Health Affairs, the Army Forces Medical Services and University hospitals (Altuwajjri, 2008). Less utilisation of e-health is occurring in the MOH because of the

wide range of facilities, as it is the major provider of health services in Saudi Arabia. However, there are a number of important information systems, particularly in the regional Directorates and in central hospitals. Unfortunately, these information systems work independently as they are not connected to each other nor connected to other private or specialised health organisations (Altuwajri, 2008). To develop the e-health services in the public sector, a budget of SR 4 Billion (USD 1.1 B) was allocated by the MOH to run a four-year development program (2008-2011) (Qurban & Austria, 2008). Additionally, a series of conferences on e-health were held by the Saudi Association for Health Informatics during past years to emphasise the importance of e-health in enhancing the quality of healthcare delivery and to explore required strategies, policies, applications and infrastructure (Saudi Association for Health Informatics, 2008). More coordination among different healthcare providers is needed immediately in order to enhance e-health and to launch a comprehensive national system for health information. A high level of coordination must be achieved with other related sectors to provide the required infrastructure such as internet and phone services.

2.7.10 New strategy for healthcare services

To meet challenges of the SHS and to improve quality of healthcare services, the MOH has set a national strategy for healthcare services. This strategy was approved by the Council of Ministers in April 2009. The national strategy focuses on diversification of funding sources; development of the information system; development of the human workforce; activation of the supervision and monitoring role of the MOH over health services; encouragement of the private sector to take its position in providing health services; improvement in the quality of preventive, curative and rehabilitative care; and finally, distribution of healthcare services equally to all regions. The national strategy is to

be implemented by the MOH in cooperation with other healthcare providers and it will be supervised by the Council of Health Services. A 20-year timeframe for achieving the objectives of this strategy has been identified (MOH, 2009).

2.8 SUMMARY

This chapter provided an overview of the healthcare system in Saudi Arabia. As a result of the continued attention to and support from the government, Saudi health services have advanced considerably over recent years. This advancement has included all three levels of primary, secondary, and tertiary health services. Consequently, the health of the Saudi population has improved markedly compared to decades ago. The MOH has introduced many reforms to its services, with substantial emphasis on PHC. Despite all these achievements, health services, and in particular public sector health services, are still faced with many challenges that need to be managed. These include human resource development; separation of the Ministry's multi-roles (financing, provision, control, and supervision of healthcare delivery); diversity of financial sources; implementation of the CHI, privatisation of public hospitals, effective management of chronic diseases; development of practical policies for national crises; establishment of an efficient national health information system, and the introduction of e-health. In order to address these challenges and continue to improve the status of the SHS, the MOH and other related sectors should coordinate their efforts to put the new strategy of health care into practice. The new health strategy has considered almost all of the key challenges and potentials of the current health services. However, clear, effective and powerful regulations and plans for implementation are needed to ensure the success of such an inclusive strategy. Having given an overview of the SHS, the following chapter provides an in-depth overview of nursing in Saudi Arabia.

Chapter 3: Nursing in Saudi Arabia

3.1 INTRODUCTION

This chapter provides an overview of the nursing profession in Saudi Arabia in terms of its history, educational development, nursing regulations, workforce challenges and professional practice, before concluding with a brief summary. This review includes valued information that has not been published in English literature. It should help the reader to understand the situation of nursing in Saudi Arabia.

3.2 A HISTORICAL BACKGROUND

Although Florence Nightingale is often recognised as the founder of modern nursing, historically, nursing services have evolved through caring for sick and wounded people. In the Arabian Peninsula, although little was documented about nursing during the Pre-Islamic period (before 570 AD), it is believed that nursing and medicine were practised by the same healer. During the early Islamic era, nursing strengthened and became more recognised when a group of women served in the Muslim armies to care for wounded and sick people (Aldossary et al., 2008; Miller-Rosser, Chapman, & Francis, 2006; Tumulty, 2001). These women were known as ‘Al Asiyat’ or ‘Al Awasi’, and each one of them was called ‘Asiyah’. These terms come from the Arabic verb “aasa” ,meaning curing for and emotionally supporting injured people (Al Thagafi, 2006; Tumulty, 2001). Currently, the terms ‘momarredhah’ for a female nurse and ‘momarredh’ for a male nurse are used instead of the older terms. These two terms come from the Arabic verb “marradha”, meaning to cure sick people (Almalki, Fitzgerald, & Clark, 2011b).

Kuaibah Bint Sa'ad Al-Aslamiyah, otherwise named Rufaidah Al-Aslamiyah, is recognised as the first Muslim nurse and the founder of nursing in the Islamic era (Jan, 1996). Rufaidah is a noun derived from the verb 'rafada', which means providing help and support for others. Rufaidah learned and developed her nursing skills from her father who was a well-known healer (Kasule, 1998). Besides serving during war time, Rufaidah practiced nursing in peace time through treating sick people, training other nurses, looking after poor people, and solving social issues (Kasule, 1998). For these purposes and with the permission and support of the Prophet Mohammed (Peace Be Upon Him - PBUH), Rufaidah erected a tent near the Prophet's mosque in Al Madinah (Aldossary et al., 2008; El-Haddad, 2006). A number of Muslim women, whose names have been recorded in the Islamic history, worked as nurses with Rufaidah and continued after her death. These included Aumaimah Bint Qaiys Al-Ghafariah, Nasibah Bint Ka'ab Al-Maziniah, Arrabea Bint Moa'wath Annajariah, Aum Atiyah Al-Ansariah, Ashefa Bint Abdullah Al-Qurasheah, and Khawlah Bint Al-Azwar (Al Thagafi, 2006).

There is little documentation of nursing history in the Arabian Peninsula in the years between the death of the Prophet Mohammed (PBUH) in 632 AD and the 1950s (Almalki et al., 2011b). However, literature has described the practice and education of nursing in other parts of the Islamic world (Hamarneh, 2004). Miller-Rosser et al. (2006) claimed that care delivered by physicians during that period may have been more nursing-oriented and that the physicians themselves were more practical in the provision of health care. This argument was supported by Hamarneh (2004) who found that several renowned physicians in the Islamic world between 632 and the 1950s, such as 'Abo Alhasan Aldebry, Abo Baker Alrazi, Abo Algasem Alzahrawi and Ibn Zahr Aleyadi, were interested in nursing and nursing education.

3.3 NURSING EDUCATION

Health education in present-day Saudi Arabia started in Riyadh in 1958, when the MOH, in cooperation with the WHO, initiated the first health institute for boys. Fifteen students with primary school certificate level education were enrolled in a one-year programme (Al Thagafi, 2006; Aldossary et al., 2008; Alhusaini, 2006). In 1961, two-year nursing schools for women were opened in Riyadh and Jeddah. Two years later, the first group of 13 Saudi female nurses' assistants graduated from these schools (Al Thagafi, 2006; Alhusaini, 2006). In 1967, the Department of Health Education and Training was established by the MOH. This Department was responsible for supervising health institutes, including nursing schools. In 1979, the Department further developed the nursing schools by limiting enrolments to students with intermediate school preparation (ninth grade) and extending the length of study to three years (Alhusaini, 2006; Miller-Rosser et al., 2006). The first graduation from these developed schools was in 1982. Since then, a series of nursing schools and health institutes have opened in various regions and cities of Saudi Arabia. By 1992, there were a total of 48 health institutes and branches providing health education, including nursing education (Alhusaini, 2006).

In 1992, a number of these institutes upgraded to be either post-secondary health institutes or junior colleges. They enrolled nursing graduates from the old institutes as well as high school students (12th grade, natural sciences) (Abu-Zinadah, 2004; Alhusaini, 2006). Currently, there are a total of 46 health institutes and junior colleges. These constitute 21 health institutes (17 for females and 4 for males) and 25 junior colleges (10 for females and 15 for males) (Alhusaini, 2006). During 2008, all of these educational organisations were transferred from the MOH to the MOHE. This transfer was aimed at improving the quality of nursing education. The MOHE has the academic experience, financial resources and

educational facilities that are required. Additionally, this transfer has allowed the MOH to focus more on its primary role, which is to provide health care for the Saudi population.

3.3.1 Ministry of Higher Education

The MOHE established the first university level College of Nursing at King Saud University in Riyadh in 1976, which offered the first Bachelor of Nursing Degree (Tumulty, 2001). In 1978, the Nursing College was absorbed by the College of Applied Medical Sciences and became the Department of Nursing (Phillips, 1989). In 2004, the Department of Nursing was once again upgraded to college status (in Saudi Arabia, colleges are the principal divisions of the university, and each college contains a number of departments). Apart from King Saud University, two Bachelor of Nursing programs were initiated at King Abdulaziz University in Jeddah in 1977 and at King Faisal University in Dammam in 1987 (Tumulty, 2001). Admission to these programs is limited to students with high school preparation. A Master of Science in Nursing began at the College of Applied Medical Sciences in King Saud University in 1987. This program was the first of its kind in the universities of the Gulf countries (Alamri et al., 2006). All the university nursing programs were initially limited to female students (Alhusaini, 2006). Since 2004, however, a number of male nursing departments have been established, for example, in King Khalid University in Abha, and Jazan University. In 1994, a PhD program was established in King Abdulaziz University in cooperation with British universities to facilitate career advancement for female nurses who are unable to travel overseas (Abu-Zinadah, 2004).

3.3.2 Other government agencies

In addition to the MOH and the MOHE, a number of governmental agencies have provided nursing educational programs in order to meet their own needs. For example, the Medical Services of Army Forces, the National Guard Health Affairs, the Prince Sultan Cardiac Centre and the KFSH & RC have been providing nursing education at Diploma level since 2002 (Alamri et al., 2006; Alhusaini, 2006). Such programs target high school students, both male and female, and last for approximately two years, covering a range of nursing, behavioural, and basic science courses. This is followed by six months of consolidated clinical practice (Alamri et al., 2006; Riyadh Military Hospital, 2008).

The KFSH & RC, in collaboration with Monash University in Australia, established a local scholarship program in order to provide post-degree education for Saudi nurses who are unable to study abroad (Aldossary et al., 2008; Miller-Rosser et al., 2006). This program affords Saudi nurses the opportunity to remain at home to study, work, and be with their families. However, this program is only available for nurses working for that hospital, and thus there are barriers to other nurses for opportunities to further their higher education locally (Miller-Rosser et al., 2006).

3.3.3 Private sector

Given the market needs of the health disciplines, especially nursing, the Saudi government supports the establishment of new health educational institutions through funding to the private sector and accreditation of new institutions (Abu-Zinadah, 2004). As a result, many private health institutes and colleges have been established in various regions of Saudi Arabia (Al Thagafi, 2006). The first private health institute, and college opened in 1999 and 2002, respectively (Abu-Zinadah, 2007).

Private organisations can be divided into three main types: private colleges for nursing education, private institutes for health training, and private centres for health training. Currently, there are five private nursing colleges (Abu-Zinadah, 2007). Graduates from private colleges earn a Bachelor Degree in the nursing sciences and are accredited as professional nurses. According to Al Thagafi (2006), the private institutes provide nursing and health programs at a Diploma level for students with high school preparation. Additionally, they provide training and continuing educational programs for graduate health professionals including nurses. Private centres for health training offer courses that range from one month to one year, after which graduates receive a certificate of success in the training course. Short continuing education courses are also offered and these run for not more than a month. There are about 44 private health institutes and five health training centres that provide nursing educational and training programs (Saudi Commission for Health Specialists [SCFHS] 2005).

The Technical and Vocational Training Corporation was the main department to license, evaluate, accredit, and supervise the private health educational institutions. Currently, this role has been transferred to the SCFHS as an important step towards effective supervision.

Despite the recommendations of the WHO and Nursing Technical Committee at the Gulf Countries' Council that support the Bachelor of Science in Nursing as a minimum entry to the nursing profession, nurses with pre-degree preparation and nursing assistants are still graduating every year from private health institutes (Abu-Zinadah & Banjar, 2006). Limiting the entry to nursing to a Bachelor Degree (in Saudi Arabia, a five-year course at a university level) is a vital step towards developing the quality and safety of nursing care. However, pre-degree prepared nurses and nursing assistants are still needed, at least for

the coming decade, if Saudi Arabia wishes to minimise its dependency on expatriate nurses and address the current nursing shortage (Almalki et al., 2011b). Many developed countries such as Australia, Canada, the United Kingdom (UK) and the USA retain various levels of nursing qualifications, including nursing assistants. Indeed, it could be argued that ‘multiple-levels-of-nurses’ is the most effective model for nursing in all countries. Each level of the nursing workforce has its role and tasks within the healthcare team. Pre-degree nurses and nursing assistants are required to perform simple and basic nursing procedures that are not complicated, but time-consuming for RNs (Almalki et al., 2011b).

According to Al-Freihi (2009), the Secretary-General of the SCFHS, the private health institutes will remain, given the current critical nursing shortage. However, more efforts are needed to enhance the quality of outcomes by reviewing and upgrading nursing programs, providing nursing educators with training courses, conducting comprehensive nursing examinations (theory and practical) for graduate students and strengthening the supervision and control over these nursing institutes. On the other hand, the increase of the Bachelor graduates must be gradually emphasised in the future development plans to make them the majority of the nursing workforce (Almalki et al., 2011b).

The latest available figures for the Saudi nursing workforce show 67% Diploma holders from health institutes, 30% Associate Degree holders from junior colleges, and 3% Bachelor Degree graduates from colleges and universities. In addition, there were 28 graduates with a Master’s Degree, and only 7 graduates with a Doctoral Degree (Abu-Zinadah, 2006).

3.3.4 Overseas scholarship programs

To meet the growing need for Saudi nurses, international scholarship programs are offered by several organisations including universities, the MOHE, the MOH and large Saudi hospitals such as the KFSH & RC, and the National Guard Health Affairs. According to Aldossary et al. (2008), a PhD scholarship programme was established in 1996 to enable Saudi nurse leaders and educators to study abroad. Recent international scholarship programs embrace almost all education levels, that is, at Bachelor, Master, and PhD levels. Currently, many sponsored students are studying nursing in various countries worldwide (Alhusaini, 2006). The focus of these programs is to prepare highly educated and qualified local nurses to lead the profession of nursing in Saudi Arabia.

3.4 ACCREDITATION OF NURSING CERTIFICATES

In terms of certificate accreditation, the SCFHS (2008) reported that nurses who graduate from health institutes and junior colleges and hold Diplomas are classified as technical nurses and senior technical nurses, respectively. Nurses with a Bachelor of Nursing are classified as specialists, while nurses with a Master of Nursing Science or PhD are classified as senior specialists. Nurses with PhDs and three years of clinical nursing experience are recognised as Nursing Consultants.

3.5 NURSING REGULATION

In 2002, the Scientific Nursing Board was formed under the direction of the SCFHS (Miller-Rosser et al., 2006). The main goals of the Scientific Nursing Board are professional development, accreditation and regeneration. Professional development focuses on the practice of nursing through identifying the scope of practice, setting standards of education, ethics and practice, establishing accountability systems, and

conducting and supporting nursing research. The accreditation role strives at evaluating and approving educational programs, educational institutions and training centres, and qualifications from outside the Kingdom. The regeneration role focuses on renewing the licences for nursing institutions and professionals (Abu-Zinadah, 2005a). The Scientific Nursing Board has achieved a number of advances in nursing practice. For example, formerly, there was no registration of nurses, no exams and no accreditation for their continuing education. Currently, all nurses in Saudi Arabia are registered with the Scientific Nursing Board and they have to attend a series of continuing education programs to renew their registration (Abu-Zinadah, 2005a). However, there is a lack of such programs in rural and remote areas, particularly in the field of the PHC nursing. The Scientific Nursing Board is working under the authority of the SCFHS, which limits its role and influence (Almalki et al., 2011b). There is a need for greater independence.

The Saudi Nursing Society was formed in 2003 at King Abdulaziz University in Jeddah. The aims of this society are to provide scientific advice to its members, develop scientific thought in the field of nursing, enhance the theoretical and clinical performances of nurses and exchange research findings with the nurses and related societies, both internally and externally. Its council comprises of highly-educated and experienced Saudi nurses from different health sectors such as the MOHE, MOH, and the National Guard Health Affairs (The Saudi Nursing Society, 2003).

3.6 NURSING WORKFORCE

Saudi Arabia has a chronic shortage of Saudi healthcare professionals, especially nurses, which is accompanied by a high level of turnover (Abu-Zinadah, 2004; 2006a). Expatriate nurses form a large proportion of the nursing staff in the Saudi healthcare facilities (MOH,

2008a; WHO, 2006a). Statistics of the MOH (2008a) showed that the total number of nurses in all healthcare sectors was approximately 101,298, yet only 29.1% of them are Saudis. This dependence on expatriate nurses worsens in the private health sector where local nurses comprise only 4.1% (see Table 3.1).

Table 3.1
Nursing personnel in the healthcare sectors in Saudi Arabia (2008)

Sector	No.	Saudis	(%)	Non-Saudis	(%)
Ministry of Health	55,429	24,689	(44.5)	30,740	(55.5)
Other Govt. Facilities	23,536	3,908	(16.6)	19,628	(83.4)
Private Sector	22,333	909	(04.1)	21,424	(95.9)
Total	101,298	29,506	(29.1)	71,792	(70.9)

Source of data: Ministry of Health (2008a) *Health statistical year book*. Ministry of Health, Riyadh.

In the MOH, which is the main provider of health care in Saudi Arabia, nurses numbered 55,429 (55.2%) of the total health workforce. Of these, 24,689 (44.5%) are Saudis, while the rest are expatriates (MOH, 2008a). The majority work in public hospitals (73.1%), while the rest operate the PHC centres and other related departments. The percentage of Saudi relative to expatriate nurses working in the healthcare sectors grew from 9% in 1996 to 21.5% in 2002 and 29.1% in 2008 (see Figure 3.1) (Aldossary et al., 2008; 2002; MOH, 2008a). However, this growth, while noteworthy, is not compatible with the actual need. Recent statistics by the MOH (2008a) showed that the ratio of nurses, including expatriates at the MOH facilities, is 22.3 nurses/10,000 (one nurse for 473 people). This ratio drops critically at the PHC services to 5.2 nurses/10,000 people. The overall ratio of nurses in the different health sectors in Saudi Arabia is 40/10,000 people. While this rate is higher than other regional countries such as the United Arab Emirates (35), Egypt (34)

and Jordan (32), it is still lower than other regional and developed countries such as Bahrain (61), Qatar (60), Australia (97), Japan (95), and France (80) (WHO, 2011).

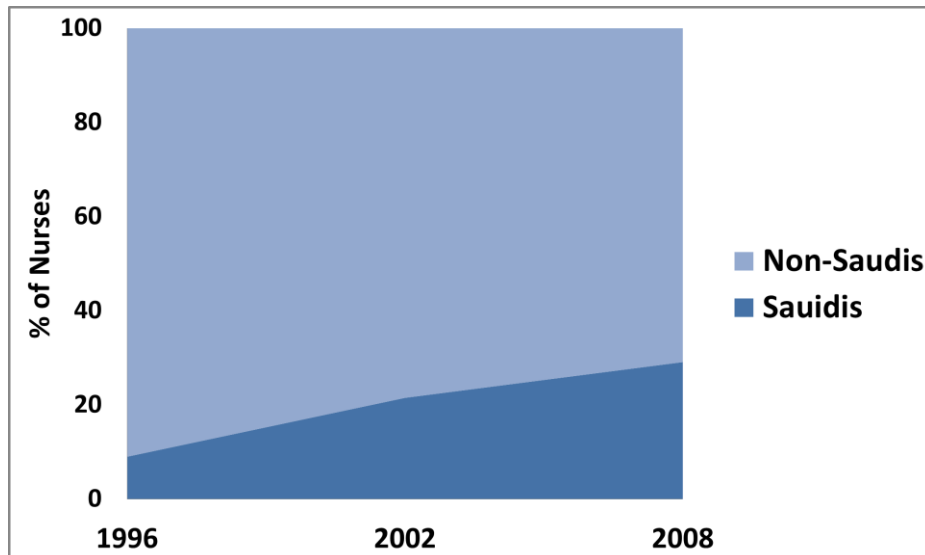


Figure 3.1. Nursing workforce in all healthcare sectors in Saudi Arabia, 1996-2008.

Source of data: Aldossary, A., While, A., & Barriball, L. (2008). Health care and nursing in Saudi Arabia. *International Nursing Review*, 55, 125-128; Ministry of Health (2002, 2008a). *Health statistical year book*. Ministry of Health, Riyadh.

Part of the problem of the nursing shortage in Saudi Arabia is the high dependency on expatriate nurses (Al-Ahmadi, 2006). The majority of expatriates use the Saudi healthcare facilities as a temporary location to obtain training and experience. Then they move with marketable skills to developed countries such as the USA, the UK, Canada, and Australia (Alamri et al., 2006; Alhusaini, 2006). Unfortunately, there are no published statistics regarding this critical issue, although expatriate turnover is a major concern for managers of healthcare facilities (Almalki et al., 2011b). Other factors that are blamed for the nursing shortage in Saudi Arabia include the lack of awareness about nursing opportunities among high school students, the nature of nursing work that conflicts with the family and personal

life (high workload, long working duties, night shifts, and working over public holidays and weekends), low payment compared with other jobs, lack of professional growth, and lack of support for working mothers (Abu-Zinadah, 2004; Al-Sa'd, 2007). However, the common blamed factor for the nursing shortage in Saudi Arabia is the poor image of nurses (Abu-Zinadah, 2004). Due to its importance, this factor will be discussed in detail in the following section.

3.6.1 Low status of nursing as a profession

The Saudi youth generally do not prefer nursing as their future career. A number of health studies undertaken during the 1990s in Saudi Arabia indicated a high opposition of students and their parents to study and have nursing as a job. In 1991, Jackson and Gary conducted a survey study to explore the attitudes and perceptions towards nursing as a profession of 1,131 secondary and university students in Saudi Arabia. The findings indicated that the low impressions of nursing and cultural and communal values were identified as the main causes that prevent the Saudi nationals from entering the nursing profession. Likewise, a survey study of university students and their parents in Riyadh showed that students were reluctant to enrol in nursing, and that both students and their parents hold incorrect knowledge and negative images of the nursing career. Reasons given for not choosing nursing included the image of nursing, long working hours, and mixing with the opposite gender (Mansour, 1992).

Several years later, another study was conducted by Hamdi and Alhyder (1996) to examine the factors that influence Saudi females' choice of nursing as a profession. The findings demonstrated that female students of both high schools and health institutes have the same opinion that nursing is a vital career in caring for Saudi society. However, they

ranked nursing as fourth among three other jobs of teacher, physician and social worker, respectively. Reasons for avoiding nursing by Saudi females include family disagreement, cultural values, low chance of marriage, poor image of nursing, gender desegregation, dissatisfaction with job salaries, lack of job progress opportunities, job nature, high level of patient-related stress, long working hours, night shifts, and the requirement of a good level of English.

During the 2000s, the situation is not far from previous years. Aljawhari (2000) reported a common agreement between Saudi female students of high school and their families regarding the inappropriateness of nursing as a future career. They ranked nursing as last among nine other jobs. The results also showed that about 80% of the participants do not desire to work in nursing. Major reasons that prevent Saudi females from studying nursing include working with males at the same place, unsuitable rotation schedules, values and beliefs of the community, difficulty of nursing tasks, and the low image of nursing as a profession. In addition, the majority of male university students felt discouraged to marry a female nurse for the same reasons (Aljawhari, 2000).

Similarly, Al-Omar (2004) conducted a survey study to determine the knowledge, attitudes, and intention among the Saudi high school students in Riyadh towards the nursing profession. The findings established that only 5.2% of the examined students indicated nursing as their preferred future job. Inferential data analysis showed that attitude, having or not having a nurse friend and knowledge were found to have a significant positive influence on high school students' intention, while long working hours and enormous workload compared to other jobs were found to have a significant negative influence. This study concluded that Saudi health decision-makers need to increase

positive attitudes regarding the nature and encouraging characteristics of modern nursing and its increasing esteem as a skilful career for high school students.

Al Thagafi (2006) investigated the attitudes of grade one students at Al Sebaei Health Institute in Altaif city, Saudi Arabia, towards the nursing profession. The findings of the study showed a negative attitude. Significant differences in students' attitudes towards nursing due to personal opinion, future profession and societal opinion were observed ($\alpha = 0.05$). However, these negative attitudes towards nursing were successfully managed by implementing a particular planned educational program.

To minimise the effect of nursing shortages and related factors, including the poor image of nurses, health and nursing long-term plans are needed to recruit more local nurses and to retain the current expatriate workforce. High priority in such strategies should be given to the role of the media in educating local people about nursing and its important role in the provision of health care. In fact, Saudi nurses are more eligible to work with local patients since they know the language, culture and customs, and are well versed in the common socioeconomic problems (Abu-Zinadah, 2006; Alamri et al., 2006).

3.7 NURSING PRACTICE

Nursing practice in Saudi Arabia has witnessed substantial advances and more are expected in the coming years. The Central Nursing Committee was established in 1987 at the MOH to advance the quality of nursing care and to recruit more Saudis to the nursing profession. Prior to 1987, there was no representation or formalised voice for nurses by nurses at the national level, as the profession was dominated by physicians (Aboul-Enein, 2002). Then, the Division of Nursing (Directorate-General of Nursing) was established at

the MOH under the direction of highly-educated and experienced Saudi nurses (Tumulty, 2001). This was followed by the establishment of nursing departments in various regions of Saudi Arabia. Such advances are expected to empower nursing as a profession at the central level of the MOH and to facilitate its professional development and presence.

Developments in the nursing profession have contributed to improvements in practice and enhanced professionalisation of nursing in Saudi Arabia. However, such progress does not mean that all obstacles facing the advancement of nursing practice are overcome. Aboul-Enein (2002) noted that the majority of nurses in Saudi Arabia are expatriates who are recruited from different countries. They have their own beliefs and values that may differ from those in the Saudi culture. They may not have sufficient knowledge about the local culture so their practice may omit the importance of Islamic beliefs and values for their patients. Mebrouk (2008) emphasised that culturally sensitive care, based on patient and family values, is fundamental to nursing. Therefore, considering the context of Islam, Saudi nurses have been found to be more appropriate for providing nursing care for the local population (Alamri et al., 2006).

Another challenge to nursing practice advancement is the language of communication inside healthcare facilities. The type and level of communication is an essential component of the provision of nursing care (Mebrouk, 2008). In this regard, Aldossary et al. (2008) reported that although the majority of patients and their families are Saudis with Arabic as their native language, most healthcare providers, including nurses, communicate in English. However, many expatriate nurses do not speak English as their first language, nor are they competent in Arabic (Simpson, Butler, Al-Somali, & Courtney, 2006). This issue becomes more obvious in the PHC where nurses interact with the open community.

Findings from a study by Mebrouk (2008) highlighted the positive impact of using the Arabic language for communication between patients and local nurses. This increases the satisfaction of patients and their families as well as improving the outcomes of nursing care.

Another apparent practice issue is the extent to which nurses are engaged in non-nursing activities, as the numbers of ancillary and management personnel are inadequate in most healthcare facilities (Tumulty, 2001). Thus, nurses are required to carry out a number of non-clinical tasks besides their nursing duties.

Finally, the lack of experience among recently qualified expatriate nurses is a major challenge to the advancement of nursing practice (Alamri et al., 2006). Such nurses create an additional workload for experienced nurses who are required to teach and supervise these novice staff whilst still performing their usual tasks. This additional load may raise the likelihood of nursing care errors and reduce the quality of nursing care, which in turn affects patients' satisfaction with care. Inexperienced nurses also require training programs that consume resources allocated to train them in new technologies and techniques in health research.

3.8 SUMMARY

This chapter has provided an overview of the development of the nursing profession in Saudi Arabia. Key advancement and challenges for nursing were outlined, including the foundation of the profession in the Islamic era, education, regulations, workforce and professional practice. In the climate of the global nursing shortage, and in view of the current and expected increase of the health facilities as well as the local population, serious efforts to augment the proportion of local nurses are required. The chapter highlighted how the establishment of long-term plans to recruit more nurses and to retain the current nursing workforce is essential for the health of the population of Saudi Arabia.

Having described the SHS in Chapter 2 and the history and current issues of the nursing profession in Saudi Arabia in Chapter 3, the thesis now turns to examine the literature of QWL and turnover intention, with a particular focus on nursing.

Chapter 4: Review on Quality of Work Life

4.1 INTRODUCTION

This chapter presents a background to QWL as well as a global review of the relevant literature. It begins with a definition of QWL and a discussion of its importance to healthcare employees, including nurses. It also provides a description of the origins of QWL and its historical development in various industries. This section should help the reader to develop a broad understanding of QWL, which “means different things to different people” (Booyens, 1998, p. 695). Additionally, this chapter provides a review of the literature on QWL in the field of health care, with a particular focus on nursing literature. Finally, the chapter highlights gaps in the available literature.

4.2 QUALITY OF WORK LIFE

QWL is a complex entity influenced by and interacting with many aspects of work and personal life (Hsu & Kernohan, 2006). Suttle (1977) defined QWL as “the degree to which members of a work organisation are able to satisfy important personal needs through their experiences in the organisation” (p. 4). Likewise, Sirgy, Efraty, Siegel, and Lee (2001) defined QWL as “employee satisfaction with a variety of needs through resources, activities, and outcomes stemming from participation in the workplace” (p. 242). Brooks (2001) argued that QWL has two goals that include improving the quality of employees’ work experiences and simultaneously improving the overall productivity of the organisation. From a nursing perspective, Brooks defined QWL as “the degree to which registered nurses are able to satisfy important personal needs through their experiences in

their work organisation while achieving the organisation's goals" (p. 9). Therefore, the concept of employee satisfaction is more than simply providing people with a job and a salary. It is about providing people with a place where they feel accepted, wanted and appreciated (Lees & Kearns, 2005). Many different work-related, family, organisational and personal factors were argued to be related to the level of QWL. These include work environment, professional development opportunities, general job satisfaction, payment, workload, autonomy and control over practice, level of education, age and gender (Brooks & Anderson, 2004; Brooks et al., 2007; Khani, Jaafarpour, & Dyrekvandmogadam, 2008).

4.2.1 What is the importance of QWL

It has been argued that QWL influences the performance and commitment of employees in various industries, including healthcare organisations (Gifford et al., 2002; Hsu & Kernohan, 2006; Huang et al., 2007). A high QWL is essential to attract new employees and retain a workforce (Lees & Kearns, 2005). Consequently, health organisations are seeking ways to address the issues of recruitment and retention by achieving a high QWL (Akdere, 2006). Focusing on improving QWL to increase the happiness and satisfaction of employees can result in many advantages for the employee, organisation and consumers. These include strengthening organisational commitment, improving quality of care, and increasing the individual's and organisation's productivity. According to Sirgy et al. (2001), a happy employee is productive, dedicated and committed. On the other hand, failure to manage these factors can have a major impact on employee behavioural responses (e.g. organisational identification, job satisfaction, job performance, turnover intention, organisational turnover and personal alienation) as well as outcomes of the organisation (Sirgy et al., 2001).

4.2.2 Origins of QWL

The concept of QWL was used in the industrial labour relationships and management before it was recognised in other fields (e.g. health organisations). QWL has been viewed by researchers in a variety of ways: (1) as a ‘variable’ to improve employees’ work experience (1969-1972), (2) as an ‘approach’ to improve the outcomes of both the individual and the organisation (1969-1975), (3) as a ‘method’ using specific techniques to improve work environments such as autonomous work groups, job enrichment or the design of new plans as integrated social and technical systems (1972-1975), (4) as a ‘movement’ to enhance organisational effectiveness (1975-1980), and (5) as ‘everything’ to do with people at work (1979-Now) (see Table 4.1) (Hsu & Kernohan, 2006; Nadler & Lawler, 1983; Venkatachalam & Velayudhan, 1997).

Table 4.1
Definitions of QWL used in industry and management

References	Definition	QWL entity
Walton (1975)	QWL is a process by which an organisation responds to employees’ needs in developing mechanisms to allow them to share fully in making the decisions.	Variable
Wood, Rasmussen, and Lawler, (1975)	QWL is concerned with the relationship between individuals and features of their physical, social and economic work environment. This also reflects those on-and-off the job attitudes and behaviours that society considers to be important.	Approach
Glaser (1976)	QWL means more than job security, good working conditions, adequate and fair compensation, more even than an equal employment opportunity.	Methods
Greenberg and Glaster (1980)	QWL is a process by which an organisation attempts to unlock the creative potential of its people by involving them in decisions affecting their work lives.	Movement
Nadler & Lawler (1983)	QWL has been used at various times to refer to a movement, a group of methods or approaches to management in organisations, or a variable reflecting the affective evaluations of individuals.	Everything (E)
Straw and	QWL is a philosophy, as a set of principles, which holds that	(E)

References	Definition	QWL entity
Heckscher (1984)	people are the most important resource in the organisation as they are trustworthy, responsible and capable of making valuable contributions, and they should be treated with dignity and respect.	
Davis (1985)	QWL is the quality of relationships between employees and the total working environment.	(E)
Trist (1985)	QWL is both an end and a means. It is an end in itself, because it is a highly significant component in quality of life in general and it is a means by which employees can acquire civic competencies and skills.	(E)
Kerce and Booth-Kewley (1993)	QWL is a matter of values and standards that are dependent to a large extent upon one's cultural context.	(E)
Yousuf (1996)	QWL is a generic phrase that covers a person's feelings about every dimension of work including economic rewards, benefits, security, working conditions, organisational and interpersonal relations and their intrinsic measurement.	(E)
Cummings and Worley (1997)	QWL is a way of thinking about people, work, and organisations involving a concern for employee well-being and organisational effectiveness.	(E)
Sirgy et al. (2001)	QWL is defined as the employee satisfaction with a variety of [working and personal] needs through resources, activities, and outcomes stemming from participation in the workplace.	(E)
Rethinam and Ismail (2008)	QWL is a wide-ranging concept, which includes adequate and fair remuneration, safe and healthy working conditions and social integration in the work organisation that enables an individual to develop and use all his or her capacities.	(E)

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Brooks and Anderson (2005) reviewed the QWL literature and found that a comprehensive description of the QWL concept was reported in three major works: Walton (1975), Taylor (1978) and Levine, Taylor and Davis (1984) (see Table 4.2).

Table 4.2
Quality of work life empirical referents

Walton (1975)	Taylor (1978)	Levine, Taylor, & Davis (1984)
Adequate, fair compensation	Adequate, fair compensation	Adequate, fair compensation
Safe, healthy working conditions	Safe, healthy working conditions	Safe, healthy working conditions
Growth	Growth	Use of capabilities
Security	Security	Security
Social integration	Social integration	Social integration
Constitutionalism	Constitutionalism	Constitutionalism
Work life	Work life	Work life
Social relevance of work	Social relevance of work	Social relevance of work
	Employer's QWL	Employer's QWL
	Societal QWL	Societal QWL

Adapted with permission from: Brooks, B. A. & Anderson, M. A (2005). Defining quality of nursing work life. *Nursing Economics*, 23 (6), 319-326. Copyright 2005 by the Nursing Economics.

Walton (1975) proposed eight major dimensions relating to QWL based on studies of workers and their experiences at work. These included: (1) adequate and fair compensation, (2) safe and healthy working conditions, (3) immediate opportunity to use and develop human capacities, (4) opportunity for continued growth and security, (5) social integration in the work organisation, (6) constitutionalism in the work organisation, (7) work and total life space, and (8) social relevance of work life.

Taylor (1978) conducted an empirical study to investigate the underlying structure of QWL using factor analysis. A paper and pencil questionnaire that consisted of 42 items was mailed to 240 randomly chosen technical managers. The response rate was 40% ($n = 95$). Items of this questionnaire were built on Walton's (1975) dimensions. However, other items were added by Taylor to incorporate what society and employers consider important regarding QWL. A principal components solution for the sample yielded an

unrotated general factor accounting for 23% of the total scale variance, while the next four factors together accounted for nearly 25% of additional variance. Factor loading of 0.385 or greater was used as the criterion for including items. This loading represents the significance threshold for $p < .001$ with $n = 95$. Thirty-two of the 42 items achieved loadings this high or higher on the five factors. Table 4.2 shows the main dimensions.

Levine, et al. (1984) defined and measured QWL in an insurance company from the perspective of white-collar employees using a step-by-step Delphi analysis. A representative panel of 64 employees was engaged in the definition process of the QWL. Cooperatively, this panel and the investigator developed a 34-item questionnaire. This tool was tested with a sample ($n = 450$) of the same company. Seven significant predictors of QWL were identified: (1) the degree to which superiors treat employees with respect and have confidence in their abilities, (2) variety in daily work routine, (3) challenge of work, (4) present work leads to future work opportunities, (5) self-esteem, (6) extent to which life outside of work affects life at work, and (7) the extent to which work performed by employees contributes to society.

4.2.3 QWL in the field of health care

The pressure to provide quality services using the same or reduced resources has been recognised by many health organisations across the world. This pressure is likely to continue for the near future, creating more stress on the employees (Brooks & Anderson, 2005). Thus, in recent decades, interest in work and organisational psychology in relation to the QWL has increased in the healthcare organisations in order to improve the retention and recruitment processes and to improve performance. A number of studies and programs to assess and improve QWL have been conducted in many health organisations

worldwide (Brooks & Anderson, 2004; Brooks et al., 2007; Dargahi, Gharib, & Goudarzi, 2007; Hsu & Kernohan, 2006; Khani et al., 2008). However, the majority of these studies and projects have focused on hospitals settings.

Lewis, Brazil, Krueger, Lohfeld, and Tjam (2001) tested whether extrinsic, intrinsic or 'prior' traits best predict satisfaction with QWL in health care. Extrinsic traits are salaries and other tangible benefits; intrinsic traits include skill levels, autonomy and challenge. Prior traits are those of the individuals involved, such as their gender or employment status. A 65-item survey of employees was conducted in seven health-care organisations providing acute, chronic, rehabilitative, long-term and home care to residents in Central-South region of Ontario, Canada. The total sample was 5486 in all locations, with a total response rate of 33%. The QWL questions of the survey instrument were classified into eight dimensions based on the literature findings: (1) co-worker and supervisor support, (2) teamwork and communication, (3) job demands and decision authority, (4) patient/resident care (5) characteristics of the organisation, (6) compensation and benefits, (7) staff training and development, and (8) overall impressions of the organisation. These factors were categorised as intrinsic and extrinsic variables, analysed using factor analysis, and regressed against a satisfaction scale, with socio-demographic variables included. The findings indicated that the pay, benefits, supervisor style and communication were the major factors in determining QWL satisfaction. The authors acknowledged that with the low response of participants, there is no guarantee that those who did not respond were similar to the respondents. Thus, caution in trying to generalise these results must be applied. Finally, the study concluded that decision-makers with an interest in improving QWL in healthcare organisations can focus on these traits and pay as well as enhancing staff autonomy or discretion.

Cole et al. (2005) investigated the understanding, collection diffusion and use of QWL indicators in Canadian healthcare organisations. Cooperation from six diverse public health organisations managing 41 sites was obtained. The researchers conducted 58 focus groups/team interviews with strategic, support and programme teams and reviewed documentation relevant to QWL. Using qualitative data techniques, group interviews were taped, reviewed and analysed for themes. Then, indicators were grouped according to the purpose and the organisation level. The findings indicated that QWL indicators were relatively new to the majority of included organisations; however, the data managed by human resources and the support team of the occupational health and safety unit were highly appropriate for monitoring the well-being of employees with 109 of 209 mentioned indicators (e.g. sickness absence). Monitoring of working conditions (62/209) was also found to be important to QWL (e.g. indicators of employee workload). Regardless of their known impact on the employees' health and well-being, the indicators of biomechanical and psychosocial hazards at work were uncommon in this study. In spite of ambiguity in the definition of QWL indicators, limited associations with other organisations' performance measures and inadequate resources for implementation, the majority of examined organisations reported ways in which QWL indicators had influenced planning and evaluation of prevention efforts. The authors concluded that the increase in resources, inclusion of other QWL indicators and greater integration with management systems could all improve the access of decision-makers in targeted health organisations to information relevant to employees' health.

A cross-sectional Iranian study was conducted by Nasl Saraji and Dargahi (2006) to examine the attitudes of Tehran University of Medical Sciences (TUMS) hospitals' employees regarding their QWL. A survey questionnaire developed by authors (Cronbach

$\alpha = .92$) was distributed among 908 employees in 15 TUMS hospitals. A stratified random sampling technique was used to select respondents as nursing, supportive and paramedical groups. The results indicated that the respondents of this study had poor QWL. Respondents were dissatisfied with their income (97.5%), occupational health and safety standards (90%), support by intermediate managers/supervisors (89%), balance between work and family (82%), trust in senior managers (78%), career prospects (75%), and stress experienced at work (71%). Seventy-four percent of nursing participants were dissatisfied with their QWL, and in general, all employees responding to this survey had poor QWL. The study concluded by recommending more training and education for the hospitals' managers on QWL issues.

In a Canadian study, Sale and Smoke (2007) used a participatory approach to develop a QWL survey for employees of an ambulatory cancer centre. The QWL committee and the employees themselves worked together in order to articulate the problem areas in four domains that could be measured with existing workplace tools: burnout, social support, job satisfaction, and work-family conflict. Companion tools to this measure include the Intrinsic Job Satisfaction, the Extrinsic Job Satisfaction, the Total Job Satisfaction, the National Institute for Occupational Safety and Health Scales for Job Satisfaction and Social Support, the Maslach Burnout Inventory, and Work-Family Conflict. The survey was distributed to staff in Year 1 (Y1) and Year 2 (Y2). There was a 78% and 73% response rate to the survey in Y1 and Y2, respectively. The sample ($N = 319$) consisted of four main groups: physicians ($n = 37$), nurses ($n = 52$), physicists ($n = 24$) and radiation therapists ($n = 58$). Overall staff QWL scores were moderate in Y1 and Y2; however, there was considerable variation among four main employee groups (physicians, nurses, physicists and radiation therapists). The scores of the nurses were the lowest compared to

the other employees on items such as total job satisfaction, intrinsic job satisfaction, extrinsic job satisfaction, and depersonalisation. The researchers concluded that the survey data provided a benchmark against which other cancer centres can be compared.

Finally, Argentero, Miglioretti, and Angilletta (2007) conducted a qualitative study using semi-structured interviews to assess QWL and identify the most important indicators among 112 health employees in the local health service in North West Italy. Findings of this study indicated a number of dimensions that were relevant for defining QWL of the participated employees. These dimensions included relationships with co-workers, work organisation, taking care of patients, professional ability and professional growth. The number of patients per week was important in the differences of QWL among the workers. This study confirmed previous findings and the determination of the most influencing indicators of QWL in recent years.

4.2.4 Nurses' QWL

Only a few studies have focused on QWL and its ability to improve the recruitment and retention of nurses and to improve the productivity and outcomes of healthcare organisations. No such studies have been undertaken in PHC facilities. These studies can be classified into two categories: seminal studies of nurses' QWL and assessment and improving studies.

4.2.4.1 Seminal studies of nurses' QWL

The comprehensive delineation of the nurses' QWL is found in five major works: Attridge and Callahan (1990), Brooks (2001), Hsu and Kernohan (2006), Webster, Flint, and Courtney (2009), and Vagharseyyedin, Vanaki, and Mohammadi (2010).

Attridge and Callahan (1990) conducted a study to identify and prioritise the characteristics of a quality of work environment as defined by nurses for nurses. The sample of this study consisted of 64 nurses. Participants were asked to produce ideas representing their views on a quality work environment using the Nominal Group Technique, a method used for generating ideas similar to brainstorming. As a result, the nurses provided 219 items that described their views of a quality work environment. Similar to Walton (1975), Taylor (1978), and Levine et al. (1984), Attridge and Callahan reported a number of dimensions including adequate and fair compensation, safe and healthy working conditions, immediate opportunities to use and develop human capabilities, future opportunity for continued growth and security, social integration in the work organisation, constitutionalism in the workplace, the fit between work and home-life, and the social relevance of work life. More specifically, the researchers described seven dimensions of nurses' QWL. These included characteristics of the organisation, human and other resources, nature of nursing work, work-related benefits, collegial relationships, self and career development, and acknowledgment of value.

Brooks (2001) reviewed the theoretical and empirical literature for nurses' QWL in order to develop a scale to measure QNWL following the framework synthesised by O'Brien-Pallas et al. (1994). This framework consists of four dimensions: (a) work life/home life, (b) work design, (c) work context, and (d) work world. The four dimensions of the conceptual framework with the related instrument items developed by Brooks 2001 are presented in Figure 4.1.

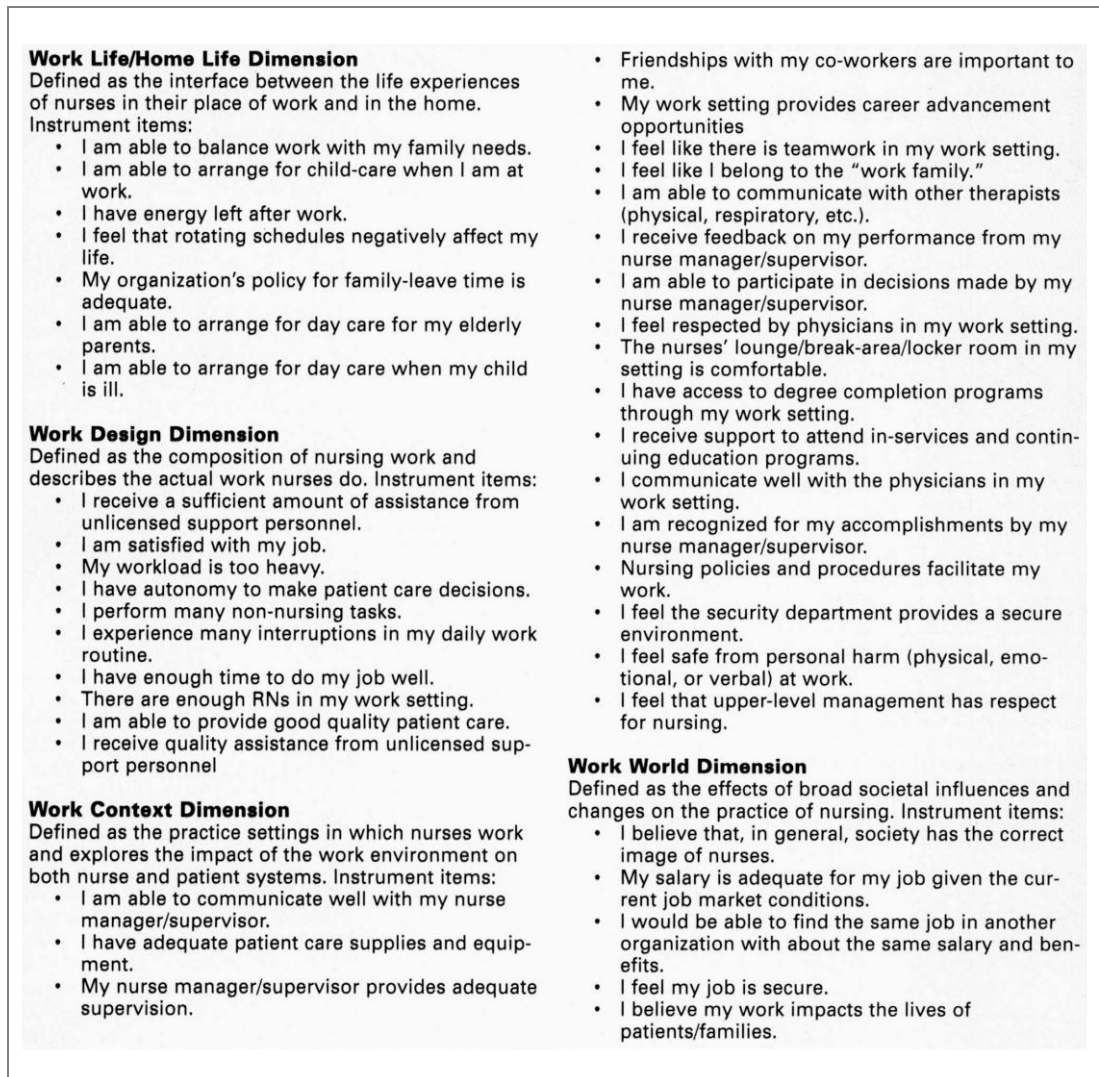


Figure 4.1. The four dimensions of the conceptual framework with related items.

Adapted with permission from: Brooks, B. A. & Anderson, M. A (2005). Defining quality of nursing work life. *Nursing Economics*, 23 (6), 319-326. Copyright 2005 by the Nursing Economics.

Brooks' framework and instrument have added to the context of nurses' QWL. They have been written and grouped in a manner that fits nurses and health organisations. Brooks' QNWL survey was used by a number of nursing studies (Brooks & Anderson, 2004; Brooks et al., 2007; Khani et al., 2008). There is increasing interest globally in this survey. According to Clarke and Brooks (2010), requests to use Brooks' survey have been received from researchers and graduate students in Australia, Canada (Ontario, Quebec), Estonia, Greece, India, Iran, Malaysia, Turkey, and Taiwan.

Hsu and Kernohan (2006) carried out a descriptive study to describe the QWL of nurses in Taiwan. Data were collected in the year 2000 using focus group discussions. Sixteen groups in one medical centre and five regional hospitals formed the sample. Each group had three to five participants who were RNs in medical or surgical wards with at least two years of nursing experience, and who held a position below assistant nurse manager. Findings identified 56 factors for the nurses' QWL. These factors were grouped under six dimensions including socio-economic relevance, demography, organisational aspects, work aspects, human relation aspects and self-actualisation. Issues emphasized by focus group participants were managing shift work within the demands of family life, accommodation, support resources, nurses' clinical ladder system and salary system. In its conclusion, the study emphasised the need for further QWL research among nurses in other settings to examine the strengths and weaknesses of their work environments and to develop appropriate strategies for nurses' QWL.

More recently, Webster et al. (2009) conducted in-depth, face-to-face, interviews with 13 nurses who had resigned in a 942-bed hospital in Brisbane, Australia. The study aimed (1) to explore the underlying organisational issues affecting a nurse's decision to leave; and (2) to develop a contemporary practice environment measure based on the experiences of nurses' working lives. Using the content analysis and constant comparative method, two domains (work life and personal life/professional development) and five themes (feeling safe/unsafe, feeling valued/not valued, getting things done, opportunities/no opportunities for professional development and being flexible/inflexible) emerged from the interviews. A content validity score for the new instrument was .79 and Cronbach's $\alpha = .93$. The authors concluded that the reality and experiences of nurses' working lives can be identified through exit interviews conducted by an independent person. Information from such

interviews is useful in identifying an organisation's strengths and weaknesses and to develop initiatives to support retention. They also proposed that a balance between the obtained domains ('work life' and 'personal life/professional development') is necessary for a satisfactory work practice environment.

Vagharseyyedin et al. (2010) conducted a systematic review of literature to determine the definitions and predictors of the nurses' QWL using 23 studies that examined the nursing QWL. Six themes were identified as major predictors of the nurses' QWL. These included: leadership and management style/decision-making latitude, shift work, salary and fringe benefits, relationship with colleagues, demographic characteristics, and workload/job strain. In terms of the QWL definitions, the researchers of this review found that many authors considered QWL as a 'subjective phenomenon' that is influenced by personal feelings and perceptions. On the other hand, some authors considered QWL as an 'outcome', whereas others saw it as a 'process'. The study concluded that further research is needed to determine the relative importance of QWL predictors, and implementation programs to improve the QWL. The study has provided valuable data on the definition and predictors of nurses' QWL. However, a number of reviewed studies had used combinations of various questionnaires (non-QWL instruments). Additionally, some reviewed studies had focused on the notions of job satisfaction, organisational commitment, performance and productivity or employees' health instead of total QWL.

4.2.4.2 Assessment studies of nurses' QWL

A number of nurses' QWL studies have assessed the status of nurses' work life. Brooks and Anderson (2004) conducted a study to explore how 1500 RNs in a Midwestern state (USA) rated their QWL, with an effective response rate of 47% ($n = 341$). Data were

collected using Brooks' QNWL survey that consists of four subscales: (1) work life/home life, (2) work design, (3) work context, and (4) work world. The rating scale was '1 = strongly disagree' to '6 = strongly agree'. Findings suggested that the nursing workload was too heavy (59%), and there was not enough time to do the job well; only 47% indicated they had enough time. Approximately 74% of the respondents did not think society had an accurate image of nurses. About 66% felt that rotating schedules negatively affected their lives, and 66% were unable to balance work with their family needs. Additionally, the respondents thought that on-site childcare (78%), childcare for ill children (70%) and day care for the elderly (56%) were important. Respondents were less positive in terms of participation in decisions made by the nurse manager (50%). Only 37% of the respondents felt respected by upper management. On a positive note, approximately 72% of the respondents reported adequate feedback and sufficient communication with the nurse manager. Surprisingly, 70% and 80% of the nurses felt respected by, and communicated well, respectively, with physicians. With regard to the rate of satisfaction with nursing work life, respondents generally had a higher than average score on the QNWL subscales (79-226, $M = 164$, $SD = 24.19$), which suggests that they were pleased overall with their nursing work life situations. The total possible scale score for the 42-item questionnaire ranged from 42-252. According to the authors, this finding should be viewed with some caution since this was a newly developed instrument with limited use. However, this survey tool has since been used in many studies, indicating its appropriateness to measure the nurses' QWL (Clarke & Brooks, 2010). In general, this seminal study (Brooks & Anderson, 2004) revealed a number of ongoing and essential work life concerns for staff nurses that required a long-term tackling strategy.

Brooks et al. (2007) surveyed 1554 staff nurses employed in three Midwestern urban and community hospitals as part of a five year nurse retention project using Brooks' QNWL survey. Data were collected at two different times: firstly, at the beginning of the project to establish baseline information, and again at the 18 months mark to measure and assess the interventions implemented by the project team. The results found various areas of nurses' QWL that required improvements. 'Work context' findings indicated a need for leadership and management. In the dimension of 'work life/home life', nurses support the importance of offering onsite child and/or elder care and continuing with non-rotating schedules. Regarding the 'work world', nurses were unhappy with how society views the nursing profession. The 'work design' results revealed that nurses were spending too much time on non-nursing tasks rather than direct patient care. In addition, nurses were eager to participate in decision making related to the nursing care in their settings. For Year One, the mean for each subscale was 26.45, 40.32, 85.96, and 20.20 for work life/home life, work design, work context, and work world subscales, respectively. See Table 7.5 for potential score ranges.

To improve the studied areas, the research team undertook a number of interventions such as designing and implementing shared governance models; removing non-nursing tasks; improving staffing levels; developing competency of assistive personnel and providing supplies and equipment. The second wave of data collection then occurred. Year Two results were 28.16, 41.25, 83.96, and 20.95 for the same subscales respectively. Year Two results were 28.16, 41.25, 83.96 and 20.95 for the same subscales respectively. The findings for Year Two showed that the interventions to improve the nurse practice environment were making a positive difference, albeit being a small improvement. The means for Year Two were higher than Year One for all aspects (3.85 vs. 3.79 for work

life/home life; 3.73 vs. 3.60 for work design; 4.42 vs. 4.30 for work context; 3.87 vs. 3.79 for work world). Brooks et al. (2007) stated that while these results are promising, there is still much to be done to improve the nurses' QWL.

Dargahi, Gharib, and Goodarzi (2007) investigated the QWL of 349 nurses at Tehran University of Medical Sciences hospitals using a cross-sectional study. The respondents were asked to determine their overall QWL using a questionnaire consisting of 30 items of QWL. Validity of the questionnaire was evaluated using content validity ($r = .88$), and reliability (70%) was determined using the test-retest method. The results found that the majority of nurses were dissatisfied with environmental health and safety at work, monetary compensation and job welfare. There was significant correlation between the executive position of nurses, years of experience and their salary ($p < 0.05$). The authors of this study concluded that the study findings revealed that the respondents had poor QWL.

Khani, Jaafarpour, and Dyrekvandmogadam (2008), in a descriptive study, explored how nurses in Isfahan hospitals in Iran rated their QWL. Data were collected using the Brooks and Anderson scale (Brooks & Anderson, 2005). Using a simple random sample method, a sample of 120 RNs was targeted during 2007. Descriptive statistics, item summary statistics, and total scale and subscale scores were computed using SPSS Version 11.5. Findings suggested that the respondents were dissatisfied with their work life. The study revealed a number of influencing factors on nurses' QWL. Approximately 82% and 95% of the respondents believed that their workload was heavy and their salary was inadequate, respectively. Nurses were generally dissatisfied with their job (63%), staffing was found to be inadequate (72%) and a majority of nurses indicated they do not have enough time to

do their job well (62%). In addition, 79% of nurses in this study indicated that they lacked autonomy to make patient care decisions. Eighty percent of the respondents did not have enough energy after finishing work, 69% felt that rotating schedules negatively affected their lives and 7% were unable to balance their work and family lives. Few nurses felt respected by the upper management (35%) and felt able to participate in decisions made by the nurse manager (29%). Many of the participants felt that society does not have an accurate image of nurses (62%) and reported that their organisations did not provide career advancement (62%). These findings mirror prior studies of Brooks and Anderson (2004) and Brooks et al. (2007), and add to the pool of nursing literature on QWL. The researchers in this study argued the need to develop specific strategies in order to improve the nurses' QWL and organisational productivity. They also confirmed the necessity of examining the effectiveness, efficacy and cost-benefit of such strategies.

In sum, seminal works on QWL, and those studies that have established and assessed QWL in healthcare organisations and among nurses in particular, have affirmed the importance of QWL to the employees' commitment, job satisfaction, and quality of health care. Although the reviewed studies of nurses' QWL used various assessment tools, findings consistently showed that nurses were dissatisfied with their QWL. However, findings also demonstrated that several interventions for QWL improvement were successfully implemented. By comparing findings of the reviewed studies, it could be argued that Brooks' study (2001) is the essential study for nurses' QWL. The scale developed by Brooks covers various dimensions of nursing work life: work life/home life; work context; work design; and work world (see Section 6.5.1). In addition, this scale has high validity and reliability compared to other assembled tools (Brooks, 2001; Brooks & Anderson, 2004; Khani et al., 2008). Finally, this review revealed a severe dearth in QWL

studies among PHC nurses, despite their important role in providing preventive and curative health care.

4.3 GAP IN THE LITERATURE

This review highlights a number of areas requiring further research. More research needs to focus on QWL to examine the impact of various work-related/personal factors on the working and private life of employees and their families. The majority of the current studies in the field of healthcare services and work environment focus on job satisfaction rather than QWL. Additionally, there is a dearth of work life studies among PHC employees, especially nurses.

Further research is required to explore the constraints and challenges limiting the abilities of leaders and executives of nursing to improve QWL among their employees and to manipulate the associated challenges such as high rates of turnover.

4.4 SUMMARY

This chapter has provided a background to QWL in various industries, including healthcare facilities. Additionally, it has reviewed the concept and the perception of QWL among nurses in different countries. Although the reviewed studies were conducted in various countries and populations, the findings indicated that nurses were not happy with their work life conditions. The influencing factors were related to work life/home life, work design, work context and work world dimensions, as described in Figure 1.1. Having examined QWL, Chapter 5 will review the turnover intention among RNs.

Chapter 5: Review of Turnover Intention

5.1 INTRODUCTION

This chapter presents a background of turnover and turnover intention among RNs. It also provides a literature review of turnover intention and related influencing factors. As only a few studies exist on nurses' turnover intention, which have been undertaken in the field of PHC, studies conducted in other healthcare organisations have been considered as part of the literature review. Reviewing the current available literature will help in clarifying the contexts of nurses' turnover and intention to leave their organisations. The chapter highlights gaps in the literature and paves the way for a study that addresses these gaps.

5.2 TURNOVER

Although nurse turnover has been the subject of a large number of studies, there is no consistent definition for this term (Tai, Bame, & Robinson, 1998). For example, nurse turnover was seen by some authors as employees leaving one particular health organisation to go to another, while another group defined nurse turnover as leaving the nursing profession altogether (see Hayes et al., 2006; Tai et al., 1998). Moreover, in a number of studies, nurse turnover was introduced as the nurses' transfer from one particular ward to another inside the same organisation (see Hayes et al., 2006; Tai et al., 1998).

Based on these definitions, nurse turnover can be described by 'location' or 'willingness' of nurse to leave. In terms of the location, there are three types: within-organisation

turnover (internal transfer), between-organisations turnover (external transfer), and professional turnover (professional transfer).

In terms of willingness to turnover, there are two types: voluntary and involuntary (Nicholas, 2006). Voluntary turnover occurs when nurses decide to depart from their current job, while involuntary turnover takes place when nurses are forced to leave the unit, organisation and/or the nursing profession for any reason. According to Hayes et al. (2006), voluntary and involuntary turnover are not always differentiated in the research, because the same consequences are experienced, whether the nurses took such a decision or were forced to leave. However, a high rate of voluntary turnover may indicate major unresolved organisational or professional conflicts.

Nurse turnover is a major challenge for healthcare services (Alotaibi, 2008; Mor Barak et al., 2001). It is also a key factor that interacts with and affects the nursing shortage (Borda & Norman, 1997; Price, 2001). It has destructive consequences for the nursing staff, organisations and the profession as a whole. At the organisational level, nurse turnover can have a negative impact on the capacity to meet patient needs and provide quality care (Hayes et al., 2006). In addition, the loss of nurses leads to inadequate staffing, which in turn may decrease morale and create more stress on the 'stayers' due to increased workloads (Aiken et al., 2001; Borda & Norman, 1997; Ingersoll, Olsan, Drew-Cates, DeVinney, & Davies, 2002). This can lead to critical changes in the behaviour of nurses towards their jobs, resulting in low work satisfaction, low productivity, and finally, leaving the organisation. Additionally, without adequate and experienced staff, error rates may increase and patient satisfaction may decrease (Rothrock, 2007).

In financial terms, nurse turnover is costly for healthcare organisations as it “consumes resources that could be directed at core business activities, such as quality improvement programs, and staff development or nurse retention activities” (Jones, 2004, p. 562). The costs of employee turnover, including hiring and training costs as well as low productivity, have been estimated to consume about 5% of total annual operating budgets (Waldman, Kelly, Arora, & Smith, 2004). For example, in the USA, the cost of replacing one nurse has been estimated to be between \$42,000 and \$64,000 USD, equivalent to a year’s salary (Strachota et al., 2003).

Nursing has always experienced higher turnover rates compared to other health professionals (Stone et al., 2007). In hospitals in the USA, for example, external nursing turnover has been reported to range from 15% to 36% per year (Stone et al., 2007; Strachota et al., 2003). These turnover rates are significantly higher than those for other healthcare employees that average 2.3% per year (Stone et al., 2007).

Although there is no clarity and consistency in the causes of nurse turnover (Hayes et al., 2006), a number of factors have been recognised, to some extent, as correlating with this issue. These include: (1) individual factors such as age (Ito, Eisen, Sederer, Yamada, & Tachimori, 2001), marital status (Tzeng, 2002), level of education (Yin & Yang, 2002), tenure (Tai et al., 1998) and years of experience as a RN (Alotaibi, 2008); (2) organisational factors such as relationships with other employees (Rosenstein, 2002), payment (Apker, Ford, & Fox, 2003), work climate (Gormley, 2003), and leadership and management style (Yin & Yang, 2002); job dissatisfaction (Dworkin, 2002); (3) nursing work such as working shifts (Flinkman et al., 2008), working hours, workload (Barrett & Yates, 2002; Strachota et al., 2003), poor staffing; and, (4) other external factors such as

social views of nursing as a career (Alotaibi, 2008; Lumby, 2004). In this doctoral study, turnover is defined as the action of a nurse's transfer from one health organisation to another.

5.3 TURNOVER INTENTION

Turnover intention is described as the extent to which employees plan to sever membership with their employers (Chen, Chu, Wang, & Lin, 2008). Likewise, Vandenberg and Nelson (1999) defined it as the "individual's own estimated probability (subjective) that they are permanently leaving the organisation at some point in the near future" (p. 1315). Similarly, Mor Barak et al. (2001) defined it as the behaviour of "seriously considering leaving one's current job" (p. 633). Many terms have been used synonymously for 'turnover intention'. These include turnover intent, intention to quit, intent to leave, intention to leave and anticipated turnover.

Turnover intention has been firmly established as the best and most accurate lead predictor of actual turnover (Brewer, Kovner, Greene, & Cheng, 2009; Kudo, Satoh, Hosoi, et al., 2006; Mor Barak et al., 2001; Shader, Broome, Broome, West, & Nash, 2001; Steel & Ovalle, 1984). In the USA, Shader et al. (2001) conducted a study to examine the relationships between work satisfaction, stress, age, cohesion, work schedule, and turnover intention among 246 RNs in an academic medical centre. The findings revealed a positive correlation between turnover intention and actual turnover ($r = .24, p < .001$). Therefore, according to Fang (2001), turnover intention can be safely used in research studies as a surrogate indicator of turnover. The consequences of anticipated turnover include a decrease in the quality of care provided and an increase in the cost of patient care (Gardulf et al., 2005; Tzeng, 2002). A study by Leiter, Harvie, and Frizzell (1998) found

that in clinical departments where nurses felt exhausted or commonly mentioned their intention to leave, patients were less satisfied with the provided care. This may influence patients' intention to return for future care in that facility.

The findings of McCarthy et al. (2007) indicated that the majority of nurses (83%) who expressed turnover intention were planning to leave permanent positions. Since intention to stay or leave indicates future plans, a better understanding of such intentions may assist an organisation to institute changes designed to affect this intent prior to actual turnover.

5.4 A LITERATURE REVIEW OF RELATED NURSING STUDIES

The aim of this literature review is to identify the influence of work life components and demographic characteristics on nurses' turnover intention.

5.4.1 Search strategy and data sources

A comprehensive search of a number of electronic databases was carried out. The databases were: CINAHL, PubMed, Science Direct and PsycINFO. Key terms used in the search process were turnover intention, intent/intention to leave, intent/intention to quit, propensity to leave, and anticipated turnover. All studies identified during the search were checked for relevance to the purpose of review, based on the information provided in the title, abstract and key terms.

5.4.2 Selection of research studies

A set of inclusion and exclusion criteria was applied to the obtained papers to ensure fulfilment of the aim of this review (see Table 5.1). Only studies that met the inclusion criteria were included yielding 32 relevant articles (see Appendix A).

Table 5.1
Inclusion and exclusion criteria of studies

	Inclusion criteria	Exclusion criteria
Type of participants	Studies addressing RNs or including them as a part of other participants	Studies addressing Nursing Managers, Nursing Assistants or specific groups of RNs such as new graduate nurses only
Setting of the study	Hospital or primary health care organisation	Military, hospice or psychiatric facilities
Key focus of the study	Organisational turnover intention	Professional turnover intention
Type of paper	Primary or secondary research	Literature reviews, reports, unpublished research studies, discussion papers, and media releases
Time framework	Only studies undertaken from 2000 to 2010	Any studies prior to 2000
Language	English	Any other languages

5.4.3 Abstracting data

Abstraction of identified studies was undertaken on two levels. First, studies had to meet the inclusion criteria. Next, summary data on the characteristics of the study including author(s), title, sample, setting, data collection method and study design, analysis procedure and findings were collected using a structured form developed for this review (Appendix A).

5.4.4 Identified factors from the literature review

Following the ‘QWL and turnover intention framework’, as discussed in Chapter 1 (see Figure 1.1), the findings revealed by the review were categorised into two main groups: work life factors and demographic characteristics. The work life factors were then characterised under the four dimensions of QWL, namely work life/home life, work

design, work context, and work world (see Table 5.2). Demographic characteristics included gender, age, marital status, level of education and years of experience in nursing (see Table 5.3).

5.4.4.1 Work life factors

Many studies reported a number of work life factors which affected intention of nurses to leave their current organisation. Table 5.2 presents these factors with related references classified under the four dimensions of work life (i.e. work life/home life, work design, work context, and work world).

5.4.4.1.1 Work life/home life

Work life/home life was an important dimension that influences nurses' intention to leave their current organisation. Contributors to this dimension include family and family needs and working hours/shifts.

Table 5.2

Work life factors influencing RNs' turnover intention as revealed by the literature review

Four dimensions of work life	Factors	Reference
Work life/home life factors	Family and family needs	(Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010; Chen et al., 2008; Lynn & Redman, 2005; McCarthy et al., 2007; Tzeng, 2002)
	Working hours/shifts	(El-Jardali, Dimassi, Dumit, Jamal, & Mouro, 2009; Kudo, Satoh, Sinji, et al., 2006; Ma, Lee, Yang, & Chang, 2009; Rambur et al., 2003; Shader et al., 2001; Takase, Yamashita, & Oba, 2008; Yildiz, Ayhan, & Erdogmus, 2009)
Work design factors	Job satisfaction	(Applebaum et al., 2010; Cai & Zhou, 2009; Chan & Morrison, 2000; Chen et al., 2008; Larrabee et al., 2003; Lu, Line, Wu, Hsieh, & Change, 2002; Lynn & Redman, 2005; Ma et al., 2009; McCarthy et al., 2007; Shader et al., 2001; Shields & Ward, 2001; Simon, Müller, & Hasselhorn, 2010; Tzeng, 2002)
	Workload	(Chan & Morrison, 2000; Chen et al., 2008; Hart, 2005; Lynn & Redman, 2005; Shields & Ward, 2001)
	Autonomy of practice	(El-Jardali et al., 2009; Hart, 2005; Yildiz et al., 2009; Zurmehly, Martin, & Fitzpatrick, 2009)
Work context factors	Management & leadership	(Chan & Morrison, 2000; Chen et al., 2008; Fang, 2001; Gardulf et al., 2005; Reeves, West, & Barron, 2005; Simon et al., 2010; Sofield & Salmond, 2003; Yildiz et al., 2009)
	Co-workers	(Apker, Propp, & Ford, 2009; Chan & Morrison, 2000; Gardulf et al., 2005; Kudo, Satoh, Sinji, et al., 2006; Reeves et al., 2005; Shader et al., 2001; Yildiz et al., 2009)
	Development opportunities (career advancement, education & training)	(Cai & Zhou, 2009; Chan & Morrison, 2000; Fitzpatrick, Campo, Graham, & Lavandero, 2010; Gardulf et al., 2005; Hart, 2005; Rambur et al., 2003; Shields & Ward, 2001; Takase et al., 2008; Tzeng, 2002)
	Work environment (setting of practice, inadequate resources & unsafe environment)	(Chan & Morrison, 2000; Chan, Luk, Leong, Yeung, & Van, 2009; Chen et al., 2008; Reeves et al., 2005; Sofield & Salmond, 2003; Stone et al., 2007; Takase et al., 2008; Tzeng, 2002)
Work world factors	Salary	(Chan & Morrison, 2000; Chan et al., 2009; El-Jardali et al., 2009; Gardulf et al., 2005; Kudo, Satoh, Sinji, et al., 2006; Ma et al., 2009; Reeves et al., 2005; Shields & Ward, 2001; Tzeng, 2002)

5.4.4.1.1.1 Family and family needs

Family and family needs contribute to nurses' intention to leave or stay in their work settings (see Table 5.2). Family plays a major role in people's lives and interacts with aspects of their personal and working life. Family support may influence the turnover/stay intention of nurses (Chen et al., 2008; Tzeng, 2002; Tzeng, Hsieh, & Lin, 2004), as do nurses' obligations towards their families (Betkus & MacLeod, 2004; Tzeng, 2002). Applebaum et al. (2010) investigated the impact of environmental factors on stress, job satisfaction and turnover intention among a convenience sample of nurses ($n = 116$). Findings revealed that satisfaction with personal life interacts with nurses' turnover intention. When nurses face major conflicts between the demands of work and family needs, their intentions to leave work become more pronounced. According to Morrell (2005), nurses leave their jobs when they find the demands of work are incompatible with home life tasks, roles and responsibilities. Conversely, McCarthy et al. (2007), in an Irish cross-sectional study to investigate the intent of 352 RNs to stay or leave employment, noted that nurses with no kinship responsibilities were more likely to show an intention to leave their current employment.

Family commitments can also enhance the retention of nurses. Lynn and Redman (2005) conducted a study in the USA which examined the relationship between organisational commitment, job satisfaction, and intention of 787 nurses to leave. The authors argued that nurses whose families are dependent on them for their income are less likely to leave their jobs, a finding consistent with prior research. Betkus and Macleod (2004) examined job satisfaction and community satisfaction and their relationship to the decision of public health nurses ($n = 164$) in rural British Columbia to stay in their current employment or leave. They stated that an older partner's retirement may enhance nurse retention. This

may result from their need for an income to support their lives. Alternatively, the partner's retirement may on many occasions prompt nurses to retire early. Thus, retirement of a spouse can variously affect a nurse's intention to leave work.

5.4.4.1.1.2 Working hours/shifts

This review has also confirmed the importance of working hours/shifts in nurses' intention to leave the organisation (see Table 5.2). The working hours/shifts affect the working and private lives of RNs, leading to significant changes in nurses' behaviours. In an American study, Rambur et al. (2003) examined the effects of demographic factors on the intention of 4418 nurses to leave their positions. The turnover intention among RNs who worked 30 hours or less per week was less than that for other nurses who worked fulltime (36-40 hours). RNs who worked 30 hours or less per week may have had more free time for rest and for their personal lives, so they could care for themselves, their families, relatives and friends. Kudo et al. (2006), studied turnover intention among 168 nurses in Japan working in small and medium-sized medical institutions. Turnover intention was significantly associated with dissatisfaction with sleep (83%).

Takase et al.'s (2008) Japanese study of nurses' intention to leave found that nurses were frequently required to work overtime with no additional payment. Working unpaid overtime may lead to lower levels of job satisfaction (Shields & Ward, 2001) and increase the possibility of turnover (Shader et al., 2001).

Shader et al. (2001) studied 241 RNs and Nurse Managers in an academic medical centre in the USA to identify factors influencing their satisfaction and anticipated turnover. Using the stepwise regression model, weekend overtime was the second most significant

predictor of turnover intention, after job satisfaction ($p < .001$). The best-fit model explained 31% of the variability in anticipated turnover. The model included the following variables: work satisfaction (-0.35) overtime weekend (0.27), job stress (0.16), and group cohesion (-0.13).

Working shifts also impacts the intent of nurses to leave their work. El-Jardali et al. (2009), in a Lebanon study, found that dissatisfaction with scheduling was associated with increased intention of nurses to leave the hospital ($OR = 1.508$, 95% $CI = 1.060-2.146$). Ma, Lee, Yang and Chang (2009), in a Taiwanese study, found that nurses who worked evening shift (33.7%) and night shift (21.6%) were more likely to indicate their intention to leave their current job (Ma et al., 2009).

As demonstrated, working hours and shifts have a significant influence on the turnover intention of nurses. The reviewed studies suggest the importance of developing the nurses' scheduling conditions to improve their retention, as nurses need flexible schedules and appropriate working hours (El-Jardali et al., 2009; Ma et al., 2009; Yildiz et al., 2009).

5.4.4.1.2 Work design

The dimension of 'work design' (i.e. job satisfaction, workload and autonomy of practice) was associated with RNs' turnover intention and its related factors are outlined below.

5.4.4.1.2.1 Job satisfaction

Job satisfaction was cited as a significant contributory factor to nurses' intention to leave their employment (see Table 5.2). Job satisfaction is defined as the degree of positive affective orientation that nurses have towards their employment (Mueller & McCloskey,

1990). Likewise, Chen et al. (2008) stated that job satisfaction is the extent to which employees like their work. A direct relationship has frequently been reported between job satisfaction level and nurse intention to remain employed. As overall nurse-job satisfaction increases, so does nurse intention to remain employed increase, and vice versa (McCarthy et al., 2007). Thus, it was not surprising that Larrabee et al. (2003), Shader et al. (2001), Shields and Ward (2001), and Cai and Zhou (2009) found that job dissatisfaction is the most significant predictor of turnover intention among RNs.

Shields and Ward (2001) performed a secondary analysis of national survey data ($n = 9625$) that was conducted by the Policy Studies Institute for the Department of Health in England. The aim of this analysis was to investigate the determinants of job satisfaction for nurses and establish the importance of job satisfaction in determining nurses' intention to quit. Findings revealed that nurses who report overall dissatisfaction with their jobs have a 65% higher probability of intending to leave than satisfied nurses. Similarly, Lu et al. (2002), using the discriminate analysis in their Taiwanese study, found that 38.4% of 2197 nurses can be properly classified as intending to leave the organisation because of low job satisfaction. McCarthy et al. (2007) demonstrated that job satisfaction was the most accurate predictor of turnover/stay intention. Nurses in this study who perceived a high level of job satisfaction had more intent to stay in their current employment. This has also been confirmed in recent studies. Applebaum et al. (2010) found a significant direct relationship between nurses' job satisfaction and turnover intention. Using backward regression, job satisfaction had the strongest influence on turnover intention ($p < .001$). Cai and Zhou (2009) examined the relationship among empowerment and job satisfaction and turnover intention in Chinese clinical nurses and found job satisfaction to be significantly negatively correlated with the turnover intention ($r = -.49, p = .01$). That is to

say, nurses who enjoy their work are less likely to express turnover intention. Using logistic regression analysis, Ma et al. (2009) found that age, working evening shifts, and level of job satisfaction were significant in predicting whether or not a nurse intended to leave a current job ($p < .05$). Of the three, job satisfaction was the most significant predictor of nurses' intention to leave their current jobs ($p < .001$).

Nurse leaders should routinely monitor their employees' satisfaction, evaluate related strategies and implement new ones to enhance satisfaction of employees (Larrabee et al., 2003). Additionally, they should keep assessing turnover intention among RNs to address any reduction in their organisational commitment. Low job satisfaction and high intention to leave may decrease the quality of patient care as well as increase organisational costs (Tzeng, 2002). Therefore, enhancing job satisfaction for nurses will likely improve their intention to stay as employees and in turn produce benefits for both the individuals and their organisations (Lu et al., 2002).

5.4.4.1.2.2 Workload

Workload was identified as another 'work design' factor that influences the nurses' turnover intention (see Table 5.2). Chan and Morrison's (2000) study in Singapore explored demographic and work-related factors which influenced the retention and turnover intentions of 114 RNs. Qualitative findings indicated that heavy workload was one of the frequently reported issues among RNs. Shields and Ward (2001) found that dissatisfaction of nurses was linked to poor career advancement opportunities, workload and poor pay. According to Lynn and Redman (2005), nurses' satisfaction with the quantity of their work was considered as the second line of defence (after strong commitment to the organisation) in organisations that adopt employees' retention

strategies. Additionally, using the logistic regression coefficients, Chen et al. (2008), in a longitudinal Taiwanese study focusing on RNs ($n = 308$), found a high association between the workload factor and the nurses' intention to stay or leave. Similarly, workload was also significantly associated with actual turnover of those nurses ($\beta = -.256; p \leq .014$).

It could be argued that high workload among nurses may result from imperfect work plans, poor staffing and the lack of resources and facilities. High workload may influence the productivity of RNs, and in turn, affect the service quality. It may make them feel stressed; therefore, they focus on finishing their duties without considering the quality of patient care. It is difficult for nurses to "do more with less"; therefore, it is important for health organisations to manage and reduce work overload if they wish to retain their nurses (Lynn & Redman, 2005, p. 286).

5.4.4.1.2.3 Autonomy of practice

Autonomy of practice in nursing was another 'design work' factor that was found to be associated with nurses' intention to leave their employment (see Table 5.2). Autonomy of practice in nursing is defined as "the freedom to act on what you know, to make independent clinical decisions that exceed standard nursing practice, in the best interest of the patient" (Kramer & Schmalenberg, 2004, p. 44).

Hart (2005) conducted a study in the USA to demonstrate factors influencing the turnover intention of 463 hospital RNs. Results showed that more than half of the respondents in their study (52.3%) reported that they had only a little control over their individual nursing practice, and 14.4% reported having no control. Nurses who responded that they had 'a lot of control' or 'complete control' over their practice were more likely to report a higher

intent to stay in their current positions. The researcher concluded that higher retention might be achieved when nurses are able to maintain control over their professional nursing practice. This finding is also supported by a recent Lebanese study (El-Jardali et al., 2009) and a Turkish study (Yildiz et al., 2009). Autonomy of practice requires individuals to feel empowered along with opportunities to act (Kramer & Schmalenberg, 2003a). According to Zurmehly et al. (2009), empowerment was significantly related to intention to leave the current position ($r = .45, p < .001$). The RNs least likely to leave their current position had significantly higher empowerment scores than those most likely to leave their current position (Zurmehly et al., 2009). Therefore, Nurse Managers and healthcare directors should empower nurses to have control over their practice, to work autonomously and to participate in decision-making (El-Jardali et al., 2009).

5.4.4.1.3 Work context

The literature review indicated that factors in the ‘work context’ dimension (i.e. management and leadership, co-workers, development opportunities and work environment) were associated with nurses’ turnover intention (see Table 5.2) and are explained below.

5.4.4.1.3.1 Management and leadership

A number of reviewed studies identified ‘management and leadership’ as a major factor that impacts nurse intention to leave their organisations (see Table 5.2). Chan and Morrison (2000) stated that interaction between nurses and their supervisors and administrators can be challenging due to the hierarchical structure in healthcare organisations. A Singaporean study explored the impact of some predictors on turnover and turnover intention among 180 RNs. Dissatisfaction with nursing supervision was

identified as one of the top predictors of turnover intention (Fang, 2001). Sofield and Salmond (2003) found that supervisors were one of the most frequent sources of verbal abuse among nurses. The significance of this finding is that about 11.9% ($n = 54$) of the nurses would actively search for another job within the next year, and 33.4% ($n = 151$) would consider leaving their jobs because of verbal abuse. Reeves et al. (2005), in a UK study of intention to leave among 2880 nurses, found that nurses who reported more problems in a number of factors including management were more likely to intend to leave their current organisations ($p < .001$). Similarly, Gardulf et al. (2005), in a Swedish study, found that nurses who intended to leave work were less satisfied with the support from immediate superiors compared to those intending to stay. Recent studies reinforced the importance of management and leadership to turnover intention (Chen et al., 2008; Simon et al., 2010; Yildiz et al., 2009). Chen et al. (2008) found that the factor of nursing supervisory support is highly associated with the intent of nurses to stay or leave. Yildiz et al. (2009) found that the nurses' intention to leave Turkish hospitals was significantly related to 10 explanatory variables. Among these variables, the level of supervisory support was found to have the third largest impact. Finally, Simon et al. (2010) conducted a study among 2119 RNs in Germany to examine the intention of nurses to leave the profession as well as the organisation. Findings suggested that the leadership quality was specifically associated with respondents' intention to leave their organisations.

Nurses also reported experiencing a lack of recognition by their administrators and supervisors for their achievements (Chan & Morrison, 2000). "Working hard and receiving no or little appreciation can cause a stressful imbalance" and in turn impact on the nurses' intention to stay at work (Abualrub & Al-Zaru, 2008, p. 234). More efforts by nursing administrators are therefore needed to encourage a closer relationship with RNs

(Chan & Morrison, 2000). Nursing managers should interact with nurses at the level of wards and units concerning the nurses' work difficulties, requirements and ambitions. This may assist in producing precise strategies to create more nurturing working environments (Chan & Morrison, 2000).

5.4.4.1.3.2 Co-workers factors

Many studies emphasised the impact of co-worker on nurses' turnover intention (see Table 5.2). Chan and Morrison (2000) found that uncooperative, non-dedicated and non-supportive co-workers affect RNs' decisions to leave. Kudo et al. (2006) reported that the number of nurses with turnover intention was significantly higher among those who experienced poor cooperation from other nurses.

Beecroft et al. (2008) stated that "organisations that value teamwork, cohesiveness and collaboration are more likely to have committed employees" (p. 50). This is supported by findings from Larrabee et al. (2003) and Shader et al. (2001) where a high level of work group cohesion and effective collaboration among employees were significant determinants of nurse intention to remain employed. According to Yildiz et al. (2009), interaction difficulties with co-workers increased the intention of nurses to leave. They found that nurses' intention to leave was significantly associated with a number of factors including interaction with colleagues working in other units. In another American study by Apker, Propp and Ford (2009), mentoring peers was the only significant predictor of intent to leave, and the relationship was inverse ($\beta = -.30$).

According to Kudo et al. (2006), nurses often face various challenges inside their work settings; therefore, mutual support among colleagues is very important. Employees who

believed their work groups to be supportive, cooperative and cohesive were more likely to remain attached to the organisation (Ingersoll et al., 2002).

5.4.4.1.3.3 Limited opportunities for professional development

Limited opportunity for professional development was another influencing factor on the turnover intention of RNs (see Table 5.2). In health organisations where there is a lack or absence of professional development opportunities, more nurses were expected to leave their jobs (Chan & Morrison, 2000; Gardulf et al., 2005; Shields & Ward, 2001). Hart (2005) identified five variables contributing to turnover intentions among RNs, namely, hospital ethical climate, control over practice, educational reimbursement as a retention strategy, gender and staff sufficiency. A significant regression equation was found ($F(5,401) = 33.830, p < .001$), with an R^2 of .297.

Rambur et al. (2003) found that nurses currently enrolled in an educational program were less likely to leave their positions compared to those who were not. Most recently, Fitzpatrick et al. (2010) conducted a study to examine the relationship of specialty certification provided by the American Association of Critical-Care Nurses (AACCN) and empowerment of nurses, and to examine the impact of these variables on nurses' intention to leave the current position and the nursing profession. Findings suggested that those participants who held the AACCN certification were less likely to leave their position ($r = 4.70, df = 1, p = .05$). Cai and Zhou (2009) found that the structural empowerment that includes access to opportunity, information, support, and resources was positively related to the perceived job satisfaction ($r = .56, p = .01$) and turnover intention ($r = -.31, p = .01$). Yildiz et al. (2009) stated lack of on-site training as a significant predictor of nurses' intention to quit their employment ($p < .05$). Limited opportunities for promotion and

career advancement (e.g., clinical-ladder system) can impact the employees' commitment (Takase et al., 2008). To improve the retention process of RNs, Nursing Managers and policy makers should focus on providing enough educational and training opportunities as well as developing the career advancement strategies.

5.4.4.1.3.4 Work environment

Factors related to the work environment such as workplace and resource inadequacy were found to be associated with RNs' turnover intention (see Table 5.2). Chan et al. (2009) investigated factors associated with nurses' intention to leave their current employment in Macao and found that the workplace was significant predictor ($p = .015$). Nurses who worked in the internal/medical wards were more likely to leave compared to nurses working in surgical wards and outpatient departments. The authors argued that this result could be attributed to the busy environment of the internal/medical wards. As an effective strategy to release these nurses from high workloads and enhance their professional experience, the authors suggested a rotation program for junior nurses across various wards. Additionally, they argued for the importance of in-service training to enhance the nurses' skills to meet patients' needs.

Other studies reported a relationship between resource inadequacy in the workplace and nurses' turnover intention. Reeves et al. (2005) found that approximately 32% of respondents in their study planned to leave their current employer within three years, mainly due to inadequacy of resources, a result consistent with other studies (Chan & Morrison, 2000; Chan et al., 2009; Takase et al., 2008). Nurses need sufficient supplies and equipment to provide quality patient care. Reeves et al. (2005) asserted that employers

who want to keep their nurses from moving to other hospitals need to find ways to help them give high-quality patient-centred care whilst addressing their working conditions.

Feeling safe in the working area is an important component of a positive work environment. Sofield and Salmond (2003) examined the experience of verbal abuse among 461 nurses in a large hospital in the USA and found a relationship between verbal abuse and turnover intention. Approximately 19% of the respondents had experienced verbal abuse in the previous month. The most frequent sources of abuse were from physicians, patients and their families, peers, supervisors and subordinates, respectively. The amount of abuse and turnover intention were significantly associated ($r = .211, p < .01$). Because of verbal abuse, 11.9% ($n = 54$) of the respondents claimed they would look for a new job within the next year, and 33.4% ($n = 151$) would consider resigning because of verbal abuse. Fifty percent of the sample identified difficulty in responding to verbal abuse. The authors of the study argued for the importance of adopting zero-tolerance policies for professional abuse. They also suggested providing training courses to improve the skills of nurses in terms of handling verbal abuse incidences.

An ‘uncaring’ environment can influence the satisfaction and turnover intention of RNs. It is important for Nurse Managers and healthcare administrators to ensure that the working environment is motivating and safe for the practice of RNs. According to Chan and Morrison (2000), generating a more nurturing environment would enhance the nurses’ sense of organisational identity and empower them to maintain a better work climate. Consequently, their organisational commitment can be fostered.

5.4.4.1.4 Work world

Many reviewed studies reported a positive relationship between nurses' intent to leave and their dissatisfaction with salary (see Table 5.2). According to Shields and Ward (2001), 65.5% of nurses reported entering the nursing profession in search of pay. Given their professional skills, work experience, work-task performance and qualifications, their expectations in terms of pay are high. Therefore, when they receive a low salary, they become more dissatisfied and in turn more willing to leave their jobs (Gardulf et al., 2005). This is consistent with findings from other studies (Chiha & Link, 2003; Holmas, 2002).

Gardulf et al. (2005) found that more than half of the nurse respondents ($n = 449$, 55%) stated that they intended to leave their current job. Of these, 155 (35%) had already taken steps towards turnover. The most mentioned reason for leaving was low salary (65%). Similarly, El-Jardali et al. (2009) found that the dissatisfaction of nurses with the extrinsic rewards was the most common predictor of intent to leave both the organisation and the country. Extrinsic rewards cover the tangible aspects of the job, including wages, benefits and bonuses (Cowin, 2002; El-Jardali et al., 2009). Similarly, Chan et al. (2009) found that nurses who identified dissatisfaction with pay and benefits were 4.14 times more likely to leave their work settings than their satisfied peers ($p < .001$).

Discrepancies between payment of nurses and that of other fields can contribute to job dissatisfaction among staff nurses (Shields & Ward, 2001). Kudo et al. (2006) contended that higher salaries may increase the nurses' job security and improve stability in their lives, since they will be better able to meet their living expenses. Therefore, it may work as an important factor for reducing the turnover intention. If nurses do not earn enough to meet their financial needs and responsibilities, they may leave the organisation or experience low

satisfaction (Ma et al., 2009). Given that pay is related to the employees' status inside their organisation, a higher salary may improve the sense of self-worth among RNs (Blegen et al., 1992).

However, the results of Gardulf et al.'s (2005) study indicated that salary itself may not be the only factor encouraging nurses to leave, as not being offered an opportunity to participate in setting criteria for their salary rank may also be a contributing factor. A majority of nurses were not given an opportunity to discuss their work performance with their managers before the annual planning of salaries. Thus, if nursing leaders wish to increase the level of nurses' satisfaction with salary, it is important to offer opportunities to discuss salary options. Additionally, nursing leaders may link salary with performance so that nurses who achieve more are paid more (Chan & Morrison, 2000). Furthermore, paying other benefits such as medical insurance, retirement benefits and professional development activities can encourage the retention of RNs (Kovner, 2006). Finally, Ma et al. (2009) suggested the establishment of a wage-level system based on the clinical ladder system as an effective strategy for the retention of RNs.

5.4.4.2 Demographic characteristics

A number of demographic characteristics were found in this review to influence the intention of nurses to leave their organisation. These characteristics are presented in Table 5.3 with related references.

Table 5.3
Demographic characteristics affecting RNs' intention of turnover

Demographic factors	References
Gender	(El-Jardali et al., 2009; Fitzpatrick et al., 2010; Hart, 2005; Ma et al., 2009; McCarthy et al., 2007; Palumbo, Rambur, McIntosh, & Naud, 2010; Rambur et al., 2003)
Age	(Chan et al., 2009; El-Jardali et al., 2009; Fitzpatrick et al., 2010; Kudo, Satoh, Sinji, et al., 2006; Ma et al., 2009; McCarthy et al., 2007; Palumbo et al., 2010; Rambur et al., 2003; Shader et al., 2001; Simon et al., 2010; Zurmehly et al., 2009)
Marital status	(El-Jardali et al., 2009; Liou & Cheng, 2010; Ma et al., 2009; McCarthy et al., 2007; Zurmehly et al., 2009)
Education level	(Chan & Morrison, 2000; El-Jardali et al., 2009; Fitzpatrick et al., 2010; Lu et al., 2002; McCarthy et al., 2007; Rambur et al., 2003; Tsai & Wu, 2010; Tzeng, 2002; Zurmehly et al., 2009)
Years of experience as a RN	(Chan & Morrison, 2000; Chan et al., 2009; Fitzpatrick et al., 2010; Hart, 2005; Larrabee et al., 2003; Ma et al., 2009; McCarthy et al., 2007; Rambur et al., 2003; Stone et al., 2009; Tsai & Wu, 2010; Zurmehly et al., 2009)

5.4.4.2.1 Gender

The gender of nurses was found to be associated with their turnover intention (see Table 5.3). However, results are somewhat inconsistent. Rambur et al. (2003) and Zurmehly et al. (2009) found that gender is not a significant determinant of the intention to leave, whilst other studies found that male nurses are more likely to leave. Findings from Hart (2005) indicated that female nurses were more intent on staying in their position than male nurses. The authors concluded that this finding should be interpreted with caution because of the small number of males in the study sample ($n = 27$, 6%). However, this finding aligns with those of three recent studies from the USA and Lebanon (El-Jardali et al., 2009; Fitzpatrick et al., 2010; Palumbo et al., 2010). El-Jardali et al. (2009) found that nurses with turnover intention were more likely to be males (20.1% vs. 15.9%, $p = .037$).

Palumbo et al.(2010) revealed that female nurses were less likely to leave their employment compared to males (23% vs. 33%, respectively). Similarly, Fitzpatrick et al.(2010) found a gender significant difference, with male nurses being more likely to leave. These findings are consistent with previous research (Borkowski, Amann, Song, & Weiss, 2007; Lou, Yu, Hsu, & Dai, 2007). A possible explanation for this is that male nurses could be the breadwinner for their family and when their salary is not adequate, they may leave the organisation. Rambur et al. (2003) found that male nurses were most likely to leave because of dissatisfaction with salary. Of those intending to leave, 53% of males versus 26% of females cited dissatisfaction with salary as a reason ($x^2 = 16.31, p < .01$). Additionally, the relationship between professional turnover intention and the organisational turnover intention could be another reason. Lou et al. argued that (2007) common stereotyping of the nursing profession as a “woman’s occupation” creates high stress on male nurses and enhances their turnover intention to take jobs in other professions (p. 47). This was supported by findings of Abualrub (2007), Andrews (2003) and O’Lynn (2004). In their work settings, male nurses may experience resistance from female nurses, administrators, and patients (Farella, 2000; Hilton, 2001). According to Borkowski et al. (2007), although some have mentioned the decline of gender discrimination against males in the nursing profession, it is still a challenge that impacts on the retention process of male nurses. Conversely, McCarthy et al. (2007) found that 92% of nurses with the intention to leave were female; however, female nurses formed 97% of the study sample.

5.4.4.2.2 Age

Another important demographic factor is the age of nurses (see Table 5.3). Younger nurses were found to be more dissatisfied in their job than older nurses and more likely to

leave. Kudo et al. (2006) and Fitzpatrick et al. (2010) found that turnover intention was significantly associated with younger nurses ($p < .05$). Likewise, McCarthy et al. (2007) revealed that 83 nurses (23%) participating in their study expressed an intention of turnover. Of these, 77% were aged between 21 and 35 years. According to Chan et al. (2009), age was one of the significant predictors of nurses' turnover intention. Approximately 37% of nurses aged 34 years or younger ($n = 121$) reported that they intended to leave, but 28.4% ($n = 73$) of those aged 45 years and older reported that they would remain employed ($p < .001$). El-Jardali et al.'s (2009) study showed that nurses who intended to leave were more likely to be younger than 30 years of age (60.9% vs. 55.5%, $p < .001$). This finding was confirmed by using Multinomial Logistic Regression, where younger nurses were found to report an intent to leave the country at higher rates than their counterparts ($OR = 1.961$; this is the inverse of $OR = 0.510$) (El-Jardali et al., 2009). Interestingly, Palumbo et al. (2010) found that intention to leave is different according to the age group. In nurses younger than 55, intention to leave decreased as age increased from 20 to 54 years. In nurses 55 years and older, increasing age was associated with increased intention to leave. A possible explanation for such differences is that in younger groups, commitment to and coping strategies increase with age. Once nurses reach 55 years and older, they are likely to think of retirement and their post-work plans. Paradoxically, older nurses were reported in several studies to be more satisfied with their work and less likely to leave (Kudo, Satoh, Hosoi, et al., 2006; Rambur et al., 2003; Shader et al., 2001; Zurmehly et al., 2009).

5.4.4.2.3 Marital status

Marital status influences turnover intention among nurses (see Table 5.3). McCarthy et al. (2007) reported that almost 60% of nurses who expressed turnover intention were single.

Ma et al. (2009) found that approximately 71.5% of respondents who expressed their intentions to leave were single with no children ($p < .05$). A possible explanation for these findings is that single nurses may have fewer family responsibilities compared to married nurses (Ma et al., 2009).

Conversely, Liou and Cheng (2010), in a Taiwanese study of 486 RNs, found that unmarried nurses were more satisfied with their hospital's cultural climate, were more committed to their hospital and had a lower intention to leave their job compared to married nurses. Another study found no relationship between intention of nurses to leave and demographic variables, including marital status (Yildiz et al., 2009).

5.4.4.2.4 Level of education

An additional demographic factor that influences nurses' turnover intention is level of education (see Table 5.3). Chan and Morrison (2000) found that 'leavers' and 'stayers' are statistically different in terms of qualifications, area of work and years of RN experience ($p < .05$). The qualifications of leavers include Certificate or Diploma, while stayers hold specialised qualifications. Similarly, Tzeng (2002) reported educational background as a significant predictor of nurses' intention to quit; Diploma (estimate = - 1.790, Wald $\chi^2 = 4.28$, $p = .04$), or an Associate Degree (estimate = -1.639, Wald $\chi^2 = 4.00$, $p = .05$). According to Zurmehly et al. (2009), the education level was related to empowerment of respondents and their intention to leave or stay ($\beta = 0.90$; $p = .003$). Nurses with Bachelor or higher degrees indicated higher levels of empowerment and less intention to leave. On the other hand, several studies have demonstrated a relationship between high educational qualifications (i.e. Bachelor, Master and specialised certificates) and turnover intention. Rambur et al.(2003) found that over 20% of their sample indicated an intention to leave

current positions, with an association between highest education level and reason for leaving ($\chi^2 = 64.28, p < .01$). Specifically, intent to leave for further career advancement increased with level of education. This may be because the nurses were given inappropriate positions that underutilised their skills set.

According to McCarthy et al.'s (2007) study, 22% of the 352 participants who held a Bachelor Degree indicated an intention to leave current employment. In support of this, Fitzpatrick et al. (2010) found that respondents with Bachelor degrees were more likely to leave their positions than were respondents with any other type of educational preparation ($p < .001$).

This literature review revealed many conflicting findings regarding the influence of education level on intention to leave. While some studies found higher levels of education to be more related to nurses' intention to leave, others reported the opposite. One study concluded that there was no significant relationship between any demographic factors, including level of education and turnover intention of nurses (Yildiz et al., 2009).

5.4.4.2.5 Years of experience as an RN

Years of experience as an RN has been reported in a number of studies as influencing intention to leave (see Table 5.3). It was reported that nurses with fewer years of experience are more likely to leave than their experienced counterparts. Chan and Morrison (2000) found a significantly higher proportion of RNs with 2-4 years of experience are likely to leave compared to novice nurses (2 years or less) or those with 6-10 years of experience. Nurses with 2-4 years of experience as a RN are expected to carry out more tasks and greater workloads than novice nurses (2 years or less); however, the

rewards may be misaligned to the tasks, responsibilities and workloads. This experience may create a sense of disappointment for nurses with their working life, resulting in burnout, and finally turnover (Chan & Morrison, 2000). This is supported by Larrabee et al. (2003) and Chan et al. (2009) who revealed that RNs who had been in their current job for less than 5 years were more likely to indicate an intent to leave. Results from Fitzpatrick et al.'s (2010) study suggested that as the participants' years of experience increased, their intent to leave their current position decreased ($t = 12.45, p < .001$).

Conversely, Rambur et al. (2003) reported that nurses with more than 21 years of experience had the highest intent to leave. The authors of this study mentioned that this intention is the result of situational factors, most likely retirement. Conversely, it is reported that nurses with longer years of nursing experience may intend to stay, even though they are dissatisfied with their work, "because they perceive it to be too late for a change of career" (Chan & Morrison, 2000, p. 118; Hart, 2005). They had spent long years and substantial effort in their jobs and organisations, therefore considering it unreasonable to leave at this point of time. Additionally, such RNs would also be skilled enough to cope easily with the particular work environment (Chan & Morrison, 2000).

5.5 GAP IN THE LITERATURE

Further research is needed to investigate the relationship between work life factors and the intent of RNs to leave their work, especially in light of current and projected health workforce shortages. Such studies must search for new and effective strategies that can improve nurses' QWL and retention. Most studies on the subject of QWL, intention to leave and turnover come from hospital-based research in western countries. Consequently, more studies concerning these issues, but focusing on various types of healthcare facilities,

especially PHC, are needed. Moreover, such research should be undertaken across a number of countries, particularly in developing countries where there is a dearth of information. This will assist in creating responsive management approaches which can address nursing workforce challenges in an informed way.

5.6 SUMMARY

This chapter has provided a background to turnover and turnover intention of RNs. Additionally, it has systemically reviewed the nursing literature in order to explore the impact of work life factors and demographic characteristics on the turnover intention of RNs in healthcare organisations.

The literature review has revealed many critical work life factors and demographic characteristics that affect the level of nurses' QWL and in turn influence their intention to leave their organisation. The work life factors include work life/home life (i.e. family and family needs and working hours/shifts), work design (i.e. job satisfaction, workload and autonomy of practice), work context (i.e. management and leadership, co-workers, developmental opportunity and work environment), and finally, work world (i.e. salary). Various demographic factors have also been identified from the literature, including gender, age, marital status, education level and years of experience as a RN. Having reviewed the related literature, Chapter 6 will discuss the methods used in this doctoral study.

Chapter 6: Methods and Research Design

6.1 INTRODUCTION

This chapter describes the design and methods used in this research to achieve the purposes and objectives stated in Section 1.5 of Chapter 1. Additionally, the setting, population and sample will be described. After that, the two instruments for data collection that were used in this study (Brooks' Survey of QNWL and the Anticipated Turnover Scale - ATS) and their psychometric properties such as validity and reliability will be discussed. The procedures of data collection and analysis will be presented. Finally, the dissemination of the results and the research ethics statement will be highlighted.

6.2 STUDY DESIGN AND SAMPLING

This study used a cross-sectional survey design to investigate the perception of QWL and turnover intention of PHC nurses in Saudi Arabia. All RNs working in PHC centres in the Jazan region (134 PHC centres) were eligible to participate in this study. The target population consisted of 585 PHC Saudi and non-Saudi nurses (MOH, 2007b).

To determine the required sample size for this study, the sample size calculation was used, assuming a confidence level of 95% and margin of error at 5%. The prevalence of turnover intention in the research area was estimated at 32%, based on findings from the pilot study. The sample size was calculated according to the following formula (Birchall, 2009):

$$N = \frac{t^2 \times p(1-p)}{m^2}$$

Where N is the required sample size, t is the confidence level at 95% (standard value of 1.96), p is the estimated prevalence of turnover intention among PHC nurses, and m is the margin of error at 5% (standard value of 0.05).

$$\begin{aligned} N &= \frac{1.96^2 \times .32(1-.32)}{.05^2} \\ &= \frac{3.8416 \times .22}{.0025} \\ &= \frac{.8452}{.0025} \\ &= 338.08 \sim \mathbf{339} \end{aligned}$$

The required sample for this study was estimated to be $N = 339$. Taking into consideration contingencies such as response rate and recording error, the sample was further increased by 10% to be $N = 373$.

According to Pallant (2007), the power of a test is very dependent on the size of the sample used in the study. Thus, the number of independent variables that determined for multivariate analysis was taken into account. Tabachnick and Fidell (2007) recommended a formula for such tests as follows: $N > 50 + 8m$ (where m = number of independent variables). The maximum independent variables needed for standard and hierarchical regression in this study were 17. Thus, a sample size of 186 was appropriate for analysis purposes ($50 + 8(17) = 50 + 136 = 186$). Based on the above figure, the determined sample size of 373 is considered sufficient for the purpose of this study; however, all nurses working in PHC centres were eligible to participate in the survey. Day (2005) argued that “the more responses obtained from the survey site increases the statistical power and the null hypotheses can be rejected with more confidence” (p. 101). Since the PHC nurses in the Jazan region are not familiar with health research, and to ensure the

highest response rate possible, all PHC centres in the Jazan region were involved. It can therefore be argued that there was sufficient respondent participation ($N = 508$) to analyse the data with confidence.

6.2.1 Inclusion criteria for the sample

A number of criteria for the respondents and organisations were included in the study. These criteria can be grouped under organisational and respondent criteria as outlined below.

6.2.1.1 Organisational criteria

- The healthcare facility had to be a PHC centre;
- Located in the Jazan region, Saudi Arabia; and
- Owned and operated by the MOH.

6.2.1.2 Respondent criteria

- The respondents were required to be RNs in the PHC centres of the MOH in the Jazan region, Saudi Arabia (and not those working in institutions other than PHC centres such as private or public hospitals or clinics).
- This study was applied to Saudi and non-Saudi RNs, regardless of their cultural background, gender, age and education level.

6.3 RESEARCH HYPOTHESES

To answer the research questions 3-5 (Section 1.6), the following hypotheses were tested:

H1: There are significant relationships between QWL and PHC nurse demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month.

H2: There are significant relationships between turnover intention and PHC nurse demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month.

H3a: The QWL dimensions (work life/home life, work design, work context and work world) are useful in predicting turnover intention.

H3b: Among the four dimensions of QWL, the work life/home life and work context dimensions make the best contribution to explaining the turnover intention of PHC nurses.

H3c: QWL dimensions (work life/home life, work design, work context and work world) are still useful in predicting turnover intention after controlling for the possible effect of the demographic variables of PHC nurses.

6.4 MIXED METHODS

The integration of quantitative and qualitative research in a single study is referred to as using mixed methods (Borkan, 2004; Creswell, Fetters, & Ivankova, 2004; Leech & Onwuegbuzie, 2009). According to Kinn and Curzio (2005), the combination of qualitative and quantitative methods within research projects is becoming increasingly important. There is a growing debate regarding the importance of integrating different

research methods into a single study (Creswell et al., 2004; Creswell & Plano Clark, 2011; Kinn & Curzio, 2005; Tashakkori & Teddlie, 2003; Teddlie & Tashakkori, 2009). As Creswell et al. (2004) explain:

This form of research is more than simply collecting both quantitative and qualitative data; it indicates that data will be integrated, related, or mixed at some stage of the research process. The underlying logic of mixing is that neither quantitative nor qualitative methods are sufficient in themselves to capture the trends and details of the situation. When used in combination, both quantitative and qualitative data yield a more complete analysis, and they complement each other (p. 7).

According to Borkan (2004), “mixed methods not only expand the research toolbox, they also provide the opportunity for synthesis of research traditions and give the investigator additional perspectives and insights that are beyond the scope of any single technique” (p. 4). The quantitative methods allow researchers to ‘see only what they are looking at’, whereas qualitative methods can assist in the determination of key elements or factors that were not previously explained or even considered (Borkan, 2004). This was supported by Kinn and Curzio (2005) who stated that using results from different methods (quantitative and qualitative) can lead to a greater understanding of the issue under research, which would not have been possible using either method alone.

Creswell et al. (2004) conducted a review to evaluate PHC research for the frequently used mixed methods. Based on findings, the authors suggested three models for mixed research on PHC organisations: the instrument design model, triangulation design model and data transformation design model. In the *instrument design model*, priority is given to quantitative data collection and analysis. It begins with qualitative data collection and analysis and then moves to the quantitative part. Researchers often use this model to develop a new instrument that is based on the views of participants (Creswell et al., 2004).

The *triangulation design model* is frequently used in health and primary health care research. The purpose of this model is to use qualitative and quantitative approaches together at equal priority to explore and understand a research problem. Both types of data (quantitative and qualitative) are collected concurrently and integrated in the results, interpretation, analysis or conclusion phase (Creswell et al., 2004).

The *data transformation design model* allows researchers to gather quantitative and qualitative data at the same time. However, the priority is given to the quantitative data collection and analysis. Qualitative data are analysed for codes and themes, using a planned codebook or conceptual framework. Then, the obtained codes or themes are (typically) numerically counted and used to support the quantitative findings. The integration of both types of data occurs at the data analysis stage (Creswell et al., 2004).

For the purpose of the present study, although the qualitative data were analysed for content following a conceptual framework, the triangulation design model as suggested by Creswell et al. (2004) was applied. The present study gives equal priority to quantitative and qualitative data and analysis. The qualitative data were not transformed into numerical items; instead, they are reported in a separate results section. Then, the interpretation of qualitative and quantitative data appear in the discussion and conclusion sections.

In addition to the quantitative instruments used in the present study (see sections 6.5.1 and 6.5.2), a number of open-ended questions (see section 6.5.4) were used as well. They aimed to determine any other key factors not covered in the quantitative data and to see if the two types of data showed similar results, but from different perspectives. As Day

(2005) noted, “the qualitative component is a necessary additional data source that should be considered important to inform the results of the study” (p. 264).

6.5 INSTRUMENTS

Two instruments were used in this research in addition to the demographic information and the open-ended questions. These were the Brooks’ Quality of Nursing Work Life (QNWL) Survey which was developed by Brooks (2001) and the Anticipated Turnover Scale (ATS) developed by Hinshaw and Atwood in 1978 (Hinshaw & Atwood, 1984). For more details about these questionnaires, please see Appendix B.

6.5.1 Brooks’ Survey of QNWL

Brooks’ Survey of QNWL was developed by Brooks (2001) to measure the QWL among RNs. It is a self-completion questionnaire which contains 42 items in the following 4 subscales: (a) work life/home life, (b) work design, (c) work context and (d) work world. The work life/home life dimension is defined as the interface between the nurses’ work and home life. The work design dimension is the composition of nursing work and describes the actual work that nurses perform. The work context dimension includes the practice settings in which nurses work, and it explores the impact of the work environment on both nurse and patient systems. Finally, the work world dimension is defined as the effects of broad societal influences and changes on the practice of nursing (Brooks, 2001; O’Brien-Pallas et al., 1994). The instrument asked respondent nurses how much they agree or disagree with each item on a 6-point scale, with ‘1’ indicating ‘strongly disagree’ and ‘6’ indicating ‘strongly agree’ with various aspects of their work life.

The author conducted extensive reliability and validity testing before the final scale was approved and used (Brooks, 2001). For the content validity of this questionnaire, a panel of seven experts was assembled to review the items. They were asked to assess each item to determine if it was part of the domain and whether it was clear and accurate. The experts were then asked to place the item in one of the outlined dimensions of QNWL. The rating scale was as follows: (1) item not relevant to the QNWL domain, (2) unable to assess relevance without item revision, (3) item is relevant but needs minor revision, or (4) item is very relevant. Items that were rated by the experts as content valid (3 or 4) were considered. Items needing minor revisions were amended. Item rewording was completed as suggested by the experts. Items rated as 1 or 2 by the experts for their lack of relevance ($n = 21$) or redundancy ($n = 9$) were rejected and deleted from the tool. This instrument was pre-tested for its clarity using a convenience sample of 12 staff nurses in a group setting, with the investigator in attendance. Participants were asked to follow the written directions to complete the instrument. No additional instruction was provided. None of the participants was familiar with the concept of quality of nursing work life. When all participants were finished, the instrument was reviewed with the group on an item-by-item basis. Participants were asked specific questions about the adequacy and specificity of the directions, item clarity, item complexity, and difficulty. This group reported no difficulty in these areas. All 42 items were therefore retained. According to Brooks (2001) and Brooks and Anderson (2004), the questionnaire is ranked at a seventh-grade reading level using the Flesch-Kincaid formula and requires 9-13 minutes to complete. Moreover, the test-retest reliability was determined in a traditional 14-day manner with Pearson's $r = .90$ ($N = 53$), where '1' indicates 'perfect' reliability. In terms of construct validity, the total calculated for the 42-item survey using Cronbach's α is .89 ($N = 265$), where '1' indicates

‘perfect’ validity, indicating a high level of confidence that the scale measures what it sets out to measure.

The Brooks’ Survey of QNWL has been used by other published works in the USA and Iran (Brooks & Anderson, 2005; Brooks et al., 2007; Khani et al., 2008; Zadeh, Mansoori, & Farid, 2008), with increasing interest globally. According to Clarke and Brooks (2010), requests to use Brooks’ survey have been received from researchers and graduate students in Greece, Estonia, Canada (Ontario, Quebec), India, Iran, Australia, Malaysia, Turkey, and Taiwan. Because Brooks’ Survey of QNWL has good reliability and validity and has been cited and requested for use in other nursing works, it was viewed as an appropriate instrument for the current study.

6.5.2 The Anticipated Turnover Scale (ATS)

The ATS survey was developed by Hinshaw and Atwood in 1978 to study turnover intention among nurses. It seeks to measure employees’ perceptions or opinions of the possibility of voluntarily terminating their present job (Hinshaw & Atwood, 1984). The ATS is a 12-item self-administered instrument with a 7-point Likert scale ranging from ‘agree strongly’ to ‘disagree strongly’ (Hinshaw & Atwood, 1984). The instrument’s items were related to an employee’s anticipated length of time to leave and certainty of leaving the job. The total score was obtained by calculating the sum of all items in the scale divided by the number of items in the scale. Higher scores reflect greater intent to leave the present position or job. Responses with means over 3.5 were considered as an indication for turnover intention (Armstrong, 2004). According to Hinshaw and Atwood (1984), the construct validity for the ATS was estimated using principal component factor analysis.

Findings identified two factors which accounted for 55% of the variance. The internal consistency reliability estimated with Cronbach's α was .84 (Hinshaw & Atwood, 1984).

The ATS has been used frequently to measure turnover intention among nursing workforces in various healthcare settings (Armstrong, 2004; Beecroft, Kunzman, & Krozek, 2001; Brady-Schwartz, 2003; Chaaban, 2006; Cox, 2001; Miller, 2007, 2008; Wilson, 2005). Table 6.1 shows the reliability values of the ATS in previous studies.

Table 6.1
Reliability of ATS as reported in previous nursing studies

Author		Reliability (Cronbach's α)	N
Hinshaw & Atwood (1984)		.84	1597
Brady-Schwartz (2005)		.86	470
Hart (2005)		.94	463
Shader et al. (2001)		.86	241
Armstrong (2004)	Time 1	.85	300
	Time 2	.81	300
Miller (2007)		.84	33
Barlow & Zangoro (2010)		.89	Meta-analysis of 12 studies

Barlow and Zangoro (2010) conducted a meta-analysis study aimed at determining the consistency of reliability estimates and evidence of construct validity of the ATS scores across nursing studies in the USA. The overall mean weighted effect size of reliability from 12 studies was .89, indicating excellent reliability and construct validity. The authors of this review concluded that Nurse Managers should consider the ATS in research on prevention of RN turnover. Because of the scale's good levels of reliability and validity

and its cited use in the international literature, it was selected as an appropriate tool for the current research.

6.5.3 Socio-demographics

For the purpose of this study, the researcher developed a demographic instrument. This instrument consisted of 28 questions which were grouped according to three subsections: personal information, educational background and employment background. For more details, see Appendix B.

6.5.4 Open-ended questions

Five open-ended questions were developed by the researcher to allow participants to identify any specific information that could be important to the study and was not covered by the survey tools. These open-ended questions covered the areas of QWL and turnover intention, the main variables in the present study. The questions in this section are as follows:

1. Considering the current job, how do you perceive your quality of work life?
2. What factors make you satisfied with your work life?
3. What factors make you dissatisfied with your work life?
4. Do you have intention to leave your current job (in Primary Health Care) during the next 12 months? Why?
5. Do you have intention to leave your current job (in Primary Health Care) during the next five years? Why?

6.5.5 Pilot study

To ensure the suitability of the used tools for the purpose of the present study, the questionnaire was contextualised to meet the local context and the multicultural environment of the PHC nursing workforce in the Jazan region. In addition to the English format, the questionnaire was translated into Arabic using a translation and back-translation technique and a committee approach (Brislin, 1970; Cha, Kim, & Erlen, 2007). That is, a bilingual researcher blindly translated the instrument from English to Arabic and a second bilingual researcher back-translated it independently (Cha et al., 2007). A panel of three bilingual experts in healthcare workforce management and in health research reviewed the translated questionnaire compared to the English format and assured its face validity (Lu, While, & Barriball, 2007).

Two pilot studies were conducted in early 2009 with the cooperation of PHC nurses in Saudi Arabia. The main aim of these pilot studies was to test the survey questionnaire for the appropriateness, structure of the questions, clarity of the questions, terminology, content validity, reliability, and time taken to complete the survey. Testing the content validity, reliability and clarity of the survey instrument via a pilot study is an important step prior to the main study (Creswell, 2003; Miller, 2007).

The first pilot study involved seven ($N = 7$) RNs from one PHC centre. Following recommendations from participants, a number of minor changes to the demographics and open-ended questions were performed. The revised questionnaire was administered to a sample of 59 PHC nurses. According to Cooper and Schindler (2003), the sample of a pilot study can range from 25-100 non-statistically chosen participants. No comments

regarding the difficulty of terminology, structure of the questions or clarity of the items were reported by the participants of the second sample.

Reliability analysis was conducted and the minimum coefficient of .70 or greater was sought for the two adapted instruments. George and Mallery (2003) and Nunnally and Bernstein (1994) indicated .70 as an acceptable reliability coefficient, although lower coefficients are frequently used in the literature. Based on the sample of 59 nurses for the second pilot study, the results showed that for QWL and its dimensions, Cronbachs' α were .89 for QWL and .90 for the ATS. These reliabilities are high, particularly when compared to previous nursing studies. Time needed to fill the questionnaire ranged from 17 to 25 minutes.

6.6 DATA COLLECTION

A list of the PHC centres in Jazan and the number of RNs in each centre was obtained from the PHC Department, the administrative authority of the PHC facilities for the whole region. This list was used to direct the appropriate number of surveys to each centre. Because of the weaknesses of postal services in some areas and to ensure a high level of responses, the surveys were distributed to the PHC centres through the department of PHC in Jazan using its internal mail service.

Each nurse was provided with a survey package. The contents included a cover letter, questionnaire, and an individual envelope. The cover letter explained the purpose of the study, provided contact details of the researcher, and illustrated the steps taken to maintain confidentiality of responses (see Appendix B). The survey questionnaire that was used in this research consisted of four sections: Brooks' QNWL scale, Anticipated Turnover Scale

(ATS), demographic information, and open-ended questions. An envelope labelled with the project information, researcher details and contacts, and instruction for the survey return process was also included in the package to ensure anonymity and confidentiality of the responses.

Respondents in each PHC were asked to seal their own completed survey in the individual provided envelope, seal them all in a large labelled envelope (provided) and then return them to the Department of PHC through the internal mail service. The return of the completed questionnaire was accepted as an indication of the respondents' consent to participate in this study. Every two weeks, a reminder letter was sent to all the PHC centres throughout the PHC Department in Jazan. At the end of the data collection period, the researcher collected the completed questionnaires from the Department of PHC. The data collection phase of the study was completed over a three-month period (April to July 2009). The overall response rate was 91% ($N = 532$); however, the effective response rate after removing uncompleted questionnaires was 87% ($N = 508$). Grady and Wallston (1988) reported that a response rate of 50% is very good for mailed questionnaires. Moreover, Punch (2003) argued that to receive representative responses of the sample, researchers should strive for response rates of at least 60 percent. Although the researcher was concerned that the PHC managers could put some pressure (intentional or unintentional) on RNs to complete the survey in a particular way (Day, 2005), there were no reports of pressure being placed on respondents from the managers.

6.7 DATA CODING AND CLEANSING

Prior to data entry, each returned survey was given an identification number, and the survey responses were coded numerically to indicate the value of each variable. Then, the

quantitative data were entered into SPSS for Windows (v.17), while the qualitative data were entered into NVivo. The quantitative data were cleaned for coding errors through a standardised cleaning process using single and multiple field frequency analysis. Following this cleaning process, 5% of the cases were randomly selected and compared to the original survey responses for accuracy (Day, 2005).

The assumption of normality is a prerequisite for many inferential statistical techniques (Coakes, Steed, & Ong, 2010). While the sample of this study is large enough to omit this assumption, the data (QWL and turnover intention) were assessed graphically for normality with histogram and normal probability plot using the explore procedure. No obvious sign of skewness was noted. Additionally, the normal probability plots were visually examined and found to cluster around a straight line, which suggested that the sample has a normal distribution (Coakes et al., 2010; Ho, 2006).

The data were also checked for missing values. There was a low number of missing values in the completed surveys, and the pattern of missing values was random. Since the sample is sufficiently large, no substitution method was used to replace the missing values; instead, they were omitted using pairwise exclusion. That is, any variable with missing data were excluded from the analysis (Coakes et al., 2010).

Outliers were cases that had standardised residual values of more than 3.3 or less than -3.3. According to Pallant (2007), with large samples, it is not uncommon to find a few outlying residual values that may require no further action. Only one case was identified as an outlier across all cases; case 318 (Std. residual = 3.4), which does not appear to present a concern.

6.8 DATA CONSIDERATIONS TO IMPROVE ANALYSIS

To improve the analysis, a number of variables had to be collapsed with others and some others needed to be categorised. The new categories are summarised in Table 6.2.

Table 6.2
Data considerations to improve analysis

Variable	Categories	N	%
Age	20-29 years	224	44.1
	30-39 years	164	32.3
	40-49 years	74	14.6
	50-59 years	33	6.5
	Missing	13	2.6
Marital status	Never married	119	23.4
	Married	375	73.8
	Divorced/Widowed	12	2.4
	Missing	2	0.4
Education	Institute	171	33.7
	Diploma	241	47.4
	Associate	65	12.8
	Bachelor or higher	27	5.3
	Missing	4	0.8
Nursing tenure	≤ 4 years	141	27.8
	5-9 years	123	24.2
	≥ 10 years	243	47.8
	Missing	1	0.2
Organisational tenure	≤ 4 years	279	54.9
	5-9 years	89	17.5
	≥ 10 years	138	27.2
	Missing	2	0.4
Positional tenure	≤ 4 years	289	56.9
	5-9 years	91	17.9
	≥ 10 years	123	24.2
	Missing	5	1
Payment per month	< SR 5,000	106	20.9
	SR 5,000-10,000	235	46.3
	> SR 10,000	129	25.4
	Missing	38	7.5

The variable of age was grouped under four categories. These include 20-29 years, 30-39 years, 40-49 years and 50-59 years. In the initial data, age was collected according to exact age in years as reported by participants. For the regression tests, the continuous data were used.

For the marital status variable, the individual categories of divorced and widowed were collapsed into one category: divorced/widowed (2.4%). The other categories for the analysis were never married (23.4%), and married (73.8%). For the regression test, the divorced/widowed group was omitted, because it only included 12 cases.

The ethnicity of respondents were collapsed into two categories for the purpose of regression analysis. Educational background was collected during the initial data in six categories. These included: Institute, Diploma, Associate, Bachelor, Masters and Doctoral Degree. For the purpose of analysis, the last three categories of Bachelor, Master and Doctoral Degree were collapsed into one category: Bachelor or higher (5.3%). For the regression tests, the education level was dichotomised into two groups: Associate Degree and higher, and less than Associate Degree.

The variables of nursing tenure, organisational tenure, and positional tenure were divided into three categories in each variable. These include: ≤ 4 years, 5-9 years, and ≥ 10 years. The variable of payment per month was divided into three categories: less than SR 5,000, SR 5,000 to 10,000 and more than SR 10,000. For the regression tests, the continuous data were used.

6.9 ANALYSIS

The quantitative data collected in this study were analysed using SPSS for Windows, v 17. Descriptive statistics for the sample profile, QWL and turnover intention were presented using frequencies, percentages, subscale and total scores, means, and standard deviations.

With regard to the study hypotheses, the independent sample *t*-test, analysis of one-way variance (ANOVA), the general linear model (GLM) univariate, a standard multiple regression and a sequential (hierarchical) multiple regression were used to analyse the data.

The data analysis plan related to the study research hypotheses was as follows:

Hypothesis 1: There are significant relationships between QWL and PHC nurse demographic variables of gender, age, marital status, nationality, ethnicity, dependent children, dependent adults, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month.

Hypothesis 2: There are significant relationships between turnover intention and PHC nurses' demographic variables of gender, age, marital status, nationality, ethnicity, dependent children, dependent adults, level of education, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month.

Analysis plan: To test the first and second hypotheses, the independent sample *t*-test, ANOVA and GLM univariate were conducted. The *t*-test and ANOVA were used to test the possible relationships between QWL and turnover intention and each of the selected demographic variables. Independent sample *t*-test was used to compare the mean scores of two different groups of demographics. This test was used for gender, dependent children,

dependent adults, nationality, and location of PHC. Prior to an interpretation of the results of the *t*-test analysis, data were checked for any violation of required assumptions, including the equity of variances using Levene's test ($p > .05$).

ANOVA with post-hoc tests were used to compare the means of more than two groups or levels of an independent variable in relation to QWL or turnover intention. This test was conducted for age, marital status, ethnicity, education level, nursing tenure, organisational tenure, positional tenure, and payment per month. The homogeneity of variances for each group were tested using Levene's test ($p > .05$).

With a large enough sample (in this case, $N = 508$), quite small differences can become statistically significant, even if the difference between the groups is of little practical importance (Pallant, 2007). The effect size for independent-samples *t*-test and ANOVA test was calculated using the eta squared and Cohen's *d*. As Pallant (2007) noted, "eta squared can range from 0 to 1 and represents the proportion of variance in the dependent variable that is explained by the independent variable" (p.235). Cohen (1988) classified the values of eta squared as (.01) small effect, (.06) medium effect and (.14) large effect. Eta score is a percentage contribution to the overall model. Two different formulas were used to calculate eta squared for independent-samples *t*-test and ANOVA. Formula for the independent-samples *t*-test:

$$\text{Eta squared } (\eta^2) = \frac{t^2}{t^2 + (N1 + N2 - 2)}$$

Formula for ANOVA:

$$\text{Eta squared } (\eta^2) = \frac{\text{Sum of squares between-groups}}{\text{Total sum of squares}}$$

The GLM univariate analysis was used to estimate the possible effect of the demographic variables as a set on QWL and turnover intention.

Hypothesis 3a: The QWL dimensions (work life/home life, work design, work context and work world) are useful in predicting turnover intention.

Hypothesis 3b: Among the four dimensions of QWL, the work life/home life and work context dimensions make the best contribution to explaining the turnover intention of PHC nurses.

Hypothesis 3c: QWL dimensions (work life/home life, work design, work context and work world) are still useful in predicting turnover intention after controlling for the possible effect of the demographic variables of PHC nurses.

Analysis plan: To test the third hypothesis, a, b, and c, multiple regression analyses were used. The general purpose of multiple regression techniques is to explain the effects of more than one independent variable on one dependent variable (Lomax, 2007; Pallant, 2007). More specifically, multiple regression analysis is used to determine: (a) how well a set of variables is able to predict a particular dependent variable, and (b) which variables in a set of variables are significant predictors of the dependent variable (Lomax, 2007; Mertler & Vannatta, 2004).

For hypothesis 3a, the standard multiple regression analysis was used to examine the ability of the QWL dimensions (work life/home life, work design, work context, and work world) to predict turnover intention. With regard to hypothesis 3b, the standard multiple regression analysis was calculated to determine the QWL variables that make the best

contribution to explaining turnover intention. To test hypothesis 3c, the hierarchical multiple regression analysis was used to determine the ability of the QWL dimensions to predict turnover intention scores, after controlling for the possible effect of demographic variables that were found to be significantly related to QWL and turnover intention in hypotheses one and two. The assumptions for the multiple regression analysis were considered and checked before interpretation of the output of the analysis. These assumptions include multicollinearity, outliers, normality, linearity, homoscedasticity, independence of residuals, and case ratio to the independent variables (Coakes et al., 2010; Pallant, 2007).

6.10 ANALYSIS OF RESPONSES TO THE OPEN-ENDED QUESTIONS

Qualitative data obtained from the responses to the open-ended questions were analysed for content using NVivo 8. A single file that includes responses to the five questions was opened for each participant. Once the responses were entered into the NVivo software, all of the data were then reviewed for content and possible categorisation. A set of tree nodes were established for each question following the proposed framework of the present study (see Figure 1.1). Tree nodes are codes that are organised in a hierarchical structure moving from the general category at the top (the parent node) to more specific categories (child nodes) (QSR International, 2008). The responses to each question were read and the relevant statements (word, sentence or paragraph) were identified and codified under the appropriate nodes. New factors (that were not covered in the scales) were also identified and merged into the four dimensions of QWL. Then, to enhance the accuracy of the coding process, a text search query was applied to find all the occurrences of a statement and then these additional occurrences were coded at the relevant node (QSR International, 2008). Each statement was coded under only one node (Bandara, 2007),

unless it contained more than one factor. Any particular notes regarding the analysis process were captured in the NVivo memos to facilitate the analysis and the discussion process. To support reliability, a researcher colleague independently reviewed the coded factors and some minor changes were made to accommodate the provided comments (Norrie, 2004).

The qualitative findings were triangularly analysed and discussed with the quantitative results in light of prior research outlined in Chapters 9 and 10. These findings were used to support each other. When findings showed a contradiction between the qualitative and quantitative data, this was reported and a possible explanation was provided. Any influencing factors that emerged from the qualitative data and were not covered in the quantitative data were discussed in relation to the relevant dimensions of QWL. Their importance to the nurses' QWL and turnover intention was discussed and linked to the literature. Additionally, both the qualitative and quantitative findings were used to develop a revised framework for the relationship between QWL and turnover intention. Finally, these findings were integrated and used to propose recommendations for health managers and nursing leaders to improve the QWL of PHC nurses and in turn decrease their turnover intention.

6.11 ETHICAL CONSIDERATIONS

Permission to conduct the study was obtained from the Human Research and Ethics Committee at the Queensland University of Technology (No: 0800000406), and the Directorate General of Primary Health Centres in the Jazan region, Saudi Arabia (please see Appendices C & D). Participants were provided with an information sheet that explained the research and the steps taken to maintain confidentiality. Participants were

advised about the voluntary nature of participation. The returned completed questionnaires indicated consent to participate. The participants were advised of the protective procedures in place to ensure anonymity. No names or other identifiable information were needed on the questionnaires, which were sealed by participants and placed in individual envelopes (provided) upon completion.

Participants were informed that the collected data would be pooled for statistical purposes only, such that the individual identity of an individual could not be determined, thus assuring anonymity. The descriptive and statistical findings that are reported in this thesis and in future publications will include no identifiable personal information. The National Statement on Ethical Conduct in Human Research by the National Health and Medical Research Council (NHMRC), Australian Research Council, and Australian Vice-Chancellors' Committee (Australian Government, 2007) were adhered to. In terms of using copyright protected tools, permission was arranged with the original authors (please see Appendix E).

6.12 SUMMARY

This chapter has described and discussed the methods that were used in the current study. A descriptive design of cross-sectional survey was used to study QWL and turnover intention among a sample of PHC nurses in Saudi Arabia. Data were obtained from 508 respondents using a questionnaire that consisted of four parts, Brooks' QNWL survey, ATS, demographic profile and open-ended questions. The data collection took place between April and July 2009, with an effective response rate of 87%, after removing uncompleted questionnaires. The quantitative data were analysed using SPSS for Windows (v. 17), while qualitative data that obtained from open-ended questions were

analysed using NVivo software. Inferential tests used in the analysis process include independent sample *t*-test, ANOVA, GLM univariate, standard multiple regression, and hierarchical multiple regression. The quantitative and qualitative results of the study are presented in Chapters 7 and 8, respectively. The triangulation of quantitative and qualitative findings and the literature is presented in Chapters 9 and 10.

Chapter 7: Quantitative Results

7.1 INTRODUCTION

This chapter commences by presenting the quantitative results of this study. First, the chapter provides a profile for the sample, including the response rate and the demographics of respondents. After that, it presents the descriptive statistics for the perception of PHC nurses towards their QWL and turnover intention. Then, the chapter presents the findings of hypotheses tested in this study using the obtained data, and finally concludes with a brief summary.

7.2 SAMPLE PROFILE

The questionnaire was distributed to 585 PHC nurses. The overall response rate was 91% ($N = 532$); however, the effective response rate after removing uncompleted questionnaires was 87% ($n = 508$). This high response rate suggests that response bias will be minimal. The majority of respondents were females ($n = 342$, 67.3%), Saudi ($n = 367$, 72.2%), Arab ($n = 375$, 73.8%), aged between 20 and 29 years ($n = 224$, 44.1%), married ($n = 375$, 73.8%), with children ($n = 310$, 61%) and dependent adults ($n = 279$, 54.9%). Most respondents held less than a Bachelor Degree in nursing ($n = 477$, 93.9%) and received a salary of 5,000 to 10,000 Saudi Riyals (SR). About 52% of respondents were working in rural areas ($n = 265$, 52.2%), as staff nurses ($n = 471$, 92.7%), during morning work period ($n = 440$, 86.6%), for 45 hours per week ($n = 331$, 65.2%), covering caseloads which included male wards, female wards, maternity and childhood wards, immunisations, home visits, chronic diseases, medical records, and management. About

two-thirds (62%) of the respondents stated that they cover two departments or more during their duties. The mean work experience as an RN was 11.3 years, with approximately 6.6 years in the current PHC centre and 6.1 years in the current position.

Table 7.1 presents a summary of the demographic variables.

Table 7.1
Demographics of the PHC nurse respondents

Variable	Count (N = 508)	%*
Gender	<i>n</i> = 508	
Male	166	32.7
Female	342	67.3
Age	<i>n</i> = 495	
20-29 years	224	44.1
30-39 years	164	32.3
40-49 years	74	14.6
50-59 years	33	6.5
Marital status	<i>n</i> = 506	
Never married	119	23.4
Married	375	73.8
Divorced/Widowed	12	2.4
Dependent children	<i>n</i> = 508	
Yes	310	61.0
No	198	39.0
Dependent adults	<i>n</i> = 489	
Yes	279	54.9
No	210	41.3
Nationality	<i>n</i> = 508	
Saudi	367	72.2
Non-Saudi	141	27.8
Ethnicity	<i>n</i> = 505	
Arab	375	73.8
Asian	30	5.9
Indian	100	19.7
Education level	<i>n</i> = 504	
Institute	171	33.7
Diploma	241	47.4
Associate	65	12.8
Bachelor or higher	27	5.3
Nursing tenure	<i>n</i> = 507	
≤ 4 years	141	27.8
5-9 years	123	24.2

Variable	Count (<i>N</i> = 508)	%*
≥ 10 years	243	47.8
Organisational tenure	<i>n</i> = 506	
≤ 4 years	279	54.9
5-9 years	89	17.5
≥ 10 years	138	27.2
Positional tenure	<i>n</i> = 503	
≤ 4 years	289	56.9
5-9 years	91	17.9
≥ 10 years	123	24.2
Location	<i>n</i> = 508	
Urban	243	47.8
Rural	265	52.2
Payment per month	<i>n</i> = 470	
< SR 5,000	106	20.9
SR 5,000-10,000	235	46.3
> SR 10,000	129	25.4

* Difference in the total of percentage = the value of missing data.

7.2.1 Gender profile

Data from this study revealed that approximately one-third (32.7%) of the respondents were male nurses (see Figure 7.1). Although this portion is high compared with other countries, this was expected in the context of Saudi Arabia, as male nurses form approximately 27% of the nursing population in Saudi Arabia and 34.8% of the PHC nursing workforce (MOH, 2007b).

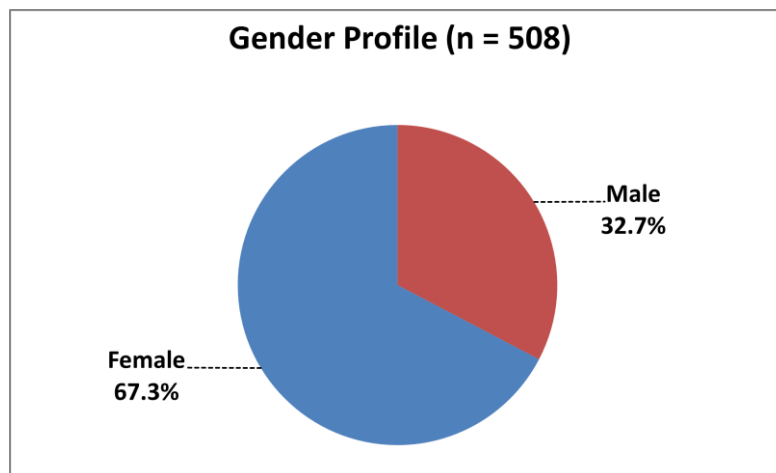


Figure 7.1. Gender distributions within the study sample.

7.2.2 Age profile

Age of respondents in this study ranged from 20 to 58 years. Approximately 44.1% and 32.3% were in the 20-29 and 30-39 age groups, respectively. These two age groups collectively accounted for approximately three-quarters (74.4%) of the total sample, indicating that the majority of the PHC of nursing workforce is young (i.e. less than 40 years of age). The mean age of the sample was 32.93 years, with a standard deviation of 8.447. Figure 7.2 illustrates the age groups of the respondents, and Figure 7.3 presents the age distribution.

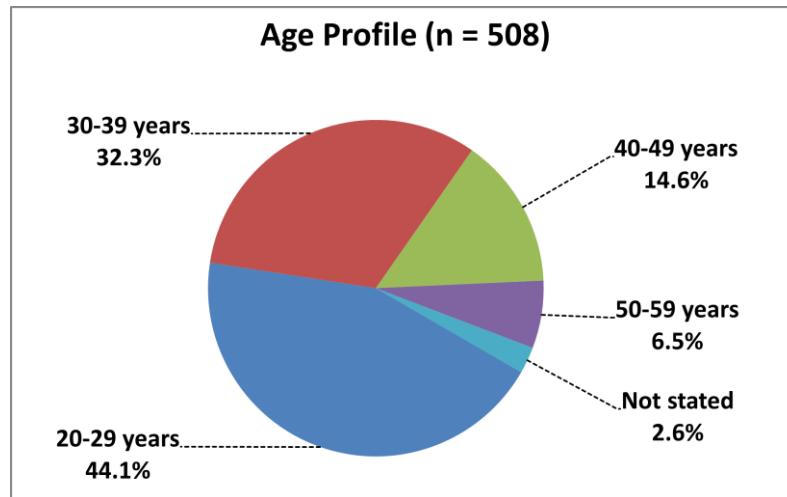


Figure 7.2. Age categories for the study sample.

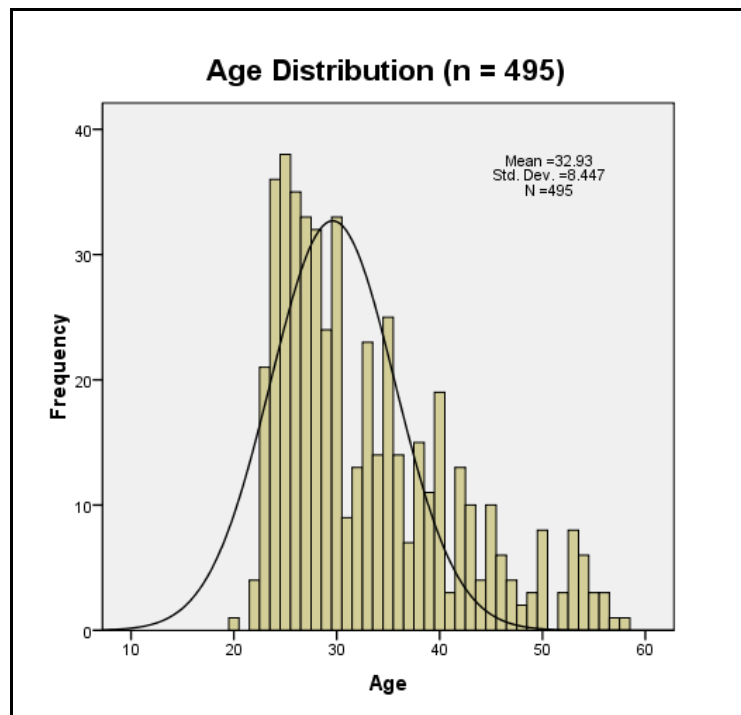


Figure 7.3. Age distribution of the respondents.

7.2.3 Marital status profile

Approximately three quarters (74.8%) of the respondents reported that they are married and have children (61%) (see Figures 7.4 and 7.5). About 23% were never married and 2.4% were divorced or widowed. According to the CDSI (2007), about sixty percent (60.2%) of the female population over 15 years of age in Saudi Arabia, and 53.9% of the same population in the Jazan region were married. Previous nursing studies reported high levels of concern for Saudi female nurses regarding their low chances for getting married as a result of cultural and communal values toward nursing work (Hamdi & Alhyder, 1996; Meer, 1999). This study, however, revealed that nearly three quarters (70.8%) of Saudi female PHC nurses were married.

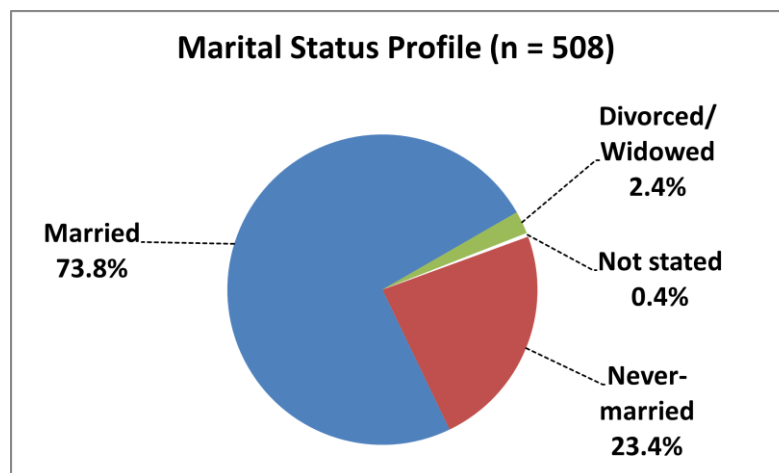


Figure 7.4. Marital status of respondents.

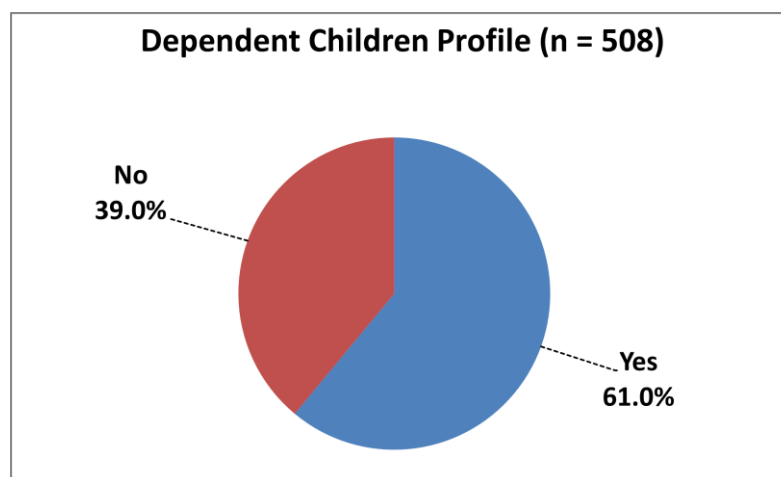


Figure 7.5. Dependent children.

In terms of number of children with nationality, Saudi nurses had more children than non-Saudi nurses (63.5%), even though the Saudi nurses are younger than the non-Saudi nurses. Table 7.2 shows the percentage of nurses who have dependent children by nationality.

Table 7.2
Dependent children by nationality among PHC nurses

Do you have dependent children?			
	Saudi	Non-Saudi	Total
Yes	233 (63.5%)	77 (54.6%)	310 (61.0%)
No	134 (36.5%)	64 (45.4%)	198 (39.0%)
Total	367 (72.2%)	141 (27.8%)	508 (100%)

7.2.4 Dependent adults

Almost 57% ($n = 279$) of the respondents indicated that they have adult dependents in their families such as parents, elders or disabled relatives (see Figure 7.6). Table 7.3 shows the percentage of nurses who have dependent adults by nationality.

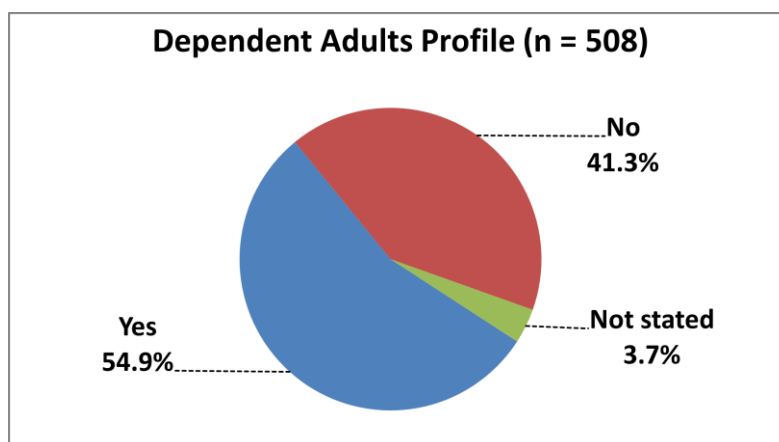


Figure 7.6. Dependent adults.

Table 7.3
Existence of dependent adults by nationality among PHC nurses

Do you have dependent adults?			
	Saudi	Non-Saudi	Total
Yes	226 (63.0%)	53 (40.8%)	279 (57.1%)
No	133 (37.0%)	77 (59.2%)	210 (42.9%)
Total	359 (73.4%)	130 (26.6%)	489 (100%)

7.2.5 Nationality profile

Approximately 72% of the respondents were Saudis (See Figure 7.7). This proportion is close to the nursing population in PHC facilities (65.5%) (MOH, 2007b). Non-Saudi nurses in PHC came from countries such as India (17.3%), Philippines (4.5%), Egypt (1.6%), Pakistan (1.4%), Indonesia (1.2%), Bangladesh (.8%), Sudan (.6%), and Yemen (.2%).

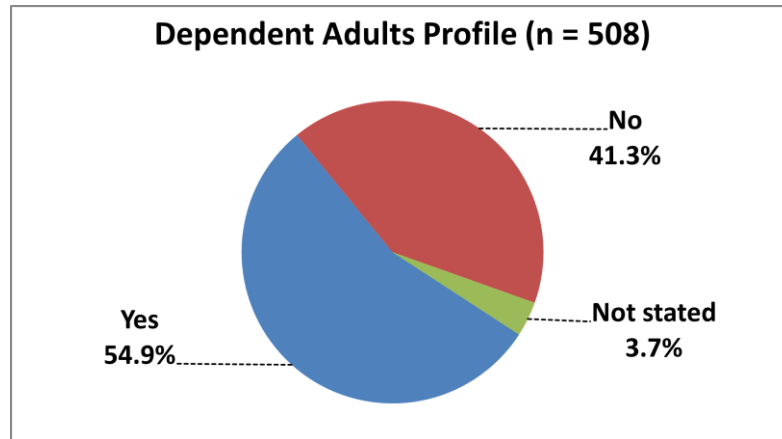


Figure 7.7. Nationality of respondents.

7.2.6 Ethnicity profile

Almost three-quarters (73.8%) of the respondents reported being Arab. Other ethnic groups reported by respondents were 19.7% Indian and 5.9% Asian. No respondents indicated that they were of Caucasian or African origin (see Figure 7.8).

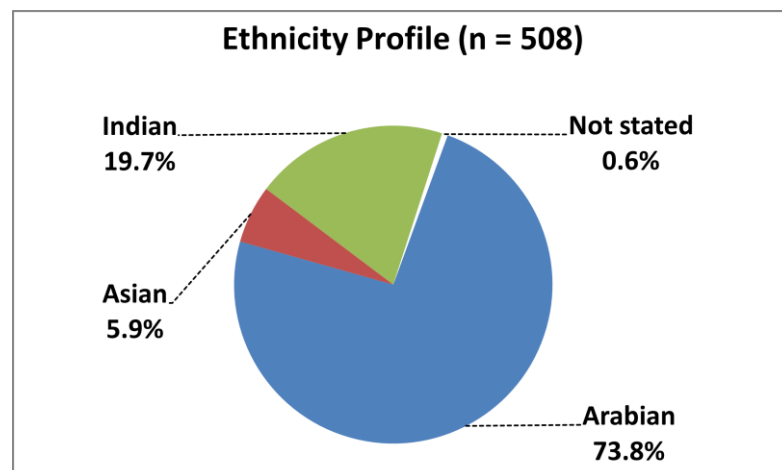


Figure 7.8. Ethnicity of respondents.

7.2.7 Education profile

Approximately half the sample (47.4%) had a Diploma, 33.7% had an Institute Certificate, 12.8% had an Associate Degree, and 5.3% had a Bachelor Degree or higher. Figure 7.9 shows a breakdown of the education level of the respondents.

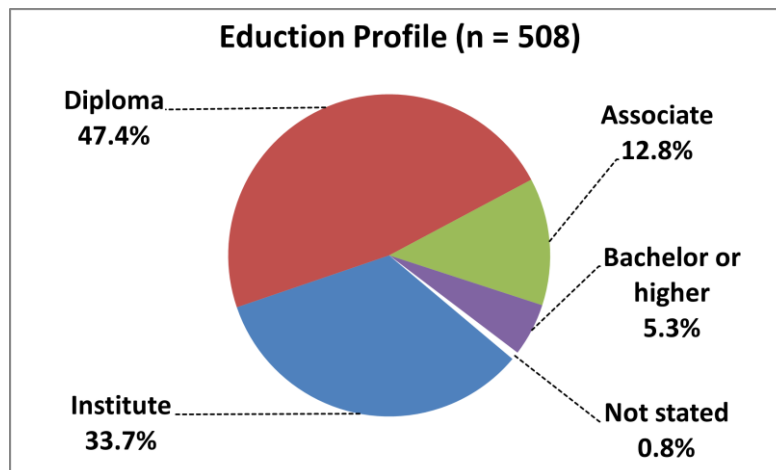


Figure 7.9. Education level of respondents.

Comparing the level of education to the nationality of the PHC nurses suggests that the proportion of Saudi PHC nurses who hold a Bachelor Degree in nursing does not exceed 5%, compared to 18.1% of non-Saudis (see Figure 7.10). According to the CDSI (2007), 12.1% of the total Saudi population had a Bachelor Degree or higher. The focus of healthcare leaders in Saudi Arabia is to establish a Bachelor Degree as the minimum entry to the profession, according to the recommendations of WHO, ICN and Nursing Technical Committee at the Gulf Countries' Council (Abu-Zinadah, 2006).

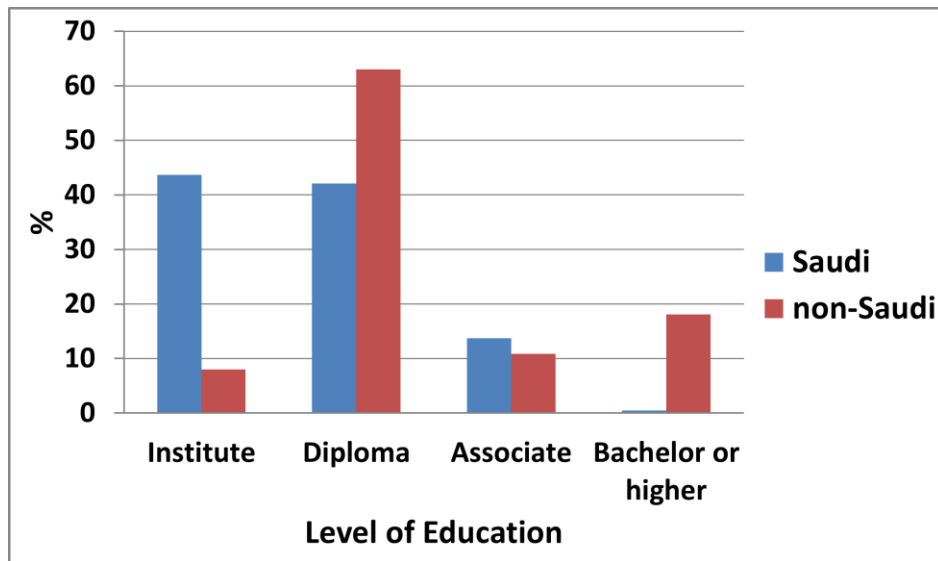


Figure 7.10. Level of education by nationality.

7.2.8 Nursing tenure profile

The analysis of data revealed that the average length of time working as a RN was 11.3 years, with a standard deviation of 8.75 years. Nearly half of the respondents (47.8%) had worked as a RN for 10 years or more, and over one-quarter (27.8%) had only four years or less of experience as a RN (see Figure 7.11). The maximum nursing tenure was 35 years, and the minimum was 1 month. Figure 7.12 shows the distribution of nursing tenure. Unexpectedly, more than one-third of respondents (38.4%) held no preparation course or educational certificate in the area of PHC, and almost the same proportion (37.6%) had no qualification in the field of PHC nursing.

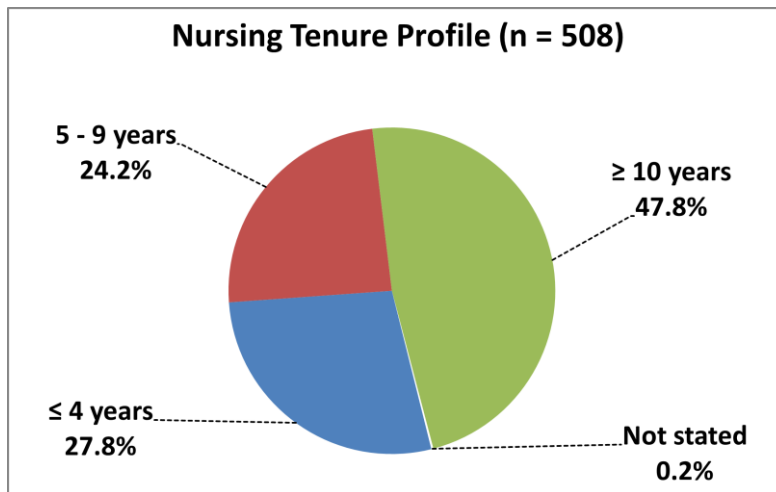


Figure 7.11. Nursing tenure of respondents.

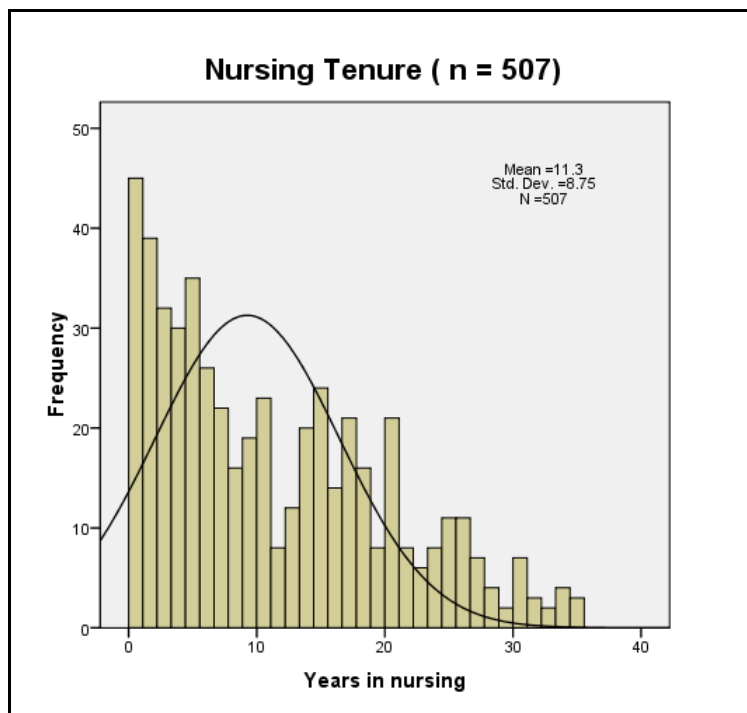


Figure 7.12. Nursing tenure distribution.

7.2.9 Organisational tenure profile

The largest group of respondents (54.9%) had worked with the current PHC centre for four years or less. Respondent nurses who worked for the current PHC centre for 10 years or more comprised 27.2% of the sample (see Figure 7.13). The mean number of years that respondents had worked in the current PHC centre was 6.64 years ($SD = 7.182$). The range of organisational tenure was 1 month through to 34 years. Figure 7.14 shows the distribution of organisational tenure (i.e. length of time worked in the current organisation).

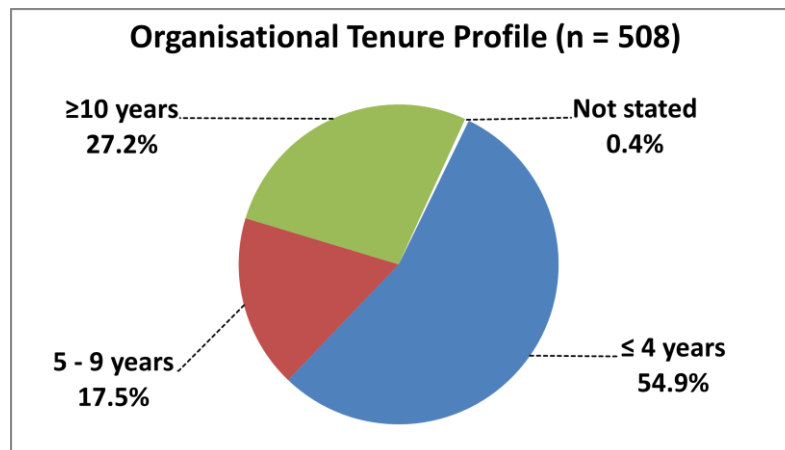


Figure 7.13. Organisational tenure of respondents.

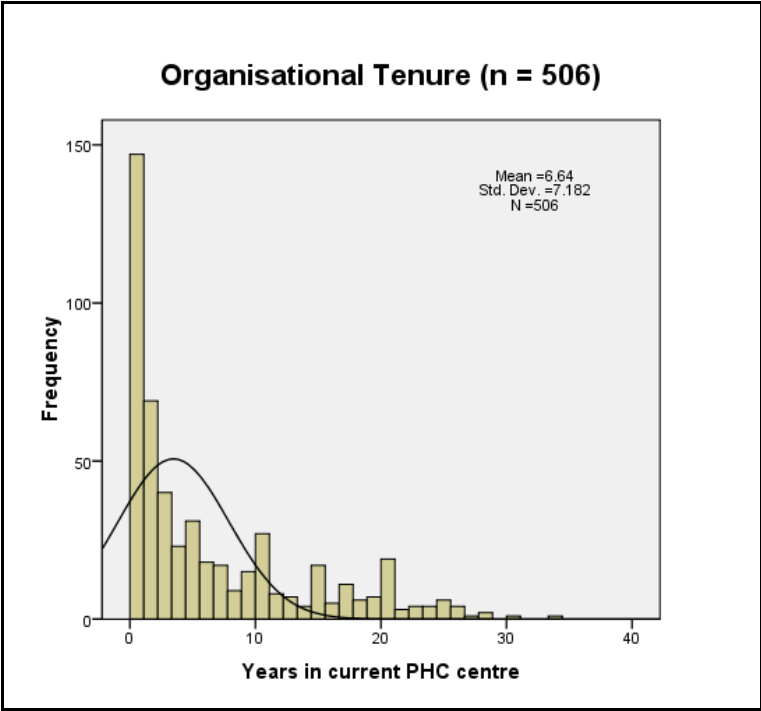


Figure 7.14. Organisational tenure distribution.

7.2.10 Positional tenure profile

The data showed that respondents have been in the current nursing position for an average of 6.10 years, with a standard deviation of 6.83 years. The maximum position tenure was 34 years, and the minimum was 1 month, with the largest group of respondents holding their position for about one year. Figure 7.15 illustrates the positional tenure of respondents in groups, while Figure 7.16 presents the distribution of the positional tenure.

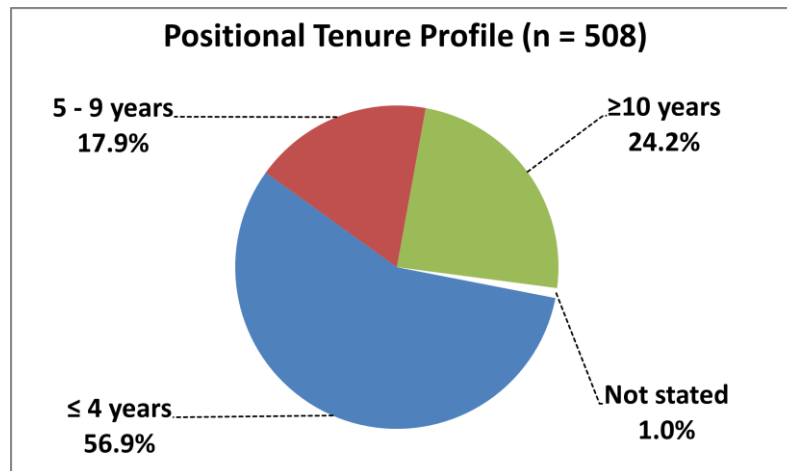


Figure 7.15. Positional tenure of respondents.

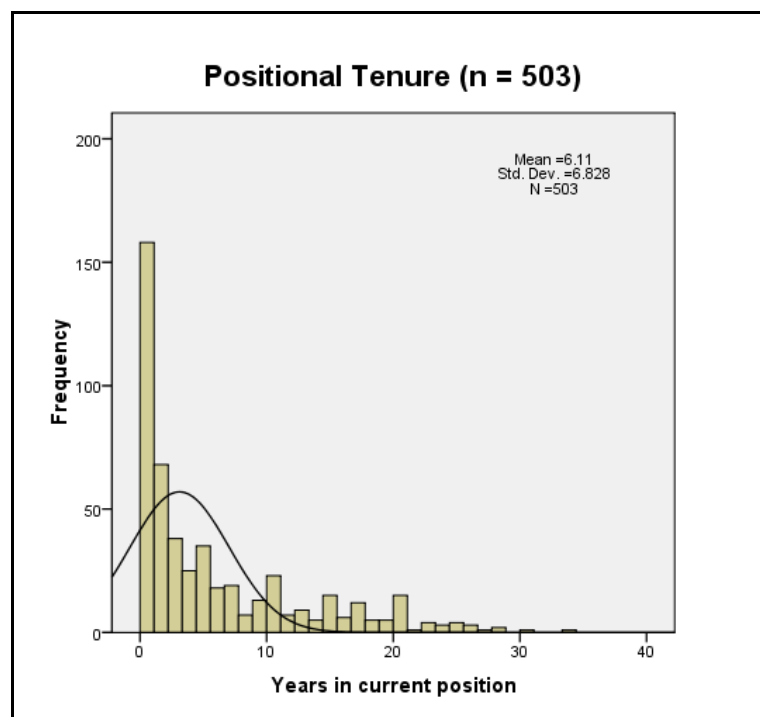


Figure 7.16. Positional tenure distribution.

7.2.11 Location of the PHC

Respondents were almost equally distributed between urban and rural areas. Approximately 52% ($n = 265$) were working in rural areas. Figure 7.17 shows the percentage of respondents according to the location of their PHC centre.

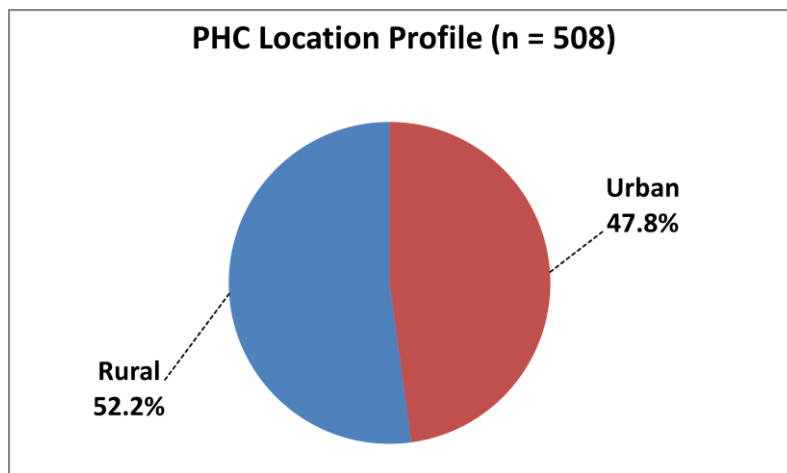


Figure 7.17. Location of PHC centres.

7.2.12 Payment profile

Approximately 46% of respondents indicated that their income was between SR 5,000 and 10,000 per month. Only 25.4% of the respondents were earning more than SR 10,000 per month. Nearly, 21% ($n = 106$) of respondents receive a salary less than SR 5,000 per month, and a majority ($n = 105$; 99%) of this category comprise non-Saudi nurses. Figure 7.18 illustrates the breakdown of monthly salary for the PHC nurses.

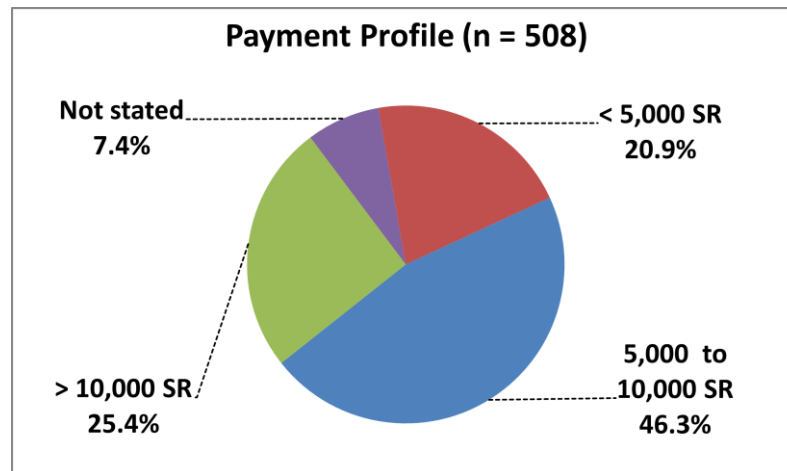


Figure 7.18. Payment per month.

Respondents also reported on their financial rewards and additional benefits. Most respondents reported that they receive neither additional financial rewards (92.5%) (e.g. for specialised certificates or completion of training courses), nor additional benefits (78.3%) (e.g. housing allowance or health insurance), respectively (see Table 7.4).

Table 7.4

Receiving additional financial rewards (for achievements) or additional benefits

		Financial rewards		Additional benefits	
		<i>n</i>	%	<i>n</i>	%
Valid	Yes	35	6.9	109	21.5
	No	470	92.5	398	78.3
	Total	505	99.4	507	99.8
Missing	System	3	0.6	1	0.2
Total		508	100	508	100

7.3 DESCRIPTION OF QWL AND TURNOVER INTENTION

This section provides descriptive statistics for the two main concepts, QWL and turnover intention. Frequencies, percentages, means, standard deviations and other statistical measures are presented.

7.3.1 Description of QWL

The respondents were asked about their perception of QWL as nurses working in PHC facilities. The aim was to gain an understanding of the QWL of PHC nurses by assessing their work life experience.

7.3.1.1 QWL Rating

The total possible score for Brooks' Scale, which consists of 42 items, can range from 42 to 252. A low total scale score indicates low overall QWL, while a high total score indicates high QWL. The same is true for each subscale: a high score indicates a more favourable environment. Respondents had a range scores of 45 to 218 ($M = 139.45$), which is lower than the average score on Brooks' Scale (147), indicating that the respondents were dissatisfied with their work life. The mean of the work life/home life and the work context subscales were lower than average: 18.97 and 66.25 respectively. For the work design and work world subscales, means of the actual range were almost equal to the average score, suggesting that respondents were not highly pleased with each dimension. Table 7.5 shows the range scores for the QWL items.

Table 7.5
Total scores and sub-scores for QWL items

Scale	Possible range	Average	Actual range	Mean	SD
42-Item scale	42-252	147	45-218	139.45	22.5
7-Item work life/home life subscale	7-42	24.5	8 -37	18.97	5.15
10-Item work design subscale	10-60	35	11-54	35.66	6.72
20-Item work context subscale	20-120	70	20-105	66.25	12.4
5-Item work world subscale	5-30	17.5	5-29	18.69	3.6

7.3.1.2 Describing QWL

Following the strategy used by Brooks and Anderson (2004), the 6-point scale was collapsed into two categories: agree and disagree. The agree category contains positive responses (agree, moderately agree and strongly agree), while the disagree category contains negative responses (strongly disagree, moderately disagree, and disagree).

7.3.1.2.1 Work life/home life dimension

The majority of nurse respondents were dissatisfied with items in the dimension of work life/home life. Approximately 83% ($n = 420$) of respondents reported their need to have on-site childcare services for sick children during working hours, and 78.9% ($n = 401$) agreed that it is important to have on-site/near childcare services. More than 80% ($n = 409$) agreed that they were not happy with working hours, which do not suit their daily life, 70.5% ($n = 352$) stated that they have no energy left after work, and over half at 58% ($n = 295$) of respondents were not able to balance work with their family needs. Over half at 58.5% ($n = 278$) of the respondents felt that the policy of their PHC centres for vacations was inappropriate, bot for the nurses and their families (see Table 7.6).

Table 7.6

Factors influencing the work life/home life dimension among PHC nurses

A		Work Life/Home Life Dimension			
		Agree		Disagree	
Item		No.	%	No.	%
Q5	Ability to balance work with family needs	213	41.9	295	58.1
Q10	Important to have on-site/near childcare services*	401	78.9	106	20.9
Q12	Energy left after work	150	29.5	358	70.5
Q20	The system of working hours negatively affects my life*	409	80.5	99	19.5
Q25	Policy for vacations is appropriate for me and for my family.	211	41.5	297	58.5
Q27	Important to have support for taking care of elderly parents*	242	47.6	266	52.4
Q36	Important to have on-site ill-child care services*	420	82.7	88	17.3

* Reversed sentences.

7.3.1.2.2 Work design dimension

Factors relating to the nursing workforce were the most influential ones in the work design dimension. Seventy-eight percent ($n = 397$) of the respondents indicated that there are not enough RNs in their PHC centres, 61% ($n = 310$) indicated that they do not have sufficient assistance from nursing assistants and service workers, and only 28.3% ($n = 144$) of the nurse respondents agreed that they have quality assistance from nursing assistants and service workers. A number of nurses commented that the nursing assistants and service workers are not trained well for working in the field of PHC. Forty percent of respondents ($n = 203$) found that their workload is heavy. Even in light of these results, 83.5% ($n = 424$) reported that they have enough time to do jobs, 74% ($n = 376$) stated that they provided good quality patient care, 61.6% agreed that they have autonomy to make client/patient care decisions, and 89.4% ($n = 454$) feel satisfied as PHC nurses (see Table 7.7).

Table 7.7
Factors influencing the work design dimension among PHC nurses

B	Work Design Dimension	Agree		Disagree	
		No.	%	No.	%
Q1	Sufficient assistance from nursing assistants and service workers.	198	39.0	310	61.0
Q2	Satisfaction with job as a PHC nurse	454	89.4	54	10.6
Q3	Workload is too heavy*	203	40.0	305	60.0
Q6	Autonomy to make client/patient care decisions	313	61.6	193	38.0
Q11	Many non-nursing tasks*	197	38.8	311	61.2
Q16	Many interruptions during daily work routine*	173	34.1	334	65.7
Q17	Enough time to do jobs	424	83.5	84	16.5
Q18	Enough RNs	111	21.9	397	78.1
Q23	Ability to provide quality client/patient care	376	74.0	132	26.0
Q42	Quality assistance from nursing assistants and service workers.	144	28.3	364	71.7

* Reversed sentences.

7.3.1.2.3 Work context dimension

Management and supervision issues were of concern. Almost sixty-five percent ($n = 287$) of respondents reported that they do not receive adequate supervision from their nurse manager/supervisor, 61% ($n = 310$) do not receive enough feedback regarding their performance, and only 31.7% ($n = 161$) felt recognised for their accomplishments. Sixty-three percent ($n = 188$) stated that they have no chance to participate in decision-making processes. Additionally, more than half of the nurse respondents (51.2%; $n = 260$) stated that the nursing policies and procedures are not supportive enough, and only 38.6% ($n = 169$) of the nurses in this sample felt respected by the upper-level management; nonetheless, 64.6% ($n = 328$) perceived that they have good communication with the management department.

In terms of development opportunities, 93% of the respondent nurses ($n = 473$) agreed that it is important to have the opportunity to further their nursing education without

leaving their current job, 72% ($n = 368$) claimed that they do not receive support to attend continuing education and training programs, and 71.1% ($n = 361$) reported that their work organisations do not provide adequate opportunities for career advancement.

More positively, nurses were notably satisfied with factors relating to their co-workers. Eighty-nine percent ($n = 453$) stated that they have good friendships and relationships with their co-workers. The majority of respondents (87.2%; $n = 443$ and 85.2%; $n = 433$) agreed they have good communication with other co-workers and physicians, respectively, and only 14.2% ($n = 75$) of respondents did not feel respected by physicians. Approximately 65.9% ($n = 335$) reported that there is teamwork in their organisations.

Regarding the working environment, nearly 60% ($n = 306$) felt that the security department did not provide a secure working environment, and about 45% ($n = 228$) felt unsafe in relation to personal harm (physical, emotional, or verbal) at work. Unexpectedly, only 40% ($n = 203$) reported that they have adequate client/patient care supplies and equipment. Nurses also reported the importance of having a private break-area (87%; $n = 446$) where they could have some time away from patients.

Despite expressing that they were not satisfied with many working factors, the majority of respondents (73%; $n = 371$) expressed a sense of belonging in their workplace. These results should encourage health leaders to improve the quality of work performance and the quality of nurses' work life. Table 7.8 shows the work context factors.

Table 7.8
Factors influencing the work context dimension among PHC nurses

C		Work Context Dimension			
Item		Agree		Disagree	
		No.	%	No.	%
Management and supervision					
Q7	Good communication with nurse manager/supervisor	328	64.6	180	35.4
Q9	Nurse manager/supervisor provides adequate supervision	221	43.5	287	65.5
Q22	Enough feedback by nurse manager/supervisor	198	39.0	310	61.0
Q26	Participate in decisions made by nurse manager/supervisor	188	37.0	320	63.0
Q33	Recognition of accomplishments	161	31.7	347	68.3
Q34	Nursing policies and procedures facilitate the work	248	48.8	260	51.2
Q40	Upper-level management has respect for nursing	196	38.6	312	61.4
Co-workers					
Q13	Friendships/relationships with co-workers	453	89.2	55	10.8
Q15	Availability of teamwork	335	65.9	173	34.1
Q21	Well-communication with other co-workers	443	87.2	65	12.8
Q28	Respect by physicians	435	85.6	72	14.2
Q32	Well-communication with physicians	433	85.2	75	14.8
Development opportunities					
Q14	Career advancement opportunities	147	28.9	361	71.1
Q30	Important to have the opportunity to further nursing education*	473	93.1	35	6.9
Q31	Support to attend continuing education/training programs	140	27.6	368	72.4
Work environment					
Q8	Adequate client/patient care supplies and equipment	203	40.0	305	60.0
Q19	Belong to the workplace	371	73.0	137	27.0
Q29	Important to have break-area for nurses*	446	87.8	62	12.2
Q35	Security department provide secure environment	202	39.8	306	60.2
Q38	Safe from personal harm at work	280	55.1	228	44.9

* Reversed sentences.

7.3.1.2.4 Work world dimension

Approximately three-quarters (75.6%; $n = 384$) of the nurses in this study did not think society has an accurate image of nurses. Ninety-five percent ($n = 482$) of nurses, however, believed that nursing work positively influences the lives of others, indicating excellent attitudes towards their career as well as an exceptional sense of self-image. Payment was also an essential factor that contributes to dissatisfaction among PHC nurses. Approximately 61% ($n = 312$) stated that their salary is not adequate, given the job market

condition and the nature of the roles they are performing. Although members of the nursing profession in Saudi Arabia are in critical demand, 62% ($n = 315$) of respondents think that they will not be able to find a similar job in another organisation easily; however, almost 77% ($n = 389$) believe that their jobs are secure so they do not expect to lose them unexpectedly. Table 7.9 presents factors related to the work world dimension.

Table 7.9
Factors influencing the work world dimension among PHC nurses

D	Work World Dimension	Agree		Disagree	
		No.	%	No.	%
Q4	Society has an accurate image of nurses	124	24.4	384	75.6
Q24	Salary is adequate	196	38.6	312	61.4
Q39	Job is secure	389	76.6	119	23.4
Q37	Ability to find the same job in another organisation	193	38.0	315	62.0
Q41	Nursing work positively impacts lives of others	482	94.9	26	5.1

7.3.2 Description of turnover intention

Respondents were asked, using the Anticipated Turnover Scale (ATS), about their perception of the possibility of voluntarily terminating their current job. As stated in the method section 6.5.2, the ATS is a self-report instrument that contains 12 items in a Likert-type scale with 7 response options: strongly agree (1) to strongly disagree (7). The total score was obtained by calculating the sum of all items in the scale divided by the number of items in the scale. A lower score suggests a higher intent to remain in a position. Conversely, a higher ATS score may be associated with a higher intent to leave a position (Hinshaw & Atwood, 1984). The responses for the ATS in this study ranged from 12 to 80, with a mean score of 41.11 and a standard deviation of 12.459. The total mean score was below the theoretical mean (48). Table 7.10 illustrates the descriptive

statistics of the possible and actual range of scores, theoretical and actual mean, and the standard deviation for ATS.

Table 7.10
Turnover intention

ATS	Theoretical		Results		
	Possible Range	Mean	Actual range	Mean	SD
	12-84	48	12-80	41.11	12.459

Based on the mean scores, the respondents were dichotomised into ‘stayers’ and ‘leavers’. Results suggested that about forty percent (40.4%, $n = 205$) of the respondents indicated that they intended to leave their current employment (see Figure 7.19).

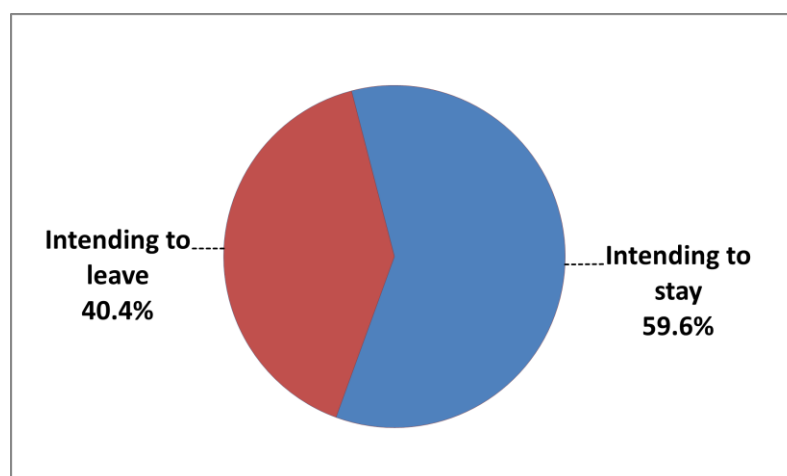


Figure 7.19. Intending to leave vs. intending to stay among PHC nurses.

The scores for turnover intention were analysed according to gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, years as a RN, years in the organisation, years in the current position, location of the PHC and payment per month. Approximately half of the male respondents (50.6%) indicated an

intention to leave, compared to 35.4% of the females. Respondents aged between 20-29 years were more likely to indicate turnover intention (49.1%) compared with other age groups. Nearly half of the never married nurses (49.6%) were more likely to leave their PHC than other groups. Forty-eight percent of respondents with no children and about 42% of those with dependent adults were more likely to have an intent to leave their organisation. With regard to the nationality, about forty-seven percent (46.8%) of non-Saudis indicated their intention to leave the current employment compared to thirty-eight percent (37.9%) of Saudi nurses. More than half (56.7%) of the Asian nurses indicated an intention to leave, followed by Indian nurses (47%). In addition, respondents were more likely to indicate turnover intention if they had an Associate degree (49.2%), Bachelor or higher (48.1%) and Diploma 46.5%, compared to an Institute qualification (26.3%). Additionally, about half of respondents with working, organisational and positional experience of four years or less were intending to leave their current PHC (53.2%, 49.8% and 49.8% respectively). Roughly, forty-four percent (43.8%) of nurses working in rural areas indicated a turnover intention. Finally, respondents with a monthly payment of less than SR 5,000 (51.9%) were more likely to indicate an intention to leave their current PHC. Figures 7.20 to 7.32 illustrate the turnover intention by demographic variables. The significance of the relationship between turnover intention and all demographic variables are presented in section 7.4.2.

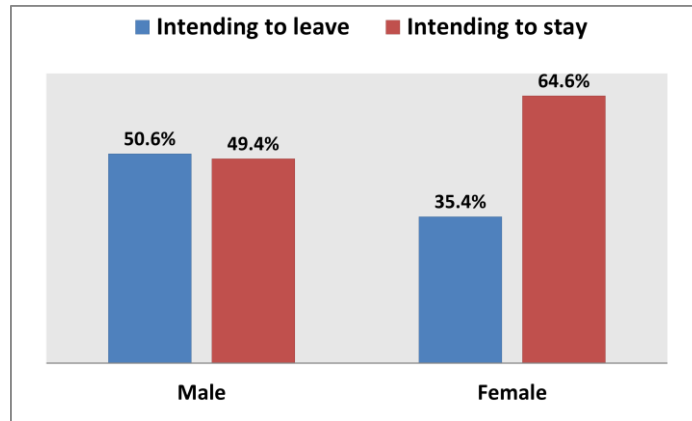


Figure 7.20. Turnover intention of respondents by gender.

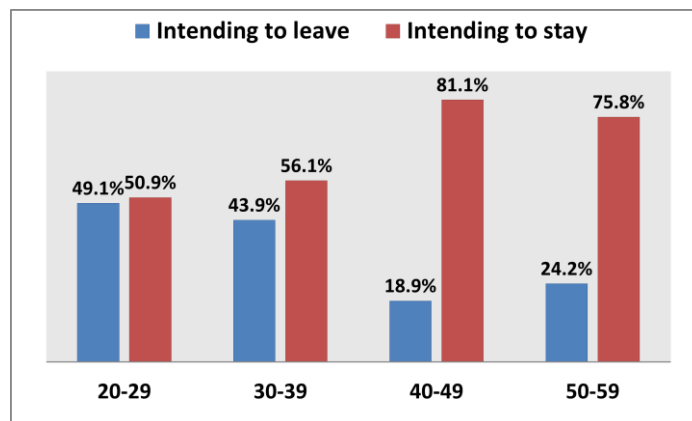


Figure 7.21. Turnover intention of respondents by age.

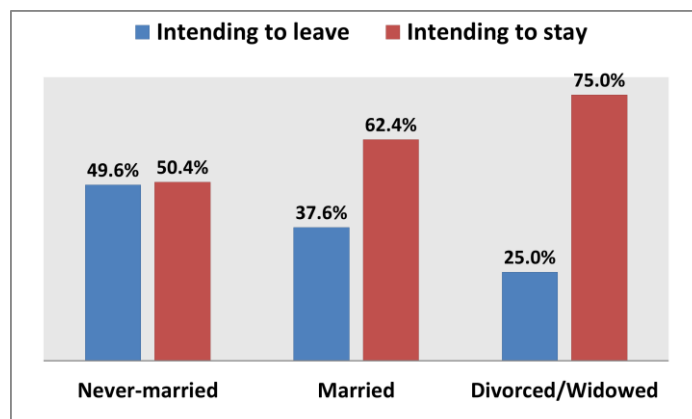


Figure 7.22. Turnover intention of respondents by marital status.

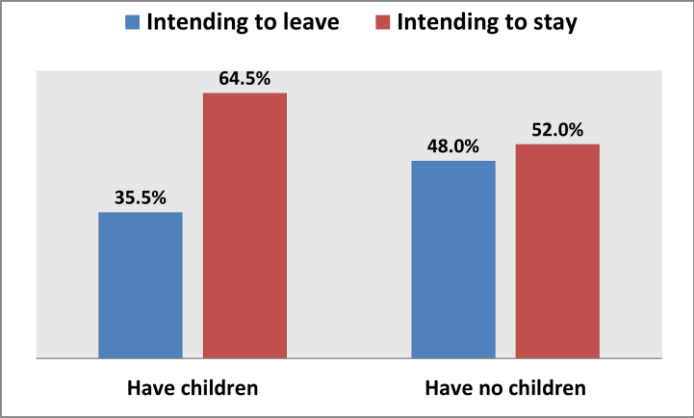


Figure 7.23. Turnover intention of respondents by dependent children.

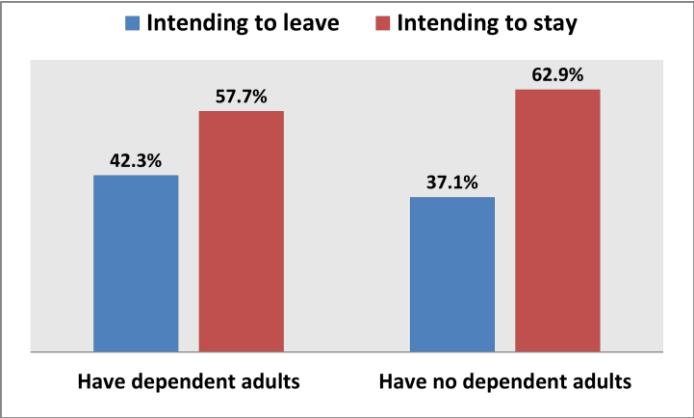


Figure 7.24. Turnover intention of respondents by dependent adults.

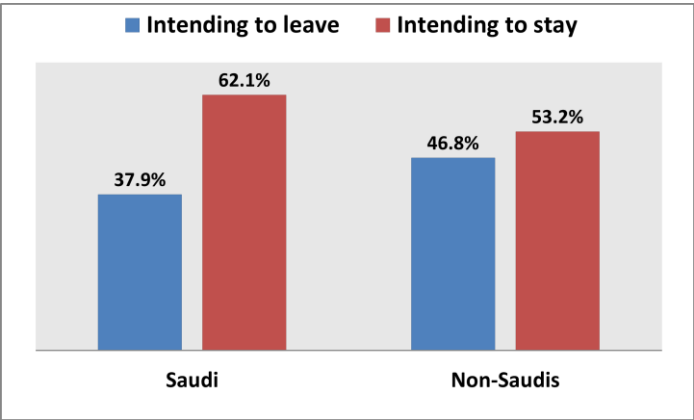


Figure 7.25. Turnover intention of respondents by nationality.

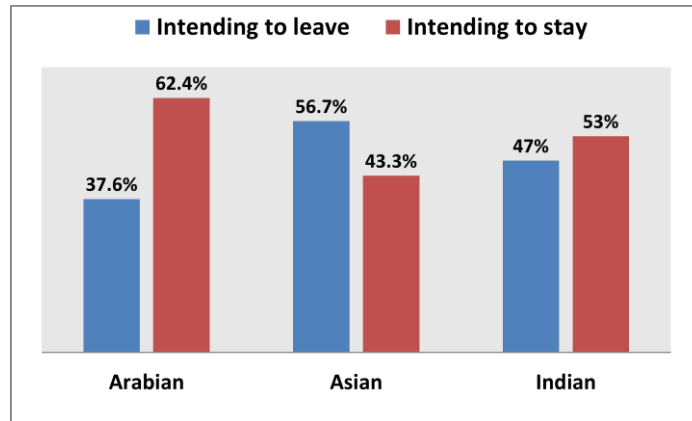


Figure 7.26. Turnover intention of respondents by ethnicity.

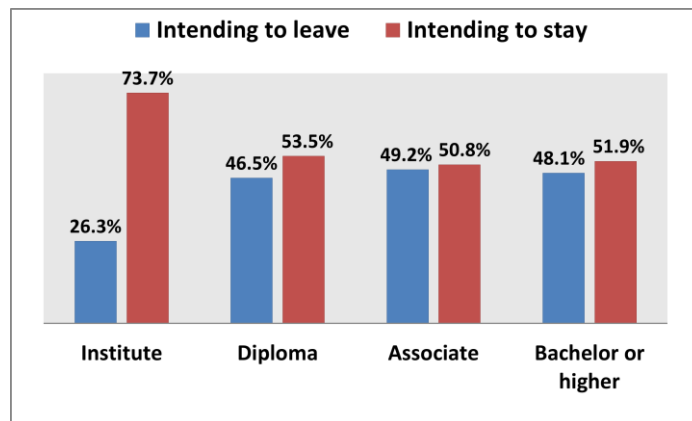


Figure 7.27. Turnover intention of respondents by level of education.

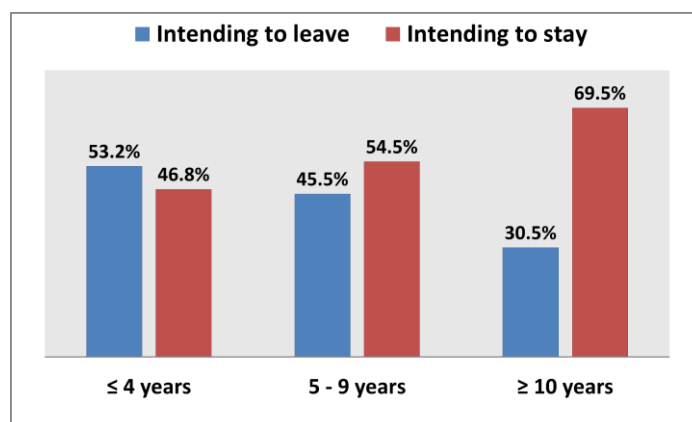


Figure 7.28. Turnover intention of respondents by years as RNs.

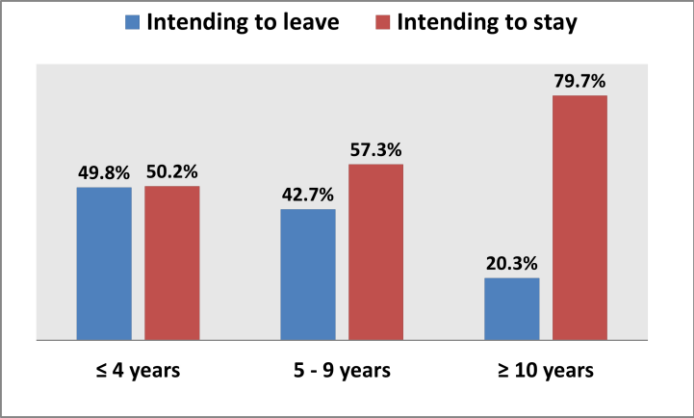


Figure 7.29. Turnover intention of respondents by tenure in the organisation.

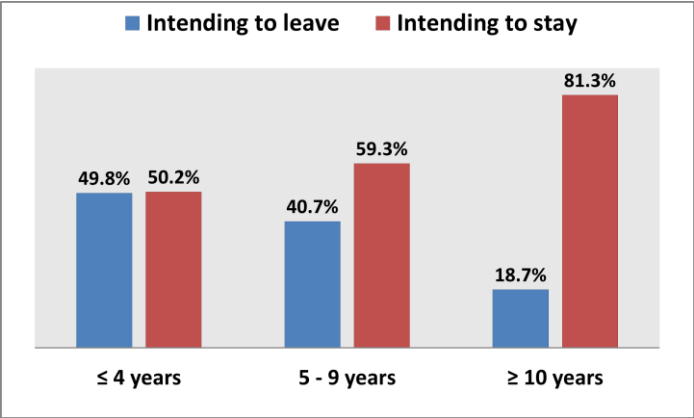


Figure 7.30. Turnover intention of respondents by length in position.

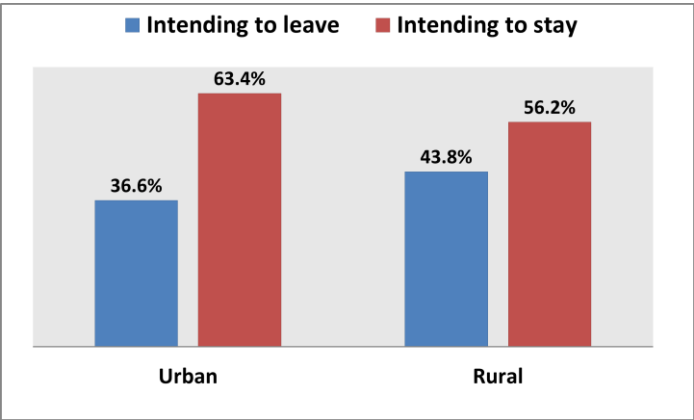


Figure 7.31. Turnover intention of respondents by location of the PHC.

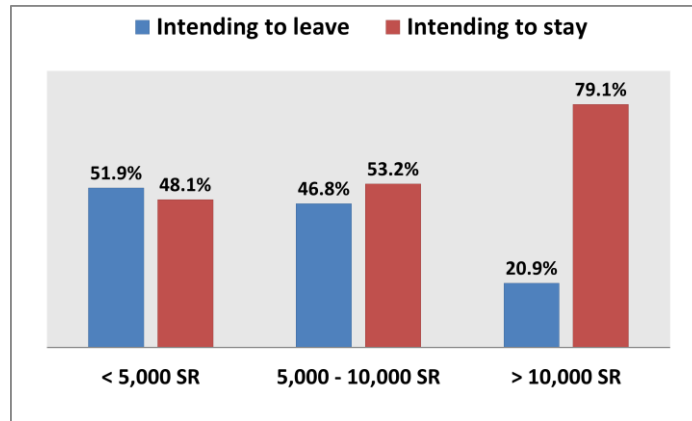


Figure 7.32. Turnover intention of respondents by payment per month.

7.4 INFERENCE ANALYSIS

This section presents the results of the data analysis for the posited hypotheses. A number of hypotheses were tested in this study.

7.4.1 Results for Research Hypothesis 1

Hypothesis 1 postulated that there is a relationship between QWL and demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, education level, nursing tenure, organisational tenure, positional tenure, location of PHC, and monthly income.

An independent samples *t*-test and an ANOVA were conducted to examine if there is any relationship between QWL and the abovementioned demographic variables, and to determine any significant difference in the QWL scores by levels of demographic variables.

Table 7.11 presents the relationship between QWL and demographic variables.

Table 7.11
QWL by demographic variables using independent sample t-test and ANOVA

Variable	Mean	SD	t/F-Value	P-Value
Gender				
Male	134.65	25.62	-3.11	.002
Female	141.81	20.77		
Age				
20-29 years	134.35	24.46	10.46	< .001
30-39 years	139.46	21.62		
40-49 years	147.42	16.65		
50-59 years	151.85	16.44		
Marital status				
Never married	133.26	26.26	6.49	.002
Married	141.25	20.84		
Divorced/Widowed	147.75	30.24		
Dependent children				
Yes	141.97	21.03	3.11	.002
No	135.55	24.65		
Dependent adults				
Yes	136.87	25.20	-2.87	.004
No	142.67	18.94		
Nationality				
Saudi	137.76	23.51	-2.69	.007
Non-Saudi	143.83	19.93		
Ethnicity				
Arab	138.13	23.49	3.92	.020
Asian	149.23	19.15		
Indian	141.70	20.09		
Education level				
Institute	139.72	24.76	1.85	.138
Diploma	138.69	21.65		
Associate	138.06	21.50		
Bachelor or higher	149.42	21.07		
Nursing tenure				
≤ 4 years	131.15	25.64	16.21	< .001
5-9 years	138.95	22.71		
≥ 10 years	144.54	19.33		
Organisational tenure				
≤ 4 years	135.17	24.88	11.62	< .001
5-9 years	143.24	18.95		
≥ 10 years	145.66	17.97		
Positional tenure				
≤ 4 years	135.44	24.67	11.13	< .001

Variable	Mean	SD	t/F-Value	P-Value
5-9 years	143.61	19.20		
≥ 10 years	145.83	18.06		
Location of PHC				
Urban	139.94	21.00	0.46	.647
Rural	139.01	24.18		
Payment per month				
< SR 5,000	141.74	20.68	5.05	.007
SR 5,000-10,000	135.83	25.49		
> SR 10,000	143.13	18.83		

7.4.1.1 Gender

Gender was significantly associated with QWL. There was a significant difference in scores for males ($M = 134.65$, $SD = 25.62$) compared with females ($M = 141.81$, $SD = 20.77$), $t(496) = -3.11$, $p = .002$. Female nurses were more satisfied with their QWL than male respondents. The magnitude of the differences in the means (mean difference = -7.16 , 95% CI: -11.69 to -2.63) indicated a small effect (eta squared = .02). This suggests that only 2 percent of the variance in QWL is explained by gender.

7.4.1.2 Dependent children

The variable of dependent children was significantly associated with QWL. There was a significant difference in scores for respondents with children ($M = 141.97$, $SD = 21.03$) and those who have no children ($M = 135.55$, $SD = 24.65$), $t(496) = 3.11$, $p = .002$. Respondents with children were more satisfied with their QWL than those who have no children. The magnitude of the differences in the means (mean difference = 6.42 , 95% CI: 2.36 to 10.48) indicated a small effect (eta squared = .02). This suggests that only 2% of the variance in QWL is explained by the presence of dependent children.

7.4.1.3 Dependent adults

The variable of dependent adults was significantly associated with QWL. There was a significant difference in scores for respondents with dependent adults ($M = 136.87$, $SD = 25.20$) and those without dependent adults ($M = 142.67$, $SD = 18.94$), $t(477) = -2.87$, $p = .004$. Respondents with dependent adults were less satisfied with their QWL compared to those without dependent adults. The magnitude of the differences in the means (mean difference = -5.80 , 95% CI: -9.76 to -1.83) indicated a small effect (eta squared = $.02$). This suggests that only 2 percent of the variance in QWL is explained by the variable of dependent adults.

7.4.1.4 Nationality

Nationality of respondents was significantly associated with QWL. There was a significant difference in scores for Saudi nurses ($M = 137.76$, $SD = 23.51$) and non-Saudi nurses ($M = 143.83$, $SD = 19.93$), $t(496) = -2.69$, $p = .007$. Non-Saudi nurses were more satisfied with their QWL. The magnitude of the differences in the means (mean difference = -6.07 , 95% CI: -10.50 to -1.64) indicated a small effect (eta squared = $.01$). This suggests that only 1 percent of the variance in QWL is explained by the nationality of respondents.

7.4.1.5 Location of PHC

Location of the PHC was not significantly associated to QWL. There was no significant difference in scores for urban ($M = 139.94$, $SD = 21.00$) and rural PHC ($M = 139.01$, $SD = 24.18$), $t(496) = 0.46$, $p = .647$. This result suggests that the location of the PHC does not have an effect on QWL.

7.4.1.6 Age

Age was significantly associated with the QWL scores. Respondents were divided into four groups according to their age (Group 1: 20-29 years; Group 2: 30-39 years; Group 3: 40-49 years; and Group 4: 50-59 years). There was a statistically significant difference at the $p < .05$ level in QWL scores for the four age groups: $F(3,481) = 10.46, p < .001$. The effect size, calculated using eta squared, was .06, meaning that the actual difference in mean scores between the groups was medium. Post-hoc comparisons using the LSD test indicated that the mean score for group 1 ($M = 134.35, SD = 24.46$) and group 2 ($M = 139.46, SD = 21.62$) were significantly different from each other and from all other groups. Group 3 ($M = 147.42, SD = 16.65$) did not differ significantly from Group 4 ($M = 151.85, SD = 16.44$). Respondents aged between 20-29 years were less satisfied with their QWL compared to other groups. Based on the mean scores for all groups, it was observed that as the age increased, the scores for QWL increased too.

7.4.1.7 Marital status

Marital status was significantly associated with the QWL scores. Respondents were divided into three groups according to their marital status (Group 1: Never married; Group 2: Married; Group 3: Divorced/widowed). There was a statistically significant difference at the $p < .05$ level in QWL scores for the three groups: $F(2,493) = 6.49, p = .002$. The effect size, calculated using eta squared, was .03, meaning that the actual difference in mean scores between the groups was small. Post-hoc comparisons using the LSD test indicated that the mean score for Group 1 ($M = 133.26, SD = 26.26$) was significantly different from Group 2 ($M = 141.25, SD = 20.84$) and Group 3 ($M = 147.75, SD = 30.24$). Group 2 did not differ significantly from Group 3. This suggests that nurses who had never married were less satisfied with their QWL compared to other groups.

7.4.1.8 Ethnicity

Ethnicity was found to be significantly associated with the QWL scores using ANOVA. Respondents were divided into three groups according to their ethnicity: Arab, Asian and Indian. There was a statistically significant difference at the $p < .05$ level in QWL scores for the three groups: $F(2,492) = 3.92$, $p = .020$. The effect size, calculated using eta squared, was .02, meaning that the actual difference in mean scores between the groups was small. Post-hoc comparisons using the LSD test indicated that the mean score for Arab ($M = 138.13$, $SD = 23.49$) was significantly different from Asian ($M = 149.23$, $SD = 19.15$). However, neither of these groups was significantly different from the Indian group ($M = 141.70$, $SD = 20.09$). This suggests that the Arab nurses were less satisfied with their QWL compared with other groups.

7.4.1.9 Education level

Education level of respondents was not significantly associated with the QWL scores. Respondents were divided into four groups according to their level of education: Institute, Diploma, Associate and Bachelor or higher. There was no statistically significant difference at the $p < .05$ level in QWL scores for the four groups: $F(3, 49) = 1.85$, $p = .138$. This result suggests that education level does not have an effect on QWL. However, based on the mean scores for all groups, it was observed that nurses with a Bachelor Degree or postgraduate qualification had higher QWL scores, followed by Institute and Diploma holders. Associate degree-prepared nurses had the lowest QWL scores.

7.4.1.10 Nursing tenure

Nursing tenure was significantly associated with the QWL scores. Respondents were divided into three groups according to their experience as RNs: ≤ 4 years, 5 to 9 years, and ≥ 10 years. There was a statistically significant difference at the $p < .05$ level in QWL scores for the three groups: $F(2,494) = 16.21, p < .001$. The effect size, calculated using eta squared, was .06, meaning that the actual difference in mean scores between the groups was medium. Post-hoc comparisons using the LSD test indicated that the mean scores for all groups: ≤ 4 years ($M = 131.15, SD = 25.64$), 5 to 9 years ($M = 138.95, SD = 22.71$), and ≥ 10 years ($M = 144.54, SD = 19.33$) were significantly different from each other. It was noted from the mean scores for all groups that the QWL increased as the years of experience as RNs increased.

7.4.1.11 Organisational tenure

Organisational tenure was significantly associated with the QWL scores. Respondents were divided into three groups according to their tenure in the current PHC: ≤ 4 years, 5 to 9 years, and ≥ 10 years. There was a statistically significant difference at the $p < .05$ level in QWL scores for the three groups: $F(2,493) = 11.62, p < .001$. The effect size, calculated using eta squared, was .05, meaning that the actual difference in mean scores between the groups was small. Post-hoc comparisons using the LSD test indicated that the mean scores for Group 1: ≤ 4 years ($M = 135.17, SD = 24.88$) was significantly different from Group 2: 5 to 9 years ($M = 143.24, SD = 18.95$), and Group 3: ≥ 10 years ($M = 145.66, SD = 17.97$). There was no significant difference between the means of Groups 2 and 3. Mean scores suggested a positive relationship between the scores of QWL and length of tenure in the current PHC. QWL increased as the organisational length of tenure increased.

7.4.1.12 Positional tenure

Positional tenure was significantly associated with the QWL scores. Respondents were divided into three groups according to their length in the current PHC: ≤ 4 years, 5 to 9 years, and ≥ 10 years. There was a statistically significant difference at the $p < .05$ level in QWL scores for the three groups: $F(2,492) = 11.13$, $p < .001$. The effect size, calculated using eta squared, was .04, meaning that the actual difference in mean scores between the groups was medium. Post-hoc comparisons using the LSD test indicated that the mean scores for Group 1: ≤ 4 years ($M = 135.44$, $SD = 24.67$) was significantly different from Group 2: 5 to 9 years ($M = 143.61$, $SD = 19.20$), and Group 3: ≥ 10 years ($M = 145.83$, $SD = 18.06$). There was no significant difference between the means of Groups 2 and 3. It was noted from the mean scores for all groups that QWL increased as the years in the position increased.

7.4.1.13 Payment per month

Payment per month was significantly associated with QWL scores. Respondents were divided into three groups according to the payment per month: $< \text{SR } 5,000$, $\text{SR } 5,000$ to $10,000$, and $> \text{SR } 10,000$. There was a statistically significant difference at the $p < .05$ level in QWL scores for the three groups: $F(2,457) = 5.05$, $p = .007$. The effect size, calculated using eta squared, was .02, meaning that the actual difference in mean scores between the groups was small. Post-hoc comparisons using the LSD test indicated that the mean scores for Group 2: $\text{SR } 5,000$ to $10,000$ ($M = 135.83$, $SD = 25.49$) was significantly different from Group 1: $< \text{SR } 5,000$ ($M = 141.74$, $SD = 20.68$), and Group 3: $> \text{SR } 10,000$ ($M = 143.13$, $SD = 18.83$). There was no significant difference between the means of Groups 1 and 3. This suggests that the respondents in Group 2 were less happy with their payment compared to others.

Overall, using the ANOVA and *t*-test, the hypothesised significant relationships between QWL and demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, nursing tenure, organisational tenure, positional tenure, and payment per month were supported. The eta squared test for these demographics indicates small to medium effect size of the variation in QWL scores. The relationships between QWL and demographic variables of education level and location of PHC were not supported (see Table 7.11).

The GLM univariate analysis was used to estimate the effect of the demographic variables on QWL. Despite the fact that all these variables (with the exception of education level and location of PHC) were significantly related to QWL when they were examined individually, examining them as a set using the GLM univariate revealed that only five demographic variables had strong relationships to QWL, $p < .05$. These include gender, dependent adults, education level, age and payment per month. However, the model as a whole is still significant. Altogether, the demographic variables explain 10.6% (Adjusted $R^2 = .10.6$) of the variability in QWL, $F(7,422) = 8.302$, $p < .001$. Table 7.12 presents the parameter estimates for the significant demographic variables on the dependent variable (QWL) scores.

Table 7.12

Parameter estimates of the demographic variables on the QWL using the GLM univariate analysis

Parameter	Estimates	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	115.973	7.470	15.526	< .001	101.291	130.655
Gender						
1 = Male	-6.360	2.514	-2.530	.012	-11.302	-1.418
2 = Female	0 ^a	.	.	.	.	.
Dependent adults						
1 = Yes	-5.659	2.191	-2.583	.010	-9.965	-1.353
2 = No	0 ^a	.	.	.	.	.
Education level						
1 = Institute	-12.154	5.924	-2.052	.041	-23.798	-.510
2 = Diploma	-2.833	5.345	-.530	.596	-13.340	7.674
3 = Associate	-2.332	6.085	-.383	.702	-14.292	9.628
4 = Bachelor or higher	0 ^a	.	.	.	.	.
Age	.692	.144	4.819	< .001	.410	.975
Payment per month	1.383	.447	3.092	.002	.504	2.262

a. This parameter is set to zero because it is redundant.

Note. Dependent variable: QWL. Only significant demographic variables and intercepts were presented in this table. R Squared = .121 (Adjusted R Squared = .106).

7.4.2 Results for Research Hypothesis 2

Hypothesis 2 postulated that there is a relationship between turnover intention among the PHC nurses and their demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, education level, nursing tenure, organisational tenure, positional tenure, location of PHC, and payment per month.

An independent samples *t*-test and ANOVA were conducted to examine if there is any relationship between turnover intention and demographic variables, and to determine any significant difference in the turnover intention scores by levels of demographic variables. Table 7.13 presents the relationship between turnover intention and demographic variables.

Table 7.13
Turnover intention by demographic variables (independent sample t-test and ANOVA)

Variable	Mean	SD	t/F-Value	P-Value
Gender				
Male	43.99	13.61	3.48	.001
Female	39.71	11.62		
Age				
20-29 years	43.20	11.87	7.24	< .001
30-39 years	41.79	13.48		
40-49 years	35.93	11.58		
50-59 years	38.36	9.46		
Marital status				
Never married	43.37	12.89	2.98	.052
Married	40.48	12.29		
Divorced/Widowed	37.42	12.21		
Dependent children				
Yes	39.97	12.56	-2.59	.010
No	42.89	12.12		
Dependent adults				
Yes	42.04	13.14	1.85	.066
No	39.94	11.56		
Nationality				
Saudi	40.93	13.22	-0.59	.555
Non-Saudi	41.58	10.25		
Ethnicity				
Arab	40.87	13.26	0.48	.620
Asian	43.00	9.47		
Indian	41.57	10.08		
Education level				
Institute	38.87	13.66	3.12	.026
Diploma	41.86	11.73		
Associate	43.66	12.69		
Bachelor or higher	41.96	8.75		
Nursing tenure				
≤ 4 years	44.37	13.05	9.49	< .001
5-9 years	41.93	10.76		
≥ 10 years	38.82	12.51		
Organisational tenure				
≤ 4 years	43.52	12.21	16.50	< .001
5-9 years	41.06	11.50		
≥ 10 years	36.28	12.31		
Positional tenure				

Variable	Mean	SD	t/F-Value	P-Value
≤ 4 years	43.84	12.45	20.64	< .001
5-9 years	39.92	10.92		
≥ 10 years	35.62	11.85		
Location of PHC				
Urban	40.60	12.51	-0.89	.374
Rural	41.58	12.42		
Payment per month				
< SR 5,000	42.45	10.53	9.60	< .001
SR 5,000-10,000	42.98	12.80		
> SR 10,000	37.25	12.82		

7.4.2.1 Gender

There was significant association between gender and turnover intention, $t(506) = 3.48$, $p = .001$, with males receiving higher scores ($M = 43.99$, $SD = 13.61$) than females ($M = 39.71$, $SD = 11.62$). Male nurses were more likely to indicate an intention to leave compared to the females. The magnitude of the differences in the means (mean difference = 4.28, 95% CI: 1.86 to 6.70) indicated a small effect (eta squared = .02). This suggests that only 2 percent of the variance in turnover intention is explained by gender.

7.4.2.2 Dependent children

The dependent children variable was significantly associated with turnover intention. There was a significant difference in scores for respondents with children ($M = 39.97$, $SD = 12.56$) and those who have no children ($M = 42.89$, $SD = 12.12$), $t(506) = -2.59$, $p = .010$. Respondents with children were less likely to indicate an intention to leave compared with those who have no children. The magnitude of the differences in the means (mean difference = -2.92, 95% CI: -5.13 to -0.70) indicated a small effect (eta squared = .01). This means that only 1 percent of the variance in turnover intention is explained by the variable of dependent children.

7.4.2.3 Dependent adults

The variable of dependent adults was not significantly associated with turnover intention. There was no significant difference in scores for respondents with dependent adults ($M = 42.04$, $SD = 13.14$) and those who have no dependent adults ($M = 39.94$, $SD = 11.56$), $t(487) = 1.85$, $p = .066$. This result suggests that the variable of dependent adults does not have an effect on turnover intention.

7.4.2.4 Nationality

Nationality of respondents was not significantly associated with turnover intention. There was no significant difference in scores for Saudi nurses ($M = 40.93$, $SD = 13.22$) and non-Saudi nurses ($M = 41.58$, $SD = 10.25$), $t(506) = -0.59$, $p = .555$. This result suggests that nationality does not have an effect on turnover intention.

7.4.2.5 Location of the PHC

Location of the PHC was not associated with turnover intention. There was no significant difference in scores for urban ($M = 40.60$, $SD = 12.51$) and rural PHC ($M = 41.58$, $SD = 12.42$), $t(506) = -0.89$, $p = .374$. This result suggests that the location of the PHC does not have an effect on turnover intention.

7.4.2.6 Age

ANOVA was conducted to explore the impact of age on the turnover intention scores. Respondents were divided into four groups according to their age (Group1: 20-29 years; Group 2: 30-39 years; Group 3: 40-49 years; Group 4: 50-59 years). There was a statistically significant difference at the $p < .05$ level in turnover intention scores for the four age groups: $F(3,491) = 7.24$, $p < .001$. The effect size, calculated using eta squared, was .04. Post-hoc comparisons using the LSD test indicated that the mean score for

Group 1 ($M = 43.25$, $SD = 11.87$) was significantly different from Group 3 ($M = 35.93$, $SD = 11.58$) and Group 4 ($M = 38.36$, $SD = 9.46$). Group 2 ($M = 41.79$, $SD = 13.48$) was also significantly different from Group 3. Group 4 did not differ significantly from Groups 2 and 3. Respondents in Group 1 (20-29 years) were more likely to indicate turnover intention compared to the other groups. Based on the mean scores for all groups, it was observed that as age increased, the scores of turnover intention decreased, except for Group 4 (50-59) where their scores of turnover intention were higher than Group 3 (40-49). This may be attributed to being at a point close to retirement among respondents of Group 4.

7.4.2.7 Marital status

Marital status was significantly associated with the turnover intention scores. Respondents were divided into three groups according to their marital status (Group 1: Never married; Group 2: Married; Group 3: Divorced/widowed). There was a statistically significant difference at the $p < .05$ level in turnover intention scores for the three groups: $F(2,503) = 2.98$, $p = .052$. The effect size, calculated using eta squared, was .01. Post-hoc comparisons using the LSD test indicated that the mean score for Group 1 ($M = 43.37$, $SD = 12.89$) was significantly different from Group 2 ($M = 40.48$, $SD = 12.29$). Group 3 ($M = 37.42$, $SD = 12.21$) did not differ significantly from Groups 1 or 2. Nurses who have never married were more likely to indicate turnover intention compared to the other groups.

7.4.2.8 Ethnicity

Ethnicity was not significantly associated with the turnover intention scores. Respondents were divided into three groups according to their ethnicity: Arab ($M = 40.87$, $SD = 13.26$), Asian ($M = 43.00$, $SD = 9.47$) and Indian ($M = 41.57$, $SD = 10.08$). There was no statistically significant difference at the $p < .05$ level in turnover intention scores for the three groups: $F(2,502) = 0.479$, $p = .620$. This result suggests that ethnicity had little effect on turnover intention.

7.4.2.9 Education level

Education level of respondents was significantly associated with the turnover intention scores. Respondents were divided into four groups according to their level of education: Institute, Diploma, Associate and Bachelor or higher. There was a statistically significant difference at the $p < .05$ level in turnover intention scores for the four groups: $F(3, 500) = 3.12$, $p = .026$. The effect size, calculated using eta squared, was .02. Post-hoc comparisons using the LSD test indicated that the mean scores for Group 1: Institute ($M = 38.87$, $SD = 13.66$) was significantly different from Group 2: Diploma ($M = 41.86$, $SD = 11.73$), and Group 3: Associate ($M = 43.66$, $SD = 12.69$). There was no significant difference between means of Groups 2 and 3. Group 4 ($M = 41.96$, $SD = 8.75$) was also not significantly different from all the other groups. Respondents with an Associate Degree were more likely to indicate turnover intention compared to the other groups. Based on the mean scores for all groups, it was observed that as the education level increased, the scores for turnover intention increased, too, except for Group 4 (Bachelor or higher) where their scores of turnover intention were lower than for Group 3 (Associate).

7.4.2.10 Nursing tenure

Nursing tenure was significantly associated with the turnover intention scores. Respondents were divided into three groups according to their experience as RNs: ≤ 4 years, 5 to 9 years, and ≥ 10 years. There was a statistically significant difference at the $p < .05$ level in turnover intention scores for the three groups: $F(2,504) = 9.49, p < .001$. The effect size, calculated using eta squared, was .04. Post-hoc comparisons using the LSD test indicated that the mean scores for group 3: ≥ 10 years ($M = 38.82, SD = 12.51$) was significantly different from Group 1: ≤ 4 years ($M = 44.37, SD = 13.05$), and Group 2: 5 to 9 years ($M = 41.93, SD = 10.76$). There was no significant difference between the means of Groups 1 and 2. It was noted from the mean scores for all groups that as the years of experience as RNs increased, the indication of turnover intention decreased.

7.4.2.11 Organisational tenure

Organisational tenure was significantly associated with the scores of turnover intention. Respondents were divided into three groups according to their tenure in the current PHC: ≤ 4 years, 5 to 9 years, and ≥ 10 years. There was a statistically significant difference at the $p < .05$ level in turnover intention scores for the three groups: $F(2,503) = 16.50, p < .001$. The effect size, calculated using eta squared, was .06. Post-hoc comparisons using the LSD test indicated that the mean scores for Group 3: ≥ 10 years ($M = 36.28, SD = 12.31$) was significantly different from Group 1: ≤ 4 years ($M = 43.52, SD = 12.21$), and Group 2: 5 to 9 years ($M = 41.06, SD = 11.50$). There was no significant difference between the means of Groups 1 and 2. It was noted from the mean scores for all groups that as the tenure in the organisation increased, the indication of turnover intention decreased.

7.4.2.12 Positional tenure

Positional tenure was significantly associated with the turnover intention scores. Respondents were divided into three groups according to their length in the current position: ≤ 4 years, 5 to 9 years, and ≥ 10 years. There was a statistically significant difference at the $p < .05$ level in turnover intention scores for the three groups: $F(2,500) = 20.64$, $p < .001$. The effect size, calculated using eta squared, was .08. Post-hoc comparisons using the LSD test indicated that the mean scores for all groups: ≤ 4 years ($M = 43.84$, $SD = 12.45$), 5 to 9 years ($M = 39.92$, $SD = 10.92$), and ≥ 10 years ($M = 35.62$, $SD = 11.85$) were significantly different from each other. It was noted from the mean scores for all groups that as the years in the position increased, the turnover intention decreased.

7.4.2.13 Payment per month

Payment per month was significantly associated with the scores of turnover intention. Respondents were divided into three groups according to the payment per month: $< \text{SR } 5,000$, $\text{SR } 5,000$ to $10,000$, and $> \text{SR } 10,000$. There was a statistically significant difference at the $p < .05$ level in turnover intention scores for the three groups: $F(2,467) = 9.60$, $p < .001$. The effect size, calculated using eta squared, was .04. Post-hoc comparisons using the LSD test indicated that the mean scores for Group 3: $> \text{SR } 10,000$ ($M = 37.25$, $SD = 12.82$) was significantly different from Group 1: $< \text{SR } 5,000$ ($M = 42.45$, $SD = 10.53$), and Group 2: $\text{SR } 5,000 - 10,000$ ($M = 42.98$, $SD = 12.80$). There was no significant difference between the means of Groups 1 and 3. It was noted from the mean scores for all the groups that as the salary increased, the indication of turnover intention decreased.

Overall, using ANOVA and *t*-test, the hypothesised significant relationships between turnover intention and demographic variables of gender, age, marital status, dependent children, education level, nursing tenure, organisational tenure, positional tenure, and payment per month were supported. The eta squared test for these demographics indicates small to moderate effect size of the variation in turnover intention scores. The relationships between turnover intention and demographic variables of dependent adults, nationality, ethnicity, and location of PHC were not supported (see Table 7.13).

The GLM univariate analysis was used to estimate the effect of the demographic variables to the turnover intention. Despite the fact that all these variables (with the exception of dependent adults, nationality, ethnicity and location of PHC) were significantly related to the turnover intention when they were examined individually, examining them as a set using the GLM univariate found that only four demographic variables had strong relationships to the turnover intention, $p < .05$. These include gender, dependent adults, positional tenure and payment per month. However, the model as a whole is still significant. Altogether, the demographic variables explain 11.1% (Adjusted $R^2 = .111$) of the variability in turnover intention, $F(4,444) = 14.976$, $p < .001$. Table 7.14 presents the parameter estimates for the significant demographic variables on the turnover intention scores.

Table 7.14

Parameter estimates of the demographic variables on the turnover intention using the GLM univariate analysis

Parameter	Estimates	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	46.069	1.546	29.804	< .001	43.031	49.107
Gender						
1 = Male	4.371	1.286	3.399	.001	1.844	6.898
2 = Female	0 ^a	.	.	.	.	.
Dependent adults						
1 = Yes	2.238	1.162	1.925	.055	-.047	4.522
2 = No	0 ^a	.	.	.	.	.
Positional tenure	-.350	.092	-3.792	< .001	-.532	-.169
Payment per month	-.644	.197	-3.261	.001	-1.032	-.256

a. This parameter is set to zero because it is redundant.

Note. Dependent variable: Turnover Intention. Only significant demographic variables and intercepts were presented in this table. R Squared = .133 (Adjusted R Squared = .098).

7.4.3 Results for Research Hypothesis 3

Hypothesis 3(a, b, and c) postulated that the dimensions of QWL (work life/home life, work design, work context, and work world) are useful in predicting turnover intention of PHC nurses. Standard multiple regression analysis was used to predict the effects of QWL dimensions (work life/home life, work design, work context, and work world) on the turnover intention and to determine the best predictor of turnover intention. Hierarchical multiple regression was then used to assess the ability of the QWL dimensions to predict turnover intention after controlling for demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, education level, nursing tenure, organisational tenure, positional tenure, and payment per month.

7.4.3.1 Hypothesis 3a

Hypothesis 3a hypothesises that the QWL dimensions (work life/home life, work design, work context and work world) are useful in predicting turnover intention. A standard multiple regression was performed between turnover intention as the dependent variable and the four dimensions of QWL (work life/home life, work design, work context, and work world). With four variables to be included in the regression analysis, the critical $\chi^2 = 18.50$ (Tabachnick & Fidell, 2007). Thus, multivariate outliers were operationalised as cases with Mahalanobis Distance Values greater than 18.50. Using this method, two multivariate outliers were detected (case 5 = 20.47 and case 409 = 20.09). Therefore, data from 496 participants were retained for analyses. Preliminary analyses found no violation of the assumptions of normality, linearity, homoscedasticity, and multicollinearity. Normality specifies that the residual should be normally distributed about the dependent variable scores, while linearity indicates that the residuals should have a straight-line relationship with the dependent variable scores. In homoscedasticity, the variance of the residuals regarding the dependent variable scores should be the same for all scores (Lomax, 2007; Pallant, 2007). Finally, multicollinearity occurs when the independent variables are highly correlated ($r = .9$ and above) (Pallant, 2007). Tests conducted to assess multicollinearity between the independent variables found that the highest correlation is .67, which is less than .7. Table 7.15 shows the correlations between the variables.

Table 7.15
Correlation between QWL variables and turnover intention

Variables	Turnover Intention*	Work life/home life	Work Design	Work Context
Work life/home life	-.245**			
Work Design	-.408**	.446**		
Work Context	-.497**	.424**	.667**	
Work World	-.291**	.309**	.444**	.418**

* Dependent variable. ** Correlation is significant at the 0.01 level.

R for regression was significantly different from zero, $F(4,491)$, 43.71, $p < .001$, with $R^2 = .263$ (see Table 7.16). Altogether, 26% of the turnover intention among the PHC nurses was explained by knowing the scores for the four dimensions of QWL.

Table 7.16
Model summary for standard multiple regression of the QWL dimensions on the turnover intention scores

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.512 ^a	.263	.257	10.625

a. Independent Variables: (Constant), Work life/Home life, Work Design, Work Context, Work World.

Note. Dependent Variable: Turnover intention.

7.4.3.2 Hypothesis 3b

Hypothesis 3b speculates that among the four dimensions of QWL, the work life/home life and work context dimensions make the best contribution to explicating the turnover intention of the PHC nurses. In this case, the interest is to compare the contribution of each independent variable to the dependent variable (turnover intention); therefore, the beta values - standardised regression coefficients - will be used. As Pallant (2007)

explained, “standardised means that these values for each of the different variables have been converted to the same scale so that they can be compared to each other” (p.159). The largest beta value in this case was $-.387$, which is for work context, followed by work design ($-.112$). This means that the work context variable makes the strongest unique contribution to explaining turnover intention, when the variance explained by all other variables in the model was controlled for. The other significant variable was work design $p < .05$. Its beta value ($-.112$) was lower than the work context value, indicating that it made less of a contribution. Although the bivariate correlations between turnover intention and each of the work life/home life and work world dimensions were statistically different from zero, they did not contribute significantly to the explanation of turnover intention. Apparently, the relationship between turnover intention and each of the work life/home life and work world dimensions are mediated by the relationships between the other independent variables (work design and work context) and turnover intention. Table 7.17 displays the unstandardised coefficients (B), standard error, standardised coefficients (β), t value and the significance of model for the standard multiple regression.

Table 7.17

Summary of coefficients for the standard multiple regression of the QWL dimensions on the turnover intention scores

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Variable		B	Std. Error (SE)	Beta (β)		
1	(Constant)	79.878	3.210		24.888	< .001
	Work life/home life	-.018	.107	-.007	-.169	.866
	Work design	-.208	.102	-.112*	-2.041	.042
	Work context	-.394	.055	-.387**	-7.209	< .001
	Work world	-.270	.155	-.077	-1.740	.082

Note. Dependent variable is turnover intention. * $p < .05$. ** $p < .001$.

7.4.3.3 Hypothesis 3c

Hypothesis 3c assumes that the QWL dimensions (work life/home life, work design, work context and work world) are still useful in predicting turnover intention after controlling for the possible effect of the demographic variables of the PHC nurses. The hierarchical multiple regression analysis was used to test this hypothesis. The demographics were entered at Step 1, explaining 13.2% of the variance in turnover intention. After entry of the four dimensions of QWL (work life/home life, work design, work context and work world) at Step 2, the total variance explained by the model as a whole was 32.1%, $F(17,433) = 12.04, p < .001$. The four QWL dimensions explained an additional 19% of the variance in turnover intention, after controlling for demographic variables, R^2 change = .19, F change (4, 433) = 30.190, $p < .001$. In the final model, only four variables were statistically significant: work context recording a highest beta ($\beta = -.37, p < .001$), followed by positional tenure ($\beta = -.30, p < .05$), payment per month ($\beta = -.23, p < .05$), and finally, gender ($\beta = -.11, p < .05$). Table 7.18 displays the unstandardised coefficients (B), standard error, standardised coefficients (β), t value and the significance of the model for hierarchical multiple regression.

Table 7.18

Summary of coefficients for hierarchical multiple regression of the QWL dimensions on the turnover intention scores after controlling for demographic variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Variable		B	Std. Error (SE)	Beta (β)		
Step 1	(Constant)	59.524	6.135		9.702	< .001
	Gender	-4.405	1.394	-.168*	-3.159	.002
	Positional tenure	-.543	.229	-.301*	-2.368	.018
	Payment per month	-1.310	.393	-.361**	-3.336	.001
Step 2	(Constant)	87.826	6.169		14.235	< .001
	Gender	-2.907	1.253	-.111*	-2.319	.021
	Positional tenure	-.532	.204	-.295*	-2.602	.010
	Payment per month	-.840	.353	-.231*	-2.381	.018
	Work life/home life	-.047	.127	-.019	-.366	.715
	Work design	-.128	.109	-.069	-1.174	.241
	Work context	-.380	.058	-.374**	-6.507	< .001
	Work world	-.225	.162	-.064	-1.386	.166

Note. $R^2 = .132$ (Adjusted $R^2 = .106$) for Step 1, $R^2 = .321$ (Adjusted $R^2 = .294$) for Step 2 ($p < .001$). Only significant coefficients and QWL dimensions are presented in this table. * $p < .05$. ** $p < .001$.

7.5 SUMMARY

Chapter 7 presented the quantitative findings of this study on QWL and turnover intention among the surveyed PHC nurses. The instruments used for this study were Brooks' QNWL survey, the ATS, and the PHC demographic survey. Demographic variables used for the analyses were gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, education level, nursing tenure, organisational tenure, positional tenure, location and payment per month. The study questions sought to examine the relation of QWL and turnover intention to the PHC nurse demographics (Hypotheses 1 and 2 respectively) using independent sample *t*-test, ANOVA and GLM univariate analysis. The research questions also sought to examine the relationships of the QWL dimensions (work life/home life, work design, work context and work world) and turnover intention using multiple regression (Hypothesis 3). The descriptive analysis of QWL and turnover intention data suggested that many respondents were dissatisfied with their work life and that almost 40% of the sample indicated that they intended to leave their current PHC.

The data analysis for Hypothesis 1, using *t*-test and ANOVA analyses, revealed significant relationships between QWL and the selected demographic variables, except for education level and location of the PHC. The eta squared test for these demographics indicates a small to medium effect size of the variation in QWL scores. Using the GLM univariate analysis, five demographic variables (gender, dependent adults, education level, age and payment per month) indicated a strong relationship to the dependent variable (QWL). Similarly, the hypothesised significant relationships between turnover intention and demographic variables of the PHC nurses (Hypothesis 2) were supported, using *t*-test and ANOVA analyses, except for the variables of dependent adults, nationality, ethnicity, and

location of the PHC. The eta squared test for these demographics indicates a small to moderate effect size of the variation in the turnover intention scores. Using the GLM univariate analysis, four variables had a strong relationship to the turnover intention. These include gender, dependent adults, positional tenure and payment per month.

In the analysis of Hypotheses 3a and 3b, the standard multiple regression was used to predict the effects of the QWL dimensions (work life/home life, work design, work context, and work world) on turnover intention and to determine the best contributor to turnover intention. Altogether, approximately one-quarter (26%) of turnover intention among the PHC nurses was explained by knowing the scores on the four dimensions of QWL. The work context variable makes the strongest unique contribution to explaining the turnover intention, followed by the work design dimension. The relationship between turnover intention and each of the work life/home life and work world dimensions are mediated by the relationships between the other independent variables (work design and work context) and turnover intention. Further analysis using hierarchical multiple regression was done to assess the ability of the QWL dimensions to predict turnover intention after controlling for the possible effect of the demographic variables of the PHC nurses (Hypothesis 3c). The four QWL dimensions explained 19% of the variance in turnover intention. However, in the final model, only four variables were statistically significant: work context, followed by positional tenure, payment per month, and finally gender. Having analysed and presented the survey data, the next chapter presents the qualitative results from responses to the open-ended questions. The qualitative analysis provides additional insights into QWL and turnover intention of PHC nurses in Saudi Arabia.

Chapter 8: Qualitative Results

8.1 INTRODUCTION

Chapter 8 presents the qualitative results from the open-ended questions. The chapter commences with a description of the process used to present the qualitative findings. The chapter then presents the perceptions of the nurse respondents towards their QWL and related factors. Factors related to nurses' turnover intention are also presented and discussed. Finally, the chapter concludes by providing a brief summary of the qualitative findings.

8.2 OPEN-ENDED QUESTIONS

Five open-ended questions were included in the questionnaire to allow the PHC nurses to identify any specific factors that influence their QWL and turnover intention. Questions involved in this section of the thesis were as follows:

1. Considering the current job, how do you perceive your quality of work life?
2. What factors make you satisfied with your work life?
3. What factors make you dissatisfied with your work life?
4. Do you have intention to leave your current job (in Primary Health Care) during the next 12 months? Why?
5. Do you have intention to leave your current job (in Primary Health Care) during the next five years? Why?

The following sections of this chapter present the findings for each open-ended question.

8.3 RESULTS

The response rate for the open-ended section was considerable; of the total of 508 PHC nurses who completed the questionnaires, 415 responded to the open-ended questions (RR = 81.7%). Given the abundance of responses to the open-ended questions and the large number of identified influencing factors on the nurses' QWL and turnover intention, the findings with examples of related raw data have been presented in tabular forms so that they are more organised and easy to follow. For Questions two, three, four and five, the revealed factors were categorised under the four main dimensions of QWL and the demographics as relevant. This chapter presents the qualitative findings on their own, without supporting discussion; however, the triangulation of these findings to the quantitative results and the linking to the literature is available in Chapter 9. The findings for each question were as follows:

8.3.1 Considering the current job, how do you perceive your quality of work life?

The respondents were asked about their perception of QWL as PHC nurses. The response rate to this question was 74.9% ($n = 311$), compared with the total response to the open-ended questions. Almost half of the respondents to this question (47.1%, $n = 147$) reported negative statements, indicating that they were dissatisfied with their work life. Tables 8.1 and 8.2 present a number of selective statements from the responses. For more examples of responses, see Appendix F.

Table 8.1
Examples of negative responses to the open-ended Question 1

Participant no.	Negative statements of responses to the open-ended Question 1
5	“Very bad work life. I work in a mountain area where there are no networks, no electricity, no safe roads, etc.”
30	“There is a shortage in the number of health professionals. For example, our centre does not have a pharmacist, epidemiological technician, statistical technician, medical record specialist. The building is not suitable for PHC purposes. We do not receive any incentives for distinguished employees. Most important, our team is not constant. They transfer us from one centre to another. I’m not happy with my overall work life.”
249	“I believe my QWL is not good. I try my best to do a good job, but the work is boring. There’s not enough equipment, important departments like x-ray and lab are not available, and working hours are not suitable for our lifestyle.”
302	“Our work life is not good because of the heavy workload, long working hours, management, and my family is not happy with my work.”
490	“Our work life is not satisfactory. There are not enough instruments or equipment to perform our duty at a high level. There also no facilities for nurses such as an area for our breaks.”

Table 8.2
Examples of positive responses to the open-ended Question 1

Participant no.	Positive statements of responses to the open-ended Question 1
135	“I feel that my work is very good. I like it. I can say that I’m happy.”
147	“I really like my work. I enjoy helping others. I thank Allah [God] who has guided me to this smart job. Through it I have satisfied myself and benefited my community.”
328	“Very nice working life. It suits my family circumstances.”
342	“My QWL is good. I think this is because I perceive my responsibility towards my work as a PHC nurse. I put all efforts into helping patients. I thank God for giving me the opportunity to work in this humane job of nursing.”
406	“In this centre, I feel satisfied with my personal and working needs”

8.3.2 What factors make you satisfied with your work life?

Respondents appeared to have no genuine interest in responding to this question. Only 33% ($n = 137$) of the respondents to the open-ended section addressed this question. The aim of this question was to determine factors that enhance the satisfaction of PHC nurses towards their QWL and to reveal any latent factors that were not covered in the questionnaire. Factors that were common to the obtained responses were categorised as demographics or under the four dimensions of QWL, namely work life/home life, work design, work context, and work world. These factors include family and family needs, working hours, nature of work, level of job satisfaction, management and supervision, co-workers, patient and community, security of job, payment, belief of nurses towards nursing, location of the PHC, and finally the distance from home to work. Table 8.3 shows the common factors with supporting examples of the raw data. For more examples of responses, see Appendix F.

Table 8.3

Factors influencing PHC nurses' satisfaction with their QWL, with examples of responses to the open-ended Question 2

Q2 What factors make you <u>satisfied</u> with your work life?				
Participant no.	Examples of responses	Sub-factor	Factor	QWL dimensions & demographics
225	"Being at the PHC, I can cater for my personal and family responsibilities."	<ul style="list-style-type: none"> • Balance work with family needs 	Family and family needs	Work Life/ Home Life
53	"I enjoy the chance to work beside my husband in the same organisation. I also have the chance to live with my children here in Saudi Arabia until they reach school age when we will send them home to study."	<ul style="list-style-type: none"> • Being with the family 		
140	"I feel happy because my family is happy too and they provide helpful support for me."	<ul style="list-style-type: none"> • Family support 		
491	"Working hours are suitable for my life. I also have 2 days off per week."	<ul style="list-style-type: none"> • Time and length of duty 	Working hours	
44	"I can spend some time with my family after work and fulfil my personal duties."	<ul style="list-style-type: none"> • Energy left after work 		
67	"I love my work. It helps me to build my knowledge and skills in the field of PHC nursing."	<ul style="list-style-type: none"> • Work experience 	Nature of the work	Work Design
40	"Being in a noble profession and doing my job sincerely is making me satisfied with my work life."		Level of job satisfaction	
128	"I have good communication with the nurse manager and the director of the centre."	<ul style="list-style-type: none"> • Communication with the manager 	Management and supervision	Work Context
468	"The nurse manager provides adequate supervision."	<ul style="list-style-type: none"> • Supervision by the manager 		
329	"My managers appreciate my efforts towards the patients and their families."	<ul style="list-style-type: none"> • Appreciation for accomplishments 		

Q2 What factors make you <u>satisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factor	Factor	QWL dimensions & demographics	
468	“This organisation provides us with nursing policies and procedures that direct our performance.”	• Policies and procedures			
109	“Cooperation of my managers.”	• Support and cooperation			
202	“Good communication with my colleagues.”	• Communication with co-workers		Co-workers	
11	“I am happy with my colleagues. We have good friendships and relationships.”	• Friendships and relationships with co-workers			
97	“We are cooperative so we help each other as needed.”	• Support and cooperation of co-workers			
365	“Working with people who value my work.”	• Respect and appreciation by co-workers			
202	“Good communication with the patients.”	• Communication with patients		Patients and the community	
205	“The patients show good cooperation with our programs.”	• Cooperation of patients			
499	“People ... are friendly.”	• Relationships with and respect from patients			
61	“I am proud and happy to serve and help people. It is my duty.”	• Helping patients and the community			
69	“I feel satisfied when I help patients and their families and I hear their nice feedback, pray to God to bless me.”	• Acceptance of service by patients			

Q2 What factors make you <u>satisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factor	Factor	QWL dimensions & demographics	
319	“The future of PHCs in Saudi Arabia looks secure so I think my job is OK.”		Security of job	Work World	
61	“Here as RNs we get a better salary than in our country.”	• Salary	Payment		
202	“I really understand the importance of my work so I like it.”		Belief of nurses towards nursing		
64	“Although the centre is in a rural area, I feel happy. It is located in my area.”		Location of the PHC	Demographics	
249	“I can walk to the centre in a few minutes.”		Distance from home to work		

8.3.3 What factors make you dissatisfied with your work life?

More than three-quarters (82.7%, $n = 343$) of the respondents to the open-ended section answered this question. This high response indicated that the majority of the PHC nurses were facing some challenges that impact their QWL. The question aimed at identifying the most influencing factors on the satisfaction of the PHC nurses towards their QWL. These factors include family and family needs, working hours, facilities for nurses, social and cultural aspects, lack of PHC workforce (poor staffing), heavy workload, non-nursing tasks, nature of work, management and supervision, co-workers, lack of development opportunities, work environment, patient and community, poor image of nursing, insecurity of job, payment, location of PHC and the distance from home to work. The common factors revealed by this question were categorised as demographics or under the four dimensions of QWL. Factors and supporting examples of the raw data are presented in Table 8.4. For more examples of responses, see Appendix F.

Table 8.4

Factors influencing PHC nurses' dissatisfaction with their QWL, with examples of responses to the open-ended Question 3

Q3	What factors make you <u>dissatisfied</u> with your work life?			
Participant no.	Examples of responses	Sub-factor	Factors	QWL dimensions & demographics
140	“As a mother, I can’t look after my kids. Yes, I bring them money, but money is not everything.”	• Balance work with family needs	Family and family needs	Work Life/home Life
78	“Female nurses must have the chance to bring their family to this country. Why are male nurses and physicians (male or female) offered visa for their families while the female nurses are not? To ensure high QWL, female nurses should have the opportunity to bring their families.”	• Being away from the family		
311	“Absence of the family support makes me dissatisfied with my work life.”	• Family support		
171	“Long duty for one work period and the two work periods strategy is not suitable for us. It interrupts the working and personal life. The solution is to reduce the length of the duty to 7 hours per day.”	• Time and length of duty	Working hours	
120	“We spend most of our time at work and we get back home tired.”	• Energy left after work		
151	“No childcare services. It’s necessary for the PHC to provide us with such services.”	• Caring for children	Facilities for nurses	
45	“Staying in the same hostel alone with a group of other nationalities.”	• Hostel and accommodation		
100	“Short annual vacation. It is only one month after a long year of heavy working. One month is too short compared with the annual vacation of female teachers.”	• Leave and vacations		
321	“Absence of transportation to and from work. We are in need for this facility, even if it is a public service.”	• Transportation		
425	“In almost all PHC hostels, nurses stay alone without their family. No enjoyment, only monthly shopping. Please, this must be changed. Take staff for a picnic, because if they are well (mentally and physically), they will give better care for the patients.”	• Social life and enjoyment	Social and cultural aspects	

Q3 What factors make you <u>dissatisfied</u> with your work life?				
Participant no.	Examples of responses	Sub-factor	Factors	QWL dimensions & demographics
148	“Shortage of nurses in the PHC sector. More nurses are required for better health care.”	• RNs	Lack of PHC workforce (staffing)	Work Design
402	“Support personnel such as nursing assistants are not available.”	• Nursing assistants		
30	“We have a shortage of pharmacists, technicians, epidemiologists, health records’ technician, and technical statisticians.”	• Other health professionals		
283	“The population of this centre is about 7,000. In addition to caring for males, I also care for the children who come with their fathers. This condition puts a heavy workload on me and affects my life.”		Heavy workload	
362	“The roles assigned to the nurses in the PHC must be controlled. They should not cover in departments such as dental, pharmacy, management, medical records and so on.”		Non-nursing tasks	
9	“My current job does not entail a bright future in the job market, because nowadays they prefer hospital experience.”	• Work experience	Nature of the work	
184	“Lack of communication with our managers. They do not listen to our complaints.”	• Communication with the manager	Management and supervision	Work Context
123	“Our managers and supervisors do not understand our challenges. They are only concerned about the work and the organisation.”	• Supervision by the manager		
151	“I feel dissatisfied when managers and supervisors do not appreciate my efforts. I really like the nursing, but when you have no appreciation or support, you will be upset.”	• Appreciation for accomplishments		
286	“Lack of job description and healthcare policy for PHC nursing. Our work depends on personal vision.”	• Policies and procedures		
391	“We ask managers to be more cooperative, especially when we face some challenges that could stop us from attending to our duties.”	• Support and cooperation		

Q3 Participant no.	What factors make you <u>dissatisfied</u> with your work life? Examples of responses	Sub-factor	Factors	QWL dimensions & demographics
258	“Lack of stability in one workplace. They always relocate us from one centre to another.”	<ul style="list-style-type: none"> • Sense of instability 		
25	“Lack of communication with colleagues such as nurses, physicians, pharmacists.”	<ul style="list-style-type: none"> • Communication with co-workers 	Co-workers	
41	“Dissatisfied relationship with co-workers.”	<ul style="list-style-type: none"> • Friendships and relationships with co-workers 		
322	“My colleague ‘nurses’ are uncooperative and do not show feelings of responsibility.”	<ul style="list-style-type: none"> • Support and cooperation of co-workers 		
210	“Nurses need to be protected from the physicians’ dominance and lack of respect.”	<ul style="list-style-type: none"> • Respect and appreciation by co-workers 		
30	“Absence of a ranking system for nurses. There is no significant difference in the roles and positions of RNs with different qualifications.”	<ul style="list-style-type: none"> • Career advancement 	Development opportunities	
404	“Procedures for continuing study are very difficult. Access to degree and postgraduate levels should be facilitated for nurses who wish to further their education at local and international universities.”	<ul style="list-style-type: none"> • Access to education degrees 		
99	“There is a lack in training courses and continuing education. It is essential to establish a library and classes in each PHC or at least for each group of PHC centres.”	<ul style="list-style-type: none"> • Continuing education and training courses 		
139	“The building is very old and not large enough to allow for all the PHC activities. It is not suitable for PHC services.”	<ul style="list-style-type: none"> • PHC building 	Work environment	
194	“The nurses do not have a particular place for rest and prayer. They also do not have personal storage lockers.”	<ul style="list-style-type: none"> • Break areas 		

Q3 Participant no.	What factors make you <u>dissatisfied</u> with your work life? Examples of responses	Sub-factor	Factors	QWL dimensions & demographics
359	“There is a severe deficiency in required resources and support for the PHC facilities. There are no modern tools or appliances, no service cars, no ambulances, especially in rural and remote areas. The healthcare leaders are only concerned about the quantity, but not the quality. They open more and more PHCs, but they do not think about how to operate them.”	<ul style="list-style-type: none"> • Infrastructure facilities 		
402	“More clinics and departments such as females, dental and x-ray are required for high level of patient care.”	<ul style="list-style-type: none"> • PHC departments 		
166	“There is not enough medical equipment, and the available ones are very old and out of order.”	<ul style="list-style-type: none"> • Equipment and supply 		
164	“The managers are all men so they give us no privacy as female nurses. Female departments must be headed by female managers.”	<ul style="list-style-type: none"> • Privacy at work 		
487	“Lack of secure environment. Patients sometimes assault us verbally and physically.”	<ul style="list-style-type: none"> • Safety at work 		
351	“Language barrier and literacy limit my role in providing health care.”	<ul style="list-style-type: none"> • Communication with patients 	Patients and the community	
193	“People in this area are uncooperative.”	<ul style="list-style-type: none"> • Cooperation of patients 		
265	“People are always talking about nurses dealing with patients; however, there is a need to teach patients in how to deal with nurses, too.”	<ul style="list-style-type: none"> • Relationships with and respect from patients 		
314	“Patients have no idea about the nature of our daily work. They want to finish quickly.”	<ul style="list-style-type: none"> • Level of patient awareness 		
70	“I feel disappointed when patients are not satisfied with my services.”	<ul style="list-style-type: none"> • Non-acceptance of service by patients 		
303	“The image of nursing among people does not make me feel happy. I want to transfer to the city where there are more chances for work and people are more educated and have		Image of nursing	Work World

Q3 Participant no.	What factors make you <u>dissatisfied</u> with your work life?	Examples of responses	Sub-factor	Factors	QWL dimensions & demographics
		a better image of nurses.”			
386	“My job is not secure. It could be unemployed at any time. I am working on a contract job. For example, last year while I was preparing for health education lectures, I was surprised that my contract was terminated. It was like a shock, because just a few days before, I received an appreciation certificate. If my direct manager had not fought to keep me within his teamwork, I could now be out of the country.”			Job insecurity	
425	“My friend and I have the same experience, but she gets a higher salary than me”. “I want to leave within 5 years, because I have a lower salary which is not enough for my family's needs. I spend half the salary in this country on food and other life requirements.”		• Salary	Payment	
74	“Why don't nurses receive additional payment for working in risky environments (financial support for risky jobs)?”		• Allowances and financial incentives		
335	“When new staff are appointed in the PHC sector, it is better to post them in centres which are not so rural. Appoint them in centres with telephone and communication facilities, because first impressions are last impressions. If they work in a rural area first, they will be in trouble and they will think about giving up their job.”			Location of the PHC	Demographics
500	“The PHC is far from where I live.”			Distance from home to work	

8.3.4 Do you have intention to leave your current job (in Primary Health Care) during the next 12 months? Why?

This question was addressed by about 94% ($n = 390$) of the respondents to the open-ended questions. Of them, 62.6% ($n = 244$) stated they were not intending to leave the current PHC, 29.5% ($n = 115$) stated yes they had turnover intention within the next 12 months, and 7.9% ($n = 31$) were not sure yet. For stayers, the findings revealed a number of influencing factors. These include: family and family needs, job satisfaction, nature of the work, co-workers, patients and the community, location of the PHC and distance from home to work. For leavers, influencing factors include: family and family needs, working hours, workload, nature of the work, management and supervision, development opportunities, payment, location of the PHC and distance from home to work. For both categories of stayers and leavers, these factors were grouped under the four main dimensions of QWL and demographics. Tables 8.5 and 8.6 present the most commonly recited factors for both stayers and leavers, with supported statements from their responses to open-ended Question four. For more examples of responses, see Appendix F.

Table 8.5

Factors influencing PHC nurses' intention to stay in their PHC organisations in the next 12 months, with examples of responses to the open-ended Question 4

Participant no.	Example of responses	Factors	QWL Dimensions & Demographics
178	"No. I need my work to support my family in my country."	Family & family needs	Work Life/ Home Life
23	"I am satisfied in my current job in the present PHC centre."	Job satisfaction	Work Design
271	"No. The PHC is the closest to the community. It looks after the health of all (individual, family and the community). I like it."	Nature of the work	
249	"No intention to leave, because I have good relationships with my colleagues ..."	Co-workers	Work Context
70	"No, working in the PHC is a comprehensive service to the community. I feel satisfied when I serve the community and when they get happy with my performance."	Patients & the community	
320	"The location of my current PHCC encourages me to stay here."	Location of the PHC	Demographics
190	"No. My work is very close to my home ..."	Distance from home to work	

Table 8.6

Factors influencing turnover intention of PHC nurses in the next 12 months, with examples from responses to the open-ended Question 4

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
256	“Yes, my family is staying in my country ... The children are growing and they need their mother for better care ... no family visa.”	Family & family needs	Work Life/ Home Life
129	“Yes. Because of long working hours.”	Working hours	
283	“Yes. If I get the chance to transfer to a hospital, I will not say no. I want to work within a team of male nurses so we can share the work and the workload.”	Workload	Work Design
212	“Yes. I plan to move to a hospital to get current knowledge and experience in nursing practice. There I will get the chance to see new cases, medications and modern equipment.”	Nature of the work	
251	“Yes. There is no support or appreciation for our efforts; our managers are busy with attendance papers.”	Management & supervision	Work Context
11	“Yes. I want to pursue my study.”	Development opportunities (career advancement & education)	
6	“Yes. I am not satisfied with work conditions including ... lack of salary.”	Payment (Salary & Allowances)	Work World
443	“Yes. If I get another job with better amenities, I will leave. Currently, I work in a rural area with little support. I do not receive any rewards for working in a rural area. I was not provided with accommodation, like other expatriate nurses.”	Location of the PHC	Demographics
364	“Yes, this centre is too far. I want to move to the area where my family lives.”	Distance from home to work	

8.3.5 Do you have intention to leave your current job (in Primary Health Care) during the next five years? Why?

About 92% ($n = 382$) of the respondents to the open-ended question answered this question. Of them, 47.4% ($n = 181$) intended to leave the current PHC within the next five years, 42.7% ($n = 163$) intended to stay, and 9.9% ($n = 38$) were not certain about their future. The most influencing factors for the stayers include: family and family needs, job satisfaction, nature of the work, co-workers, patients and the community, tenure in PHC, location of the PHC and distance from home to work. For leavers, influencing factors include: family and family needs, working hours, job dissatisfaction, workload, nature of the work, management and supervision, development opportunities, payment, age, location of the PHC and distance from home to work. For both categories of stayers and leavers, these factors were grouped under the four main dimensions of QWL and demographics. The most commonly cited factors for both stayers and leavers together with supporting statements from their responses to open-ended Question five are presented in Tables 8.7 and 8.8. For more examples of responses, see Appendix F.

Table 8.7

Factors influencing PHC nurses' intention to stay in their PHC organisations in the next 5 years, with examples of responses to the open-ended Question 5

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
66	"No. I have to support the medical expenses of my daughter and I still love my work here."	Family & family needs	Work Life/ Home Life
26	"I am satisfied with my current job; I would like to stay here until the MOH terminates my contract."	Job satisfaction	Work Design
319	"I will stay at this centre ... it is where I can practise my knowledge and skills."	Nature of the work	
326	"No intention to leave, because I am happy and agree with the staff in this organisation ..."	Co-workers	Work Context
172	"No ... I know all the people in this area and I know their health conditions and social circumstances. I am almost one of them."	Patients & the community	
97	"No intention to leave within the next 5 years. I have spent many years in this centre and if I leave, it will be just for retirement."	Tenure in PHC	Demographics
24	"I am living and working in the city. I am happy."	Location of the PHC	
305	"No. I plan to stay here, because it is close to my home."	Distance from home to work	

Table 8.8

Factors influencing turnover intention of PHC nurses in the next 5 years, with examples of responses to the open-ended Question 5

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
62	“Yes. I have some family problems so I want to transfer to Madina Monawara. My husband and children are there and they suffer from being apart from me. I hope and wish for a transfer.”	Family & family needs	Work Life/ Home Life
99	“Yes. I will leave this centre as soon as I can, because the long working hours do not fit with my family life as a wife and mother. I want to spend more time with my husband and kids.”	Working hours	
385	“I am not satisfied with my current job. I want to transfer to a hospital.”	Job dissatisfaction	Work Design
15	“Heavy workload.”	Workload	
497	“Yes. I wish to go back to King Fahd Hospital. Working in a PHC is boring. In a hospital, one can increase one's experience regarding diseases, medications and nursing practices.”	Nature of the work	
99	“Upper management does not respect nurses or appreciate their efforts. For making small mistakes, nurses are penalised by transferring them to other centres or by reducing their salaries.”	Management & supervision	Work Context
338	“I have the intention to leave for educational purposes. I want to study a degree and a Master.”	Development opportunities (career advancement & education)	
73	“I have the intention to leave, because nurses do not receive fair payments. All the major increases are only directed to the physicians. We work more than them.”	Payment (Salary & Allowances)	Work World
367	“Yes, because at that time, I'll already be old and I want to be with my family.”	Age	Demographics
15	“My workplace is located on the border area. It is far from the city and social life.”	Location of the PHC	
308	“During the next 5 years, I will try to get closer to my house and family. I will look for another centre or hospital.”	Distance from home to work	

8.4 SUMMARY

This chapter presented the qualitative results from the open-ended questions that aimed to provide a narrative description of the PHC nurses' perception towards the main variables of the study; QWL and turnover intention. These questions specifically examined the satisfaction of PHC nurses with their QWL and identified the influencing factors, assessed the respondents' turnover intention during the next 12 months and the next 5 years as well as identified the major drivers for their final intention. While almost half of the respondents appeared to be satisfied with their QWL, the other half (47.1%) reported negative statements regarding their QWL, indicating that they were dissatisfied with their work life. A number of factors were identified as influencers on the PHC nurses' perception towards their QWL. Positive factors include family and family needs, working hours, nature of work, level of job satisfaction, management and supervision, co-workers, patient and community, security of job, payment, belief of nurses towards nursing, the location of the PHC, and the distance to the work. Common factors associated with dissatisfaction with QWL include family and family needs, working hours, facilities for nurses, social and cultural aspects, lack of PHC workforce (poor staffing), heavy workloads, non-nursing tasks, nature of work, management and supervision, co-workers, lack of development opportunities, work environment, patient and community, poor image of nursing, insecurity of job, payment, the location of the PHC, and the distance from home to work.

The findings of the turnover intention open-ended questions indicated that approximately 63% of respondents were not intending to leave their current PHC job within the next 12 months, 29.3% had a turnover intention, and 8% were unsure. For the 'stayers', family and family needs, job satisfaction, nature of work, co-workers, patients and the community, and the location of the PHC centre were the key influencing or 'pull' factors.

For the 'leavers', the main influencing or 'push' factors were family and family needs, working hours, workload, nature of work, management and supervision, lack of development opportunities, inadequate payment, and the location of the PHC.

For the next five years, the findings were that 46% of respondents intended to leave their current PHC job, while 44% were intending to stay, and 10% were unsure. The influencing factors were almost the same as those for the 12-month period. However, three additional factors emerged for the 5-year period, namely, tenure in the PHC as a retention factor, and job dissatisfaction and age as 'push' factors. The next chapter provides a discussion which synthesises the quantitative and qualitative findings in terms of the theory and practice.

Chapter 9: Discussion

9.1 INTRODUCTION

This chapter presents a summary of the study, triangulates the quantitative and the qualitative findings and discusses them in the context of the literature. The discussion covers the perception of QWL among PHC nurses, their turnover intention in relationship to their QWL and the relationship of dependent factors (QWL and turnover intention) to the respondents' demographic characteristics. Finally, the chapter provides a brief summary of the discussion.

9.2 SUMMARY OF THE STUDY

The purpose of this study was to improve the retention of PHC nurses through exploring and assessing their QWL and intention to leave. The objectives of this study were to: (1) assess the perception of PHC nurses towards their QWL; (2) explore turnover intention among PHC nurses; (3) examine the relationship between each of QWL and turnover intention to the PHC nurse demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, level of education, nursing tenure, organisational tenure, positional tenure, location of the PHC, and payment per month; (4) examine whether the QWL dimensions are useful in predicting the turnover intention of the PHC nurses; and (5) use the findings to develop recommendations for healthcare executives and nursing leaders on strategies to improve QWL among nurses of the PHC centres in order to attract and maintain qualified nurses in the current competitive environment.

A questionnaire of four sections (Brooks' survey of QNWL, ATS, Open-ended questions and the demographics) was used in this study. Data were collected from 508 PHC nurses. The SPSS v17 for Windows was used to analyse the quantitative data. Procedures and analysis tests used in this study were descriptive statistics, *t*-test, ANOVA, standard multiple regression, and hierarchical multiple regression. NVivo 8 was used to manage and analyse the qualitative data obtained from responses to the open-ended questions.

9.3 DISCUSSION OF THE FINDINGS

In this section, the major qualitative and quantitative findings are integrated and discussed in relation to the available literature.

9.3.1 Perception of QWL among the PHC nurses

The PHC nurses were asked to rate their QWL. The aim was to gain an understanding of the QWL of the PHC nurses by assessing their work life experience. The findings of the present study indicated that the respondents were dissatisfied with their work life. There is no prior research on QWL of the PHC nurses in Saudi Arabia to compare with the findings of this doctoral study. However, these findings are consistent with findings of a number of previous studies where nurses were not satisfied with their work life (Brooks et al., 2007; Dargahi, Gharib, & Goodarzi, 2007; 2008; Nasl Saraji & Dargahi, 2006). Successful QWL strategies in healthcare settings can improve employees' morale and organisational effectiveness (Hanlon & Gladstein, 1984). Additionally, QWL can improve the quality of care provided as well as recruitment and retention of the nursing workforce (Clarke & Brooks, 2010; Schalk, Bijl, Halfens, Hollands, & Cummings, 2010). Improving QWL may be a more practical and long-term approach to attracting and retaining the workforce, which should be considered by healthcare managers (Gifford et al., 2002).

9.3.1.1 Work life/home life

The ‘work life/home life’ dimension refers to “the interface between the life experiences of nurses in their place of work and in the home” (Brooks & Anderson, 2005, p. 323). Although the work and home life of an employee are usually treated independently by many authors (Clark, 2000), they are closely connected in that what happens in one – either positive or negative – significantly affects the other (Akdere, 2006). The findings of the present study indicated that the PHC nurses were mostly dissatisfied with the work life/home life factors. The nurses reported that they spend a long time at work so they had little energy left after work. As a result, the nurses were unable to balance their work with their family life. According to Ashy (2004), “many working Saudi women have to work hard to balance the demands of their careers and their families” (p.171). The standard working hours for PHC health professionals, including nurses, are 47.5 hours per week, which increases to 49 hours in PHC centres that work two periods per day, compared to 35 hours for other workers in all other public sector occupations (Ministry of Civil Services, 2005). However, the nurses only receive 20% extra in their salary compared to 45% for pharmacists and 70% for physicians in recognition of these additional hours (Abu-Zinadah, 2004). In comparison, the standard hours in Australia for health workers per week are approximately 35 hours; however, the nurses work an average of 28.1 hours per week (Australian Institute of Health and Welfare, 2010). According to El-Gilany & Al-Wehady (2001), respondent nurses of their study provided a number of suggestions to improve work conditions, including working for one period per day and fewer working hours (53.2%).

Other factors affecting the satisfaction of nurses with their work life were the absence of on-site/near childcare services and inadequate policy regarding vacations. These findings

are in line with previous literature (Brooks & Anderson, 2004; Brooks et al., 2007; Khani et al., 2008).

Qualitative findings of this study reaffirmed the importance of family to the perception of the PHC nurses towards their QWL. Nurses who were living with their families, being able to balance the work with their family needs, having suitable working hours and receiving enough support from their family were more satisfied in terms of their work life. On the other hand, these factors were a source of challenges to the majority of respondents. Nurses were not happy to work away from their families (Roussel & Williams, 2007). Expatriate female nurses are asking for visas to bring their families into Saudi Arabia and the local nurses prefer to work in a PHC close to their homes and families, as the following illustrates:

Female nurses must have the chance to bring their family to this country. Why are male nurses and physicians (male or female) offered visa for their families while the female nurses are not? To ensure high QWL, female nurses should have the opportunity to bring their families (Participant 78).

van Rooyen, Telford-Smith, and Strumpher (2010) argued that “experiencing the loss of a family through distance, even if it is only temporary, causes a person to mourn the loss” (p.5).

Although a few nurses were happy with the working hours, the majority were not. Long working duty consumes the energy of PHC nurses and conflicts with their family responsibilities. Nurses have certain obligations to their families, especially female nurses caring for both children and older parents (Chandra, 2003; Chao & Roth, 2000). The majority of the young Saudi nurses in this study had children, which is different from the international experience. According to Abbott, Cieri and Iverson (1996) and Hsu and

Kernohan (2006), many women (nurses) choose to postpone child-rearing until their careers have been established. Thus, effective solutions to improve the home life/work life for the PHC nurses are needed. For example, the working hours should be reduced, part-time jobs should be made available, supporting facilities such as on-site/near childcare services and sufficient vacations should be provided so that the PHC nurses can meet both their family and work responsibilities.

Another significant factor revealed by the qualitative data were the need for ‘facilities for PHC nurses’. These facilities included childcare services, leave/vacation, hostel/accommodation, and transportation. Mention of childcare services and leave/vacation for PHC nurses again in the narrative data supported their significance in the quantitative findings and in the literature (Brooks & Anderson, 2004; Cartledge, 2001; Khani et al., 2008; Lee, Lee, & Lum, 2008; Lu, While, & Louise Barriball, 2005; Rothausen, Gonzalez, Clarke, & O’Dell, 1998). According to Abu-Zinadah (2004), lack of these facilities is one of the apparent causes of the nurses shortage in Saudi Arabia. In terms of hostels and accommodation, expatriate nurses were not happy with their location and general conditions as well as living with a group of nurses from different backgrounds at the same hostel. One nurse commented that “the hostel is in a very bad condition. We have not had a fridge for at least seven years. Improving the nurse hostel is very important” (Participant 59). Saudi nurses who come to work from far away were asking for accommodation like other non-Saudis. Regarding transportation, nurses stated that they needed transportation to and from work, even if a public service. Nurses are provided with a monthly transportation allowance (Ministry of Civil Services, 2005); however, it appears that this allowance does not cover the actual cost.

The social life for expatriate PHC nurses was another important factor that emerged from the narrative data. Expatriate nurses are isolated from the surrounding community. They cannot meet their friends from other organisations or enjoy their spare time. One nurse stated that, “we want to meet our friends on the weekends at any of our hostels” (Participant 429). Another nurse wrote, “... nurses stay alone without their family. No enjoyment, only monthly shopping. Please, this must be changed. Take staff for a picnic, because if they are well (mentally and physically), they will give better care for the patients” (Participant 425). It could be argued that the expatriate female nurses have come from different cultural backgrounds so they are not familiar with the Saudi situation where the society is male-dominated (Elamin & Omair, 2010; van Rooyen et al., 2010). Females in most parts of Saudi Arabia usually do not move around without their male relatives and they are not allowed to drive cars (van Rooyen et al., 2010).

It is apparent from the findings that the work life/home life factors impact the QWL of PHC nurses. Suggestions to improve this dimension may include: providing the expatriate female nurses with a family visa so they can bring their families into Saudi Arabia, reducing the length of their working duty so the PHC nurses have the time to look after their families, providing nurses with necessary facilities such as childcare services, transportation to and from the work or a fair transportation allowance, enough annual vacation, and suitable accommodation. Additionally, the expatriate nurses need to be provided with a comprehensive orientation program to ensure that they understand the working, social and cultural conditions in Saudi Arabia, even before they commence work. Additionally, they should be provided with mandatory training courses in Arabic and communication skills. Finally, the PHC directors and nursing managers should find suitable ways to incorporate their expatriate staff into the community. For example, it will be useful to provide nurses in

each sector with a social club where they are able to engage and spend some leisure time with their friends and colleagues. Encouragement of peer support and mentoring practice may help expatriate nurses to overcome the social and culture challenges (Bozionelos, 2009). Another suggestion is to organise recreational and marketing tours during the weekends for expatriate female nurses, especially those who work in rural areas.

Although the QNWL survey does not include any items on the nurse's health condition, it was expected to be discussed by respondents of the current study in their responses to the open-ended question. Interestingly, this aspect was not part of the responses obtained. Prior nursing research identified employees' health as a significant factor for QWL of hospital nurses (Bradley, 2003; Hayes et al., 2006; McNeely, 2005). It could be argued that the PHC nurses do not require the same level of physical effort that occurs in the hospital settings. For example, PHC nurses do not need to stand for long periods of time. Additionally, almost 74.4% of the nursing workforce in this study were young employees (i.e. less than 40 years of age); thus, were likely to be too young to experience some of the chronic health conditions associated with ageing.

9.3.1.2 Work design

The 'work design' dimension refers to "the composition of nursing work, and describes the actual work nurses do" (Brooks & Anderson, 2005, p. 323). Results suggested that the PHC nurses were not satisfied with current staffing policy. Specifically, there is a shortage in the number of RNs and other trained nursing assistants and service workers. In addition, there is a lack of other employees such as physicians, pharmacists and managers. These findings are similar to the literature (Brooks & Anderson, 2004; Brooks et al., 2007; Khani et al., 2008). The narrative findings indicated that the shortages in the health

workforce put a greater load on the current nursing staff since they have to perform the nursing jobs in addition to covering other non-nursing duties. One nurse commented,

One factor that makes me dissatisfied with my work life now is working from one area to another, and we even cover the work of other health staff in the PHC, when they fail to come for duty... like in the male dept., pharmacy dept. The nurse in PHC is always in a hurry to accomplish the work of the day. I believe to achieve good work, staff must concentrate on one area (Participant 417).

Manojlovich and Ketefian (2002) argued that the ability of nurses to practise in a professional manner may be influenced by the organisational culture of their work environment. Thus, the multiplicity of roles undertaken by the PHC nurses does not give them an advantage; instead, it may reduce their professionalism as they work as spare capacity for other staff. A restriction of nurses' roles to nursing tasks may contribute to solving this challenge.

Despite the shortage of nurses in Saudi Arabia, the nurses in this study were given additional non-nursing tasks. This mal-utilisation of PHC nurses increases the nursing shortage and turnover, and affects their nursing skills and experience. Such challenges may put extra pressure on clinical nurses, affecting their perceptions towards their working lives (Vagharseyyedin et al., 2010).

Although the majority of respondents in the present study were satisfied with their jobs as nurses, they were not satisfied with the nature of PHC work. The nurses saw working in the field of PHC as a sort of routine that lacks the innovation and creativity. This is an important addition to the framework of QWL from the narrative results. For example, one nurse stated, "...what we do today we will do again tomorrow and every day. My previous work in the hospital was full of knowledge and experience compared to my

current work” (Participant 98). What intensifies this is the lack of clinical autonomy among more than one-third of the respondents. They reported that they do not have the required autonomy to make client/patient care decisions. According to Kramer and Schmalenberg (2004), “autonomy is the freedom to act on what you know, to make independent clinical decisions that exceed standard nursing practice, in the best interest of the patient” (p. 44). Autonomy of practice in nursing was found to be associated with quality of care and job satisfaction (Finn, 2001; Kramer & Schmalenberg, 2003b; Larrabee et al., 2003).

To improve the satisfaction of PHC nurses in terms of the ‘work design factors’, nursing and health leaders should recruit adequate numbers of qualified nurses and nursing assistants to meet the actual demands for nursing care in the PHC as well as limiting the use of the nursing workforce in non-nursing departments such as pharmacy, management and medical records. To fix this deep-rooted challenge, a comprehensive strategy for PHC human resources supply should be considered by health leaders in cooperation with universities and other educational institutions. To improve the perception of nurses towards the nature of nursing work at PHC facilities, it could be argued that the expansion of the PHC ‘nursing’ roles, while limiting their engagement in ‘non-nursing’ tasks, may assist in enhancing the sense of nursing professionalism and in turn improve QWL. For example, PHC organisations in Saudi Arabia should introduce the nurse practitioner position, which has been found to be very effective in improving healthcare services as well as the nurses’ professionalism (Horrocks, Anderson, & Salisbury, 2002; Kinnersley et al., 2000; Laurant et al., 2008; Laurant et al., 2005). Additionally, nurses must be empowered and provided with support and opportunities to increase their nursing competencies and autonomy to provide appropriate care for their patients/clients (Kramer & Schmalenberg, 2003b)

9.3.1.3 Work context

‘Work context’ stands for “the practice settings in which nurses work and explores the impact of the work environment on both nurse and patient systems” (Brooks & Anderson, 2005, p. 323). Consistent with findings of previous studies, a number of ‘work context’ factors were identified as influencers on the QWL of the PHC nurses. These factors include: management and supervision, co-workers, development opportunities, and work environment.

Regarding management and supervision practices, nurses in this study were dissatisfied. There is a lack of supervision, feedback, support, participation in decision-making, and respect shown by upper-level management. Additionally, working policies and procedural guidelines are inadequate. Of great concern, nurses were not recognised for their efforts and accomplishments and they experienced a sense of instability (low trust) due to frequent transfer among PHC centres. In previous studies, nursing management practices were found to be associated with the quality of care, employees’ productivity, employees’ satisfaction and the intent to stay or leave (Chan & Morrison, 2000; Chen et al., 2008; Fang, 2001; Sofield & Salmond, 2003). According to a Turkish study by Bodur (2002), the public health nurses scored lower than their co-workers on how their boss handled their workers ($p < 0.05$). Bodek (2003) argued that employees want to feel respected at work for what they do and who they are. Above all, they need to feel valued for their skills, knowledge, performance and participation in the development process. According to Abualrub and Al-Zaru (2008), recognition of nurses’ performance has a direct effect on the level of intention to stay at work. Employees need to feel a high level of trust towards their managers and supervisors as well as a strong sense of stability at the workplace. Frequent transfer of staff members may influence their organisational commitment as well

as their personal productivity. In support of this, nurse respondents in El-Gilany and Al-Wehady's (2001) study in Saudi Arabia cited that "staying in the same place of work" is one of the best strategies to improve their work conditions (p.5).

Mechanisms should be developed to allow nurses to participate in decision-making regarding practices that influence their work life, receive meaningful feedback on their performance and recognition for their accomplishments (Vagharseyyedin et al., 2010). Shared governance and systematic clinical supervision would be excellent mechanisms to achieve such alteration (Doherty & Hope, 2000; Dunbar et al., 2007). Shared governance is a long process of cultural change that focuses on developing the leadership and management skills of all grades of staff. It requires time, persistence, determination and a strong commitment to training and development (Doherty & Hope, 2000). Shared governance works best when the staff are leading the change of the work environment instead of leaving the role of improvement to the formal leaders alone (Brooks et al., 2007; Hess, 2004). Hallberg, Welander, Hansson and Axelsson (1993) conducted a clinical supervision project to support the nurses in the workplace. This intervention achieved significant improvements in many aspects: autonomy, teamwork, development opportunities, and recognition for their work.

Policies and procedures for nursing were found to be neither adequate nor clear. There is a lack of job description and healthcare policy for PHC nursing; thus, the work depends on personal visions. This finding was in accordance with the findings in the literature (Zaghloul, Al-Hussaini, & Al-Bassam, 2008). Work in PHC needs to be well defined so that each person knows his/her job determinants. Adequate job descriptions, working policies and standard procedures for PHC nursing practice are urgently required.

Nurses in this study were notably satisfied with factors related to their co-workers. They reported that they have good friendships, good relationships and good communication with their co-workers. Additionally, they work cooperatively in teamwork. These findings were reinforced by findings from the qualitative data. Although a few expatriate nurses were not satisfied in terms of their co-workers, the majority of respondent nurses reported good communication, friendship and relationship, support and cooperation, respect and appreciation by co-workers as important factors that make them satisfied with their work life. This contrasts with previous nursing research in Saudi Arabia which found that nurses were not satisfied with the relationship with their co-workers, especially physicians (Alhusaini, 2006), where they experienced low levels of respect, appreciation and support. Additionally, they had poor communication and interaction with physicians. Work-group cohesion is a very important factor that contributes to the satisfaction of employees towards their work condition (Kovner, 2006). Positive changes in relationships among local and expatriate co-workers in PHC organisations could be attributed to the rich experience of Saudi employees in dealing with expatriates. Saudi employees may have developed good coping strategies and a deep understanding of cultures and norms of expatriate colleagues, because expatriate workers comprise a large portion of the Saudi workforce (approximately seven million) (Pakkiasamy, 2004). PHC managers should encourage the integration of their employees to ensure comprehensive patient care and high QWL.

For expatriates who were not satisfied with their co-workers, this may be because they faced difficulties in establishing relationships with peers in Saudi Arabia (Bozionelos, 2009; Mellahi, 2007). These difficulties may be due to differences in culture and work environment. According to Bhuian (1996), the majority of expatriates cannot adjust to the

different culture of Saudi Arabia. It may be useful to provide these nurses with cross-cultural training, focusing on the culture of the host country and best ways of building good relationships with its people. Bozionelos (2009) argued that using a peer support strategy to incorporate expatriates into the working environment is more effective than using cross-cultural training. Additionally, mentoring was suggested for expatriates who work in countries that are culturally distanced from their home countries and where peer support may not be readily attainable (Bozionelos, 2009). Gaynor, Verdin and Buck (1995) found a consistently strong relationship between high peer social support within the group and high morale/satisfaction.

Opportunities for professional development (i.e. career advancement, opportunity to further nursing education, and access to continuing education) were reported by the respondents as being unsatisfactory. This finding was supported by prior nursing research (Cabigao, 2009; Cartledge, 2001). According to Cabigao (2009), insufficient opportunities for professional development often diminish nurses' efforts to provide quality care and is a major reason for their job dissatisfaction. Nurse respondents who held Bachelor Degrees comprised only about 5% of the total sample; thus, a majority of nurses (93%) were advocating for their rights to pursue their Bachelor Degree. Previous research found that the most highly educated nurses were the most satisfied, with Associate Degree-prepared nurses the least satisfied (Ingersoll et al., 2002). The present study shows that the education level influences nurses' satisfaction with their QWL. Based on the mean scores of the QWL scale as well as the GLM univariate findings, it was observed that nurses with a Bachelor Degree or higher were more satisfied with their QWL compared with other nurses. This may be because the opportunity for nurses with Associate, Diploma and Institute qualifications to pursue their Bachelor Degree in Saudi Arabia is very limited

(Alhusaini, 2006). In this regard, one PHC nurse stated, “procedures for continuing study are very difficult. Access to degree and postgraduate levels should be facilitated for nurses who wish to further their education at local and international universities” (Participant 404). Another nurse argued that “our managers do not encourage us to continue our studies; instead, they hide circulars by the MOH in relation to opportunities for degree completion” (Participant 438). What is more, if the Associate Degree-prepared nurses and Diploma or Institute holders are enrolled at degree level, their previous study and experience are not accredited and they have to study the full program as new students. Additionally, expatriate nurses are not allowed to further their study in Saudi Arabia. Distance-learning programs could help to solve this challenge as well as improving the satisfaction of the PHC nurses (Mandrell, Hobbie, Deatrick, Lipman, & Hinds, 2004). PHC managers and nursing leaders should consider partnerships with educational organisations to offer distance education opportunities for nurses, especially those in rural areas. Such incentives may be an effective strategy for the recruitment and retention of rural nurses (MacPhee & Scott, 2002).

In terms of continuing education, 72% of nurse respondents stated that they did not receive support to attend continuing and in-service education programs. Similarly, Alhusaini (2006) found that 30.3% of nurses in Riyadh were not offered any training courses or continuing education programs, and 65.9% were offered very short courses (1-5 days per year) in certain areas such as maternity, quality of care and cardiopulmonary resuscitation (CPR). Factors identified by the author as barriers for nurses to attend continuing education programs included disapproval by the direct manager, lack of time, high cost of the courses and seminars, lack of training in the workplace, and lack of justice in supporting employees for attending such programs. The respondents in the current

study suggested the establishment of a nursing library and learning classes in each PHC or for each group of PHC centres. They also argued that the MOH should provide them with access to the current nursing publications and books in the field. The PHC organisations should encourage their nurses to attend continuing education programs by paying for their costs. One nurse commented, “they [the managers] force us to attend training courses in areas far from our work settings, but they do not pay for all this attendance. They should pay for our courses” (Participant 123). Nurses as healthcare professionals seek to continually refresh their knowledge and skills to provide quality patient and community care and to satisfy their QWL. A lack of training programs for nurses will impact their competence and performance (Alhusaini, 2006).

Dissatisfaction with career advancement was also reported in other nursing studies (Brooks & Anderson, 2004; El-Gilany & Al-Wehady, 2001; Khani et al., 2008; Rout, 2000). This could be attributed to the absence of the nursing structure that classifies nurses according to their qualifications and at the same time ensures their financial and professional rights. All categories of nurses in this study, with the exception of nurses who hold a Bachelor Degree, are classified as nursing technicians, with little ranking differences. This situation diminishes the financial, professional and functional differences of all these categories. In this study, one nurse commented, “we work as staff nurses from the first day in our job until we resign” (Participant 12). Another nurse reported, “there is no significant difference in the roles and positions of RNs with different qualifications” (Participant 30). Alhusaini (2006), in a study of nurses in Saudi Arabia, found that the lack of role clarity is one of the noticeable work obstacles for Saudi nurses. Hence, there is a need to establish an accurate career-ladder or rank-system for PHC nurses.

The working environment was also of concern among PHC nurses. More than half of the respondents reported that the security department does not provide a secure working environment. This feeling was reinforced in the narrative responses. One nurse commented, “no security is available at my workplace. We wish we could have a security department so we can feel safe from harm at work” (Participant 399). A number of previous nursing studies highlighted concerns about the safety of the working environment as a major factor in nurses’ dissatisfaction with their workplaces (Alhusaini, 2006; Brooks & Anderson, 2004; Khani et al., 2008). Violence against nurses and healthcare workers has been identified in many studies as a major occupational problem (Alotaibi, 2008; El-Gilany, El-Wehady, & Amr, 2010; Lin & Liu, 2005). El-Gilany, El-Wehady and Amr (2010) conducted a survey study in Al-Hassa, Saudi Arabia, to highlight the incidence of workplace violence against 1091 PHC workers. About 28% of the sample were exposed to at least one violent event during the past year. Emotional and physical violence accounted for 92.1% and 7.9% of violent events, respectively. Feeling safe at work is essential for nurses to perform their work appropriately.

In accordance with prior nursing research (Alhusaini, 2006; El-Gilany & Al-Wehady, 2001), the majority of nurses in this study were not happy with their break-area (recreation room). They do not have a particular place to rest, eat or pray. Private and furnished break-areas for PHC nurses are essential for their comfort in the workplace.

More important to the working environment experience, nurses reported a lack of client/patient care supplies and equipment. Availability of supplies and equipment is essential for providing adequate health care. One nurse stated, “there is not enough medical equipment, and the available ones are very old and out of order” (Participant 166).

In support of this, another nurse stated, “for the benefit of our patients, we ask for the necessary supplies to be available without delay” (Participant 349). A number of PHC studies in Saudi Arabia revealed that many essential resources for health care were not adequately available (Al-Khaldi & Al-Sharif, 2002; Al-Khaldi et al., 2002; Al-Sharif & Al-Khaldi, 2003). Lack of essential patient care supplies may impact on the level of nurses’ QWL and their performance and productivity. Nurses need more efficient and effective working environments which ensure that patients become the priority and patients’ needs are met (Pillay, 2009).

Other important factors regarding the working environment emerged from the qualitative data. These factors include: the PHC building, infrastructure facilities, PHC departments and privacy at work. The majority of buildings are old private buildings with inadequate infrastructure facilities (e.g. phone, e-health, service cars, ambulances, computers), limiting the health care professionals (including nurses) from providing high quality and adequate healthcare services. This is supported by prior research in Saudi Arabia (Alhusaini, 2006; El-Gilany & Al-Wehady, 2001).

Additionally, a number of female nurses were not happy in terms of their privacy at work. They argued, “female nurses should only work with female patients” (Participant 463). Similar findings were revealed by El-Gilany and Al-Wehady (2001), where about 99% of interviewed female nurses were not accepting duties for male patients. Mebrouk (2008), in a study of Saudi nurses, found that even though some of nurses expressed that they do take care of male patients, many agreed that they would prefer gender segregation to a greater extent. The author concluded that the Saudi nurses “clearly perceived value in gender segregation, which reflects that stereotypical views of gender segregation being

male dominance are misunderstandings or ethnocentric perspectives” (p. 158). Thus, it should not be underestimated that gender segregation is widely accepted in Saudi Arabia (Mebrouk, 2008). To improve nurses’ QWL and to enhance retention, the privacy of Saudi female nurses should be considered through assigning them to work with female and child patients/clients, at least for the current time, until working with the other gender becomes acceptable by the society. In support of this is the high percentage of males in the nursing profession in Saudi Arabia, which contrast with the worldwide situation; that is, male nurses comprise almost half of the nursing workforce in Saudi Arabia (MOH, 2008a).

In addition to the above factors, the qualitative findings revealed another important ‘work context’ factor: the nurses’ relationship with patients. Although a few nurses were not satisfied in terms of the patient relationship, the majority enjoyed working with patients and the whole community. Respondents felt satisfied when helping patients and they show satisfaction with the service provided. This finding is consistent with previous literature (Alotaibi, 2008; Argentero et al., 2007; Brousseau, Alderson, & Cara, 2008; Pillay, 2009). Respondent nurses in Alotaibi’s (2008) study mentioned that they liked working with patients and enjoyed providing them with the required care. Similarly, Pillay (2009) in a cross-sectional survey on 569 nurses in South Africa also highlighted the gratification that nurses obtained from patient care and their sense of belonging in the communities within which they work. Such relationships between nurses and community members may increase mutual trust, contributing to a strong sense of stability for the PHC nurses as well as enhancing their sense of belonging to the community. Unfortunately, frequent unwanted transfers of PHC nurses from one centre to another, as discussed above, terminates such

relationships and trust which may have taken a long time to consolidate. This may affect the performance and productivity of PHC nurses who go through the same experience.

9.3.1.4 Work world

‘Work world’ deals with “the effects of broad societal influences and changes on the practice of nursing” (Brooks & Anderson, 2005, p. 323). Many nurses in this study felt that people do not have an accurate image of the nursing profession. In Saudi Arabia, nursing is not ranked as highly as other medical jobs such as medicine and pharmacy (Al-Rashidi, 2000; Al Thagafi, 2006). According to Al Thagafi (2006), the public does not appreciate the role of nurses in providing health care, believing that nurses are no more than physicians’ assistants. Alamri et al. (2006), however, found that people in Saudi Arabia understand the importance of nursing and they believe jobs must be occupied by locals; however, they prefer jobs of high prestige such as medicine for their young (Al-Omar, 2004; Alamri et al., 2006). This view of nursing in Saudi Arabia is in line with other countries such as Iran, Japan, Jordan and Kuwait (Alotaibi, 2008; Khani et al., 2008; Shuriquie, While, & Fitzpatrick, 2008; Turale, Ito, & Nakao, 2008). Hence, public stereotypes are found to negatively affect nursing practice and retention (Takase, Kershaw, & Burt, 2002; Takase, Maude, & Manias, 2006).

Previous nursing studies have reported high levels of concern for Saudi female nurses regarding their low chances of getting married as a result of cultural and communal values (Hamdi & Alhyder, 1996; Meer, 1999). According to Jackson and Gary (1991), about 69% of secondary-school students indicated they would not marry a nurse. Social reasons were cited as the major deterrent in this choice. Another study by Al-Omar (2004) reported that 95% of the participants in their study were single nurses. This is unusual,

especially in the Saudi tradition where people (especially female) marry at a young age (El-Gilany & Al-Wehady, 2001). However, the current study revealed that nearly three-quarters (70.8%) of the Saudi female PHC nurses were married. This proportion exceeds the national (60.2%) and the local average (53.9%). As discussed above, a large proportion of respondents felt that the community does not highly regard the nursing profession. However, the increase of married nurses in PHC suggests a change in social attitudes to nurses. Perhaps this change is related to the nature of work in PHC where nurses do not work at night. Additionally, this change may be unique to the Jazan region, but not to other parts of Saudi Arabia. There could be other latent factors for this unique result, such as the need for additional sources of income, especially in the current era of economic constraint. A recent Saudi study by Elamin and Omair (2010) found that single, unemployed, young and educated Saudi males reported less traditional attitudes towards working females compared with married, employed, old, and less educated males. Similarly, Ashy (2004) argued that “many young Saudi men prefer to marry working Saudi women who can share in the financial responsibilities of the family and who have a variety of interests.” (p. 171). However, this area requires further research.

Payment, including salary and financial incentives, was found to be an important factor in nurses' dissatisfaction with their QWL (61.4%). Respondents stated that the current salary is not adequate compared to the tasks required and to the nursing market. Additionally, a large proportion of them reported that they neither receive additional financial rewards (92.5%) nor additional benefits (78.3%). A recent salary scale for Saudi health professionals in the public health sector stated that the salary ranges from SR 4,670 to 17,150 per month for nurses with less than Bachelor preparation and SR 7,130 to 21,195 for nurses with a Bachelor Degree or higher (MOH, 2011). However, the basic salaries for

pharmacists with a Bachelor Degree and resident physicians ranges from SR 7,420 to 22,725 and from SR 9,200 to 27,325, respectively (MOH, 2011). Additionally, the pharmacists and physicians receive a number of incentives that are not available for other health professionals including nurses. Moreover, the current salary system for expatriate nurses is neither fair nor clear. Nurses who have the same qualification, same experience, and perform the same duties receive different salaries: “according to my education and experience, the salary is unfair; the increment is not the same for all nurses” (Participant 487). Another nurse stated that:

My friend and I have the same experience, but she gets a higher salary than me. I want to leave within 5 years, because I have a lower salary which is not enough for my family’s needs. I spend half the salary in this country on food and other life requirements (Participant 425).

According to van Rooyen, et al. (2010), expatriate health employees in Saudi Arabia are categorised into zones regarding the financial compensation based on their nationality. Employees in lower zones earn thousands of riyals less than nurses in higher zones. For example, nurses from Zones 1 and 2 (North America) are the highest paid employees compared to the others. Such inequities may lead to dissatisfaction of the affected nurses, impact their performance, and increase their turnover intention.

Although several research studies found that payment is not the prime motivator for employees (Kinni, 1998), behavioural theorists such as Herzberg (1972) and Maslow (1987) suggested that satisfying basic needs is essential, because people cannot concentrate on their higher needs until their basic needs are met (Hsu & Kernohan, 2006). In support of this, many recent nursing studies have found that salary, financial benefits and equity in pay were very important to nurses (Al-Ahmadi, 2006; Argentero et al., 2007;

Dargahi, Gharib, & Goodarzi, 2007; Dargahi, Gharib, & Goudarzi, 2007; Hsu & Kernohan, 2006; Vagharseyyedin et al., 2010), and the lack of such benefits may impact the satisfaction, commitment and performance of affected employees (AbuAlRub, 2007; Al-Ahmadi, 2006, 2009; Cowin & Jacobsson, 2003; Day, 2005; Hsu & Kernohan, 2006; Nasl Saraji & Dargahi, 2006). Lewis, Brazil, Krueger, Lohfeld, & Tjam (2001) found that extrinsic predictors of QWL such as pay and financial benefits explained 40% of the variance in QWL satisfaction. Payment is essential for nurses who come from developing countries that are faced by many economic challenges. However, regarding the monthly salary received by nurses in this study, nearly 21% ($n = 106$) receive less than SR 5,000, and the majority ($n = 105$; 99%) of this category comprise non-Saudi nurses. Considering this fact, there is a need to re-examine salary scales for nurses in PHC organisations, especially for expatriate nurses.

The majority of respondents in this study (76.6%) reported that their jobs are secure and they do not expect to lose them unexpectedly. This result appears at odds with research conducted overseas (Day, 2005; Khani et al., 2008). Khani, et al. (2008), in an Iranian study, reported that 79% of respondent nurses felt that their job was insecure. Job security in the current study is a positive contribution towards QWL; however a number of nurses, especially expatriates, held concerns about their job security. In keeping with the literature, they were unhappy with the short-term contract policy (O'Brien-Pallas, Duffield, & Hayes, 2006; Rethinam & Ismail, 2008). This could be attributed to the fact that the opportunity to renew the contract is uncertain (Rethinam & Ismail, 2008). One nurse commented that:

My job is not secure. It could be unemployed at any time. I am working on a contract job. For example, last year while I was preparing for health education lectures, I was surprised that my contract was terminated. It was like a shock, because just a few days before, I received an appreciation certificate. If my direct

manager had not fought to keep me within his teamwork, I could now be out of the country (Participant 386).

Such experience may lead to a lack of trust in their jobs, organisations and managers, and in turn lead to poor QWL (Nasl Saraji & Dargahi, 2006; Rethinam & Ismail, 2008). Trusting the organisation and managers and enjoying stable and secure jobs may improve job satisfaction, organisational commitment and personal and organisational performance.

This research showed that the majority of respondent nurses had a high belief in the value of the nursing profession. Approximately 95% of them believed that nursing positively impacts the lives of others, indicating excellent attitudes towards their career and an exceptional sense of self-image. In contrast, a study of 346 hospital nurses in Saudi Arabia found that only about one-third of the sample had a high perception of nursing (Zakari, Al Khamis, & Hamadi, 2010). The authors concluded that this could be attributed to the workplace, personal interest in the nursing profession as well as the public image of nursing. However, in relation to the current study, it could be argued that the workplace and the public nursing image have no or little impact on the perception of PHC nurses towards the nursing profession. The majority of respondent nurses were not satisfied with their QWL and at the same time, they were aware of the negative perception of society towards the nursing profession; however, they had a high perception towards the impact of their profession. The sense of making a difference in people's lives together with personal interest in nursing were the most influencing factors in this high perception. Approximately 89% of respondent nurses were satisfied as a PHC nurse. A high perception of the profession and the personal

interest in PHC nursing are noteworthy for the nursing directors, PHC managers and healthcare policy makers to maintain their nursing workforce through improving QWL.

9.3.2 Turnover intention

Using the ATS, about forty percent (40.4%, $n = 205$) of the respondent nurses indicated that they intended to leave their current employment. This finding was supported by the qualitative findings. Approximately 29.5% and 47.4% of respondents to the open-ended questions intended to leave their current PHC during the next 12 months and the next five years, respectively. This finding supports the notion that turnover and turnover intention are high among nurses in general (Chan et al., 2009; Coomber & Barriball, 2007; Gardulf et al., 2005; Rambur et al., 2003), and among nurses working in Saudi Arabia (Al-Ahmadi, 2006; Saeed, 1995; Zaghoul et al., 2008). Saeed (1995) conducted a study in Riyadh to determine the variables related to nurses' intention to leave their hospital. Data were collected from three hospitals in Riyadh. Of the 488 respondents, 275 (56.35%) intended to leave their job. Al-Ahmadi (2006) collected data from 434 nurses working in nine psychiatric hospitals randomly selected from various geographic regions. Results showed that 37% of nurses had the intention to leave the institution. Most recently, Zaghoul, et al. (2008) studied the intention of 276 nurses to stay at a university hospital in Al-Khobar, Saudi Arabia. Findings revealed that about 17% of the sample (47 nurses) agreed that they had intentions to leave. Additionally, more than half of the respondents were not sure exactly whether they intended to leave or not. Studies on health professionals, other than nurses, in Saudi Arabia reported similar findings as well. For example, in Al-Ahmadi's (2007) study on the intention to leave the current employer, findings revealed that approximately 38% of respondents indicated their intention to leave their hospitals. However, the present study is the first to address the issue of turnover

intention in the PHC sector in Saudi Arabia. Influencing factors will be discussed in section 9.3.4 (relationship between QWL and turnover intention).

9.3.3 Relationships between dependent factors (QWL and turnover intention) and the demographic variables (Hypotheses 1 & 2)

Hypothesis 1 postulated that there would be a significant relationship between QWL and the demographic variables of gender, age, marital status, dependent children, dependent adults, nationality, ethnicity, education level, nursing tenure, organisational tenure, positional tenure, location of the PHC, and payment per month. Similarly, Hypothesis 2 postulated that there would be a significant relationship between turnover intention among PHC nurses and the above demographic variables. Results of this study supported Hypothesis 1, except for the education level and location of the PHC. Likewise, the findings supported Hypothesis 2, except for the dependent adults, nationality, ethnicity, and location of the PHC. However, using the GLM univariate analysis, the education level was significantly related to QWL, while the variable of dependent adults showed a strong relationship to the turnover intention of PHC nurses.

9.3.3.1 Age

Age was significantly associated with QWL and turnover intention. Respondents aged between 20-29 years were less satisfied with their QWL and they were more likely to indicate turnover intention compared to the other age groups. Based on the mean scores for all groups, it was observed that as the age increased, the scores of QWL increased too. On the other hand, it was also observed that as age increased, the scores of turnover intention decreased except for Group 4 (50-59 years) where their scores of turnover intention were higher than Group 3 (40-49 years). This may be attributed to the idea of retirement among respondents of Group 4 (Gray & Phillips, 1994). One nurse commented

on her intent to leave within 5 years: “I will leave the PHC when the MOH stops renewing my contract; by that time, I will reach the age of 60” (Participant 233). McCarthy et al. (2007) revealed that 83 nurses (23%) participating in their study expressed an intention of turnover. Of these, 77% were aged between 21 and 35 years. On the other hand, older nurses were reported in several studies to be more satisfied with their work and, in turn, less likely to be leaving (Camerino et al., 2006; Hinshaw & Atwood, 1985; Kudo, Satoh, Hosoi, et al., 2006; Letvak & Buck, 2008; Rambur et al., 2003; Shader et al., 2001). Older nurses may have strong personal ties to the organisation (e.g., self-identity, friends and social relationships, seniority or retirement benefits), and leaving the organisation (before retainment) is costly and unworthy to them (Ho, 2006; Mathieu & Zajac, 1990; Stevens, Beyer, & Trice, 1978).

9.3.3.2 Gender

Gender was significantly associated with QWL and turnover intention. Female nurses were more satisfied with their QWL than their male counterparts. Consequently, males had a higher intention to leave their current employment. The literature is not consistent in terms of the relationship between gender and each of employees’ satisfaction and turnover intention. A number of nursing studies support the notion that the female nurses are more satisfied in their work and are more likely to stay (Fochsen et al., 2006; Hart, 2005; Lou et al., 2007; O’Lynn, 2004; Tourangeau & Cranley, 2006). Other studies found no relationship between gender and employees’ satisfaction and their intention to leave (Al-Ahmadi, 2006; Al-Ahmadi, 2002; Rambur et al., 2003). It can be argued that male nurses were less satisfied with their work life and were more intent on leaving their current employment for two reasons: first, male nurses in this study comprised 32.7% ($n = 166/342$) and about 99% of them ($n = 164/342$) were Saudis. Saudi males are responsible

for their families, parents and relatives; thus, they prefer to work in or close to their communities so they can meet their responsibilities. However, contrary to the Saudi female nurses, the Saudi male nurses do not have the opportunity to work in their living areas – Saudi female nurses are given priority (El-Gilany & Al-Wehady, 2001). Qualitative findings may provide some explanations in this regard. One Saudi male nurse stated, “this centre is too far. I want to move to the area where my family lives” (Participant 364). Similarly, another male nurse commented that: “during the next 5 years, I will try to get closer to my house and family. I will look for another centre or hospital” (Participant 308).

Another possible cause for gender difference in terms of QWL and turnover intention is the poor public image of nursing in Saudi Arabia. Although 36.40% of the nursing workforce in Saudi Arabia are males, community members do not regard nursing as highly as other health disciplines, particularly for male nurses. ‘Hidden’ turnover among Saudi male nurses is a challenge for public healthcare organisations where male nurses work in management or other non-nursing departments and are officially counted in the nursing workforce. This kind of turnover appears in the public health facilities due to lack of accountability for employee and management departments. In this case, organisational turnover and professional turnover are associated. According to Borkowski et al. (2007), although some have mentioned the decline of gender discrimination against males in the nursing profession, it is still a challenge that impacts on the retention process of male nurses. However, further research is needed to understand the gender difference in relation to QWL and turnover intention among the PHC nurses in Saudi Arabia.

9.3.3.3 Marital status

Marital status was significantly associated with QWL and turnover intention. Compared to other groups, nurses who have never married were less satisfied with their QWL and were more likely to indicate turnover intention. This finding is consistent with the literature (Hwang & Chang, 2008). A possible explanation for this finding is that the nurses who have never married were younger compared to the other groups so they may not have the required clinical and life skills to cope with their working environment when it differed from their expectation. This sense may increase their dissatisfaction. Additionally, nurses who have never married may have less family responsibilities so they do not have to consider moving family members when transferring to another organisation (Tai et al., 1998). This could also be attributed to the high proportion of single nurses amongst the expatriate nurses (22.1%).

9.3.3.4 Dependent children

The dependent children variable was significantly associated with QWL and turnover intention. Respondents with children were more satisfied with their QWL than those who had no children and were less likely to indicate an intention to leave. This could be attributed to the responsibilities of parent-nurses 'as breadwinners' towards their family members including children. One expatriate nurse stated, "I have to support the medical expenses of my daughter ...". (Participant 66). Similarly, another nurse commented, "I have a large family and I need to spend money on them" (Participant 190). According to Phillipson and Smit (2005), financial commitments to children such as pressure to fund them through university may increase the likelihood that people remain in employment. This was supported in previous research (Barnes, Parry, & Lakey, 2002; Higgs, Mein, Ferrie, Hyde, & Nazroo, 2003). Another justification is that the presence of children in the

life of PHC nurses may encourage their stabilisation, work satisfaction and intention to stay. In support of this notion, an expatriate nurse stated, “I enjoy the chance to work beside my husband in the same organisation. I also have the chance to live with my children here in Saudi Arabia ...” (Participant 53). Health conditions of the child may influence the retention of PHC nurses. Although Evandrou and Glaser (2004) argued that informal care responsibilities for sick or disabled people including children may be a ‘push’ factor from employment, in the current study it was a retention factor. As one nurse articulated, “... I can’t transfer to any other area, because my little child is disabled and I need to look after him” (Participant 107). Such children may have specific treatment programs or particular care plans which require a sense of constancy. Providing financial and moral support to nurses who have such challenges may enhance their intention to remain in the current employment.

9.3.3.5 Dependent adults

The variable of dependent adults was significantly associated with QWL. Respondents with dependent adults were less satisfied with their QWL compared to those without dependent adults. Almost 55% of the respondents have dependent adults, and 48% agreed that having support for taking care of elderly parents is important for their QWL. This reflects the role of offspring (nurses) towards their parents and other dependent adults. A number of previous nursing studies reported on the impact of dependent adults on the satisfaction of employees regarding their QWL (Brooks & Anderson, 2004; Brooks et al., 2007; Khani et al., 2008). In Saudi Arabia, according to the Islamic context and the local culture, offspring have clear obligations towards their parents and relatives. For example, one version in the Noble Qur’an states: “And We have enjoined on man (to be dutiful and good) to his parents. His mother bore him in weakness and hardship upon weakness and

hardship, and his weaning is in two years - give thanks to Me and to your parents. Unto Me is the final destination.” (Qur'an, 1997, pp. 551, v.531:514).

It was hypothesised that the variable of dependent adults will be significantly associated with turnover intention of the PHC nurses. This hypothesis was not supported by the findings when the demographic variables were examined individually. However, the variable of dependent adults was significantly related to turnover intention using the GLM univariate analysis. Nurses with dependent adults indicated less intention to leave their current organisation, perhaps because they need their jobs to meet their commitments towards their parents and other dependent adults. Additionally, it is common for Saudi parents to have many children; thus, they can cooperate with each other in giving care to their parents and other dependent adults. Therefore, PHC nurses are not required to leave their job in order to provide direct care to their dependents.

9.3.3.6 Nationality

Nationality of respondents was significantly associated with QWL. Non-Saudi nurses were more satisfied with their QWL. Prior literature regarding the relationship of nationality and the employees' satisfaction towards their work life is inconsistent. While a number of studies found a significant relationship between employees' satisfaction and nationality (Abo-Znadh, 1998; Al Juhani & Kishk, 2006), others revealed no association (Al-Ahmadi, 2002). Why the Saudi nurses were less satisfied than their counterparts is not clear. However, this could be attributed to their general perception towards their work life, including family needs, professional developments, working environment, work condition, public image of nursing and financial benefits. Such a finding may have important implications for the Saudisation policy, where low satisfaction among nurses may increase

their organisational and professional turnover, intensifying the critical shortage of local nurses.

The nationality of respondents was not significantly associated with turnover intention. There was no significant difference in scores for Saudi nurses and non-Saudi nurses ($p = .555$). This result suggests that nationality does not have an effect on turnover intention. This finding is different from prior research where expatriate health professionals including nurses indicated higher intention to leave their hospitals (Al-Ahmadi, 2006; Al-Ahmadi, 2007).

9.3.3.7 Ethnicity

Ethnicity was significantly associated with the QWL scores. Respondents were divided into three groups according to their ethnicity: Arab, Asian and Indian. Arab nurses were less satisfied with their working life compared to the other groups. This may be because almost all of Arab nurses in the present study are Saudis (97%). As discussed above, Saudi nurses were found to be less satisfied compared to other nationalities.

Ethnicity was not significantly associated with the turnover intention scores. There was no statistically significant difference at the $p < .05$ level in turnover intention scores for the three groups: $F(2,502) = 0.479$, $p = .620$. This result suggests that ethnicity does not have an effect on turnover intention. This was supported by prior research (Miller, 2008).

9.3.3.8 Education level

It was hypothesised that there would be a significant relationship between education level and QWL. The literature supports the notion that highly educated individuals develop higher satisfaction with their work (Rambur, McIntosh, Palumo, & Reinier, 2005).

Although the education level was not significantly related to QWL when examined individually, using the GLM analysis, findings suggested that education level have a significant effect on QWL ($p < .05$). In support of this, the majority (93%) of the respondent nurses in the current study agreed that it is important to have access to nursing degree programs. The percentage of nurses holding a Bachelor Degree is very small since they comprised only 5% of the total PHC nursing workforce. The opportunities for nurses to pursue their education are limited for several reasons such as the shortage of nurses and lack of nursing schools that provide conversion programs for Institute, Diploma and Associate Degree holders.

It was also hypothesised that there would be a significant relationship between education level and turnover intention. The results supported this hypothesis. Respondents with an Associate Degree were more likely to indicate turnover intention compared to other groups. Additionally, based on the mean scores for all categories, it was observed that as the education level increased, the scores of turnover intention increased as well, except for nurses with a Bachelor or higher degree where their scores of turnover intention were lower than the Associate Degree holders.

Prior nursing research reported inconsistent findings regarding the relationship between education level and turnover intention. While a number of studies found higher status of education to be more related to nurses' turnover intention (Beecroft et al., 2008; Cabigao, 2009; Saeed, 1995; Sourdif, 2004; Tourangeau & Cranley, 2006), others revealed the opposite (Ingersoll et al., 2002; Rambur et al., 2003). Moreover, a number of studies found no significant relationship between education status of nurses and their turnover or turnover intention (Al-Ahmadi, 2006; Fang, 2001; Larrabee et al., 2003).

In the current study, it could be argued that Associate Degree holders were intending to leave in order to pursue their studies. While they usually study about three and a half years to be qualified nurses, in the real world they perform the same tasks as Diploma or Institute graduates. However, when they decide to pursue further study inside the country, they must start from scratch (Almalki et al., 2011b). All these factors may influence their commitment to their organisations and profession and push them to leave.

9.3.3.9 Nursing tenure

Nursing tenure was significantly associated with QWL and turnover intention of the PHC nurses. A positive relationship was found between QWL and nursing tenure. QWL increased as the years of experience in nursing increased. Moreover, a negative relationship was revealed between turnover intention and nursing tenure. Nurses with fewer years of experience were more likely to indicate turnover intention. Prior nursing research was inconsistent with this regard. Prior studies found that nurses with longer years in nursing had a higher intention to leave (Lou et al., 2007; Rambur et al., 2003). Al-Ahmadi (2007) found that health professionals in Saudi Arabia with few years of experience (< 5 years) were less likely to leave their jobs compared with senior employees (≥ 20 years of experience). Other studies found no significant relationship between employees' satisfaction, turnover intention and nursing tenure (Miller, 2007, 2008; Stuenkel, Nguyen, & Cohen, 2007). However, the present finding is supported by others (Bloom, Alexander, & Nuchols, 1992; Cabigao, 2009; Chan & Morrison, 2000; Gillespie, Chaboyer, & Wallis, 2009; Gray & Phillips, 1994; Hart, 2005; Hwang & Chang, 2008; Larrabee et al., 2003; Tourangeau & Cranley, 2006). Nurses with longer experience in nursing had spent long years and substantial efforts in their jobs and organisations; therefore, it was unreasonable to leave at this point in time (Farrell & Rusbult, 1981).

Chan and Morrison (2000) argued that expert nurses would be more competent and skilled to cope with a stressful work environment.

9.3.3.10 Organisational tenure

Organisational tenure was significantly associated with QWL and turnover intention. QWL increased as the organisational tenure increased. An inverse relationship between turnover intention and organisational tenure was revealed in this study. When the tenure in the organisation increased, the indication of turnover intention decreased. This finding is supported by prior literature (Burke, 2003; Tourangeau & Cranley, 2006). In contrast, Sourdif (2004) found that nurses with longer organisational tenure were less satisfied with their work and more intent to leave their current job. In support of the current finding, tenure in the PHC organisation was one of the retention factors for the PHC nurses in the qualitative findings. One nurse wrote that “no intention to leave. I am happy with the current work and with this PHC. I have been here for many years and I feel like a part of this centre. I want to continue here” (Participant 199). Abelson (1986) argued that employees with longer tenure have more human capital invested in the organisation so they may be more reluctant to leave compared to employees with less tenure. Different to hospitals, working in PHC focuses on all units of society: individuals, family and the whole community, and characteristics of PHC nurses by building relationships with those parties. Development of a good relationship may provide the PHC nurse with a sense of satisfaction, belonging and stability in society. This is exemplified by one participant’s response: “I have been in this centre for many years. I know all the people in this area and I know their health conditions and social circumstances. I am almost one of them” (Participant 172).

The differences in organisational tenure have a critical implication for the nursing and PHC managers. Proenca and Shewchuck (1997) investigated which work environment features enhanced nurse retention. They found variance according to the nurses' organisational tenure in organisations. Nurses with lower organisational tenure preferred learning and advancement opportunities, while nurses with longer organisational tenure preferred work flexibility. Additionally, nurses with longer organisational tenure may require more sense of appreciation, value and respect.

9.3.3.11 Positional tenure

Positional tenure was significantly associated with QWL and turnover intention. QWL increased as the years in the position increased. Conversely, the turnover intention decreased as the years in the position increased. This finding is consistent with prior research (Cimete, Gencalp, & Keskin, 2003; Hart, 2005; Stuenkel et al., 2007). According to Hart (2005), nurses who had been RNs longer and those who had been in their current positions longer were more likely to report intentions to stay in their current positions. Similarly, Cimete et al. (2003) found that nurses with high levels of education, income, and duration of working life as well as length of time in the position held reported higher satisfaction scores. Stuenkel et al. (2007) argued that nurses with many years spent in their current positions have established long-term relationships with peers and supervisors and may be more comfortable requesting the assistance or mentoring they need and desire. Additionally, it could be argued that nurses with longer years in the current position may have become used to their work, duties, co-workers, general working environment and the organisation's system; as a result, they have developed a high level of commitment to their work, position and organisation. Thus, they do not intend to leave their organisation.

9.3.3.12 Location of the PHC

Location of the PHC was not significantly associated with QWL or turnover intention. However, the analysis of the quantitative data shows that more nurses reported intending to leave from PHC in rural areas (43.8%) than those in cities (36.6%). The qualitative data showed strong support for the practical impact of the PHC location on respondents' turnover intention. One nurse argued, "my workplace is located on the border area. It is far from the city and social life" (Participant 15). Prior research found that voluntary turnover of nurses increased in urban areas more than rural locations (Bloom et al., 1992; Donoghue & Castle, 2007; Tai et al., 1998). Location of the PHC may influence voluntary turnover because of different job market opportunities in urban areas compared to rural areas (Donoghue & Castle, 2007; Tai et al., 1998). Despite this argument, other researchers found no relationship between workplace location and employees' satisfaction/turnover intention (Bodur, 2002).

In the current study, one may speculate that the PHC nurses are usually recruited through the Central PHC Department and distributed to the PHC centres according to the demand. They do not have the opportunity to choose their work setting, especially expatriate nurses. Some of them are directed to rural areas where there is a critical lack in life requirements and essentials and the working environments are poor. Such experience may influence their impressions and satisfaction, enhancing their turnover intention. An expatriate nurse stated that:

When new staff are appointed in the PHC sector, it is better to post them in centres which are not so rural. Appoint them in centres with telephone and communication facilities, because first impressions are last impressions. If they work in a rural area first, they will be in trouble and they will think about giving up their job (Participant 335).

In support of this finding, Bowles and Candela (2005) in a study of 352 nurses in Nevada (USA) found that nurses with negative perceptions of their first job experience or of a new working environment may be less likely to remain in the job after 1 year of employment.

9.3.3.13 Payment per month

As hypothesised for this study, payment per month was significantly associated with the scores of QWL and turnover intention. A number of previous studies reported that the turnover intention of nurses is associated with their level of satisfaction with their salary (Gardulf et al., 2005; Tai et al., 1998). In the present study, the respondents in Group 2 (SR 5,000-10,000) were less happy with their salary compared to the others; however, this group did not have the highest intention to leave the PHC organisation. Nurses with lower salary (but not lower satisfaction with salary) demonstrated higher intent of turnover than higher salary employees. This indicates that the salary is important to the satisfaction and retention of the PHC nurses. According to Gardulf et al. (2005), salary alone may not be the only factor encouraging nurses to leave, as not being offered an opportunity to discuss the salary and related criteria may also be a contributing factor. For example, nurses may not know why they had the salary that they had and what to do to improve it.

9.3.3.14 Distance between home and workplace

Although the distance between home and the workplace was not included among the demographic characteristics to be investigated in this study, it was cited commonly in the responses to the open-ended questions as a main cause for dissatisfaction with QWL and intention to leave the organisation. One nurse on his intention to stay in the current organisation stated that “no [intention to leave]. My work is very close to my home ...” (Participant 190). However, another nurse stated that “I have the intention to leave,

because this centre is far from my home” (Participant 165). In the literature, the distance from home to work was an important factor for the perception of health workers towards their QWL (Argentero et al., 2007). Home-work distance was reported in research as a main cause for employees’ voluntary turnover (Tai et al., 1998; Yin & Yang, 2002).

9.3.4 Relationship between QWL and turnover intention (Hypothesis 3)

Hypothesis 3 postulated that the QWL dimensions (work life/home life, work design, work context and work world) are useful in predicting turnover intention. This hypothesis was supported by findings from the present study. Using standard multiple regression, 26% of the turnover intention among the PHC nurses was explained by knowing the scores on the four dimensions of QWL. Further analysis using hierarchical multiple regression was conducted to assess the ability of the QWL dimensions to predict the turnover intention after controlling for the possible effect of demographic variables of the PHC nurses (Hypothesis 3c). The findings indicated that the QWL dimensions explained 19% of the variance in turnover intention. However, the model as a whole (demographics and QWL dimensions) explained 32.1% of variance in nurse’s turnover intention. These findings are similar to models tested by Tourangeau and Cranley (2006), Shader, et al. (2001), Gregory, Way, LeFort, Barrett and Parfre (2007), Sourdif (2004) and Larrabee, et al (2003), whose models explained 34%, 31%, 31%, 26% and 25.5% of variance in turnover intention.

To test Hypothesis 3b, which speculated that the work life/home life and work context dimensions make the best contribution to the turnover intention of the PHC nurses, standard multiple regression was used. The results partially supported this hypothesis. The work context dimension makes the strongest unique contribution to explaining turnover

intention, followed by the work design dimension, $\beta = -.387$ and $\beta = -.112$, respectively. The 'work context' dimension includes a number of variables: management and supervision, co-workers, professional opportunities and work environment. These variables were found in prior research to be associated with turnover intention (Kudo, Satoh, Sinji, et al., 2006; Shader et al., 2001).

Evidence was found to support the impact of the 'work design' variables on the PHC nurses' turnover intention. These variables include job satisfaction level, workload, lack of workforce, lack of autonomy, non-nursing tasks, interruptions, limited time to do jobs and patient care (Chan & Morrison, 2000; Reeves et al., 2005; Shader et al., 2001).

Although the bivariate correlations between turnover intention and each of the work life/home life and work world dimensions were statistically different from zero; they were not found to be a statistically significant contributor to turnover intention among the PHC nurses using multiple regression. For the 'work world' dimension, only the payment variable was frequently referred to in the responses for the open-ended questions as a main cause for turnover intention of the PHC nurses. This supports the regression model findings. However, in addition to payment, other variables involved in the 'world work' dimension (e.g. public image of nursing, labour market, insecurity of job and belief towards nursing) were reported in prior research as important predictors of the nurses' turnover intention (Chan et al., 2009; Kudo, Satoh, Sinji, et al., 2006).

Factors related to the work life/home life dimension were commonly mentioned in the qualitative data as causes for turnover intention of the PHC nurses. These included family and family needs (family needs, being with family, facilities for family – visa) and working

hours (balance work with family, working hours, work periods per day). Here are examples of statements postulated by respondents regarding these factors: "... my family is staying in my country ... the children are growing and they need their mother for better care ... no family visa" (Participant 256) and "the work duty is too long, affecting my family and personal life" (Participant 303).

It could be argued that the questionnaire items regarding home life/work life did not cover all the variables of this dimension. By including a larger number of scale items, additional variables may explain more variance in nurses intention to leave or stay (Tourangeau & Cranley, 2006). For example, a model tested by Boyle, Bott, Hansen, Woods and Taunton (1999) explained 52% of variance in ICU nurse intention to stay, because they used a large number of independent variables. As argued by Tourangeau and Cranley (2006), the regression model of the current study explained about 32% of variance in nurses' turnover intention, meaning that approximately 68% of variance remained unexplained. This indicates that there are other important predictor variables to turnover intention of PHC nurses not captured by the model (Tourangeau & Cranley, 2006).

To improve the retention of PHC nurses, nursing managers and PHC directors should consider these findings. Attention should be directed to the variables of 'work context' and 'work design' dimensions. In addition to their significant contribution to nurses' turnover intention in the quantitative findings, they were also reported in the qualitative findings. The management/supervision and the development opportunities were the most cited factors for nurses' turnover intention during the 12-month and 5-year periods. This was supported by the literature (Alotaibi, 2008).

In terms of qualitative findings for the 'work design' dimension, a number of factors were cited as 'push' factors from the organisation. These included the workload and nature of work for the 12-month and 5-year periods and job dissatisfaction for the 5-year period only. Workload and job dissatisfaction were frequently reported in the literature as main factors influencing the turnover intention of nurses (Chen et al., 2008; Delobelle et al., 2010; Hayes et al., 2006). However, the nature of work was a new factor that emerged from the qualitative data and was not included in the QNWL survey.

The importance of 'work life/home life' and 'work world' dimensions to the turnover intention of PHC nurses cannot be omitted, although they were not statistically significant in predicting turnover intention using multiple regression analysis. As discussed above, factors of this dimension are important to nurses' satisfaction and retention. In particular, factors related to the family. They were reported by respondents as the main causes for their intention to stay or leave the current PHC. Perhaps it is important to revise the QNWL survey to develop a version that considers the work life of PHC and the local culture. Factors revealed by the qualitative results should be incorporated in the revised version. Then another study should be conducted to examine if there are other kinds of relationships between turnover intention and the QWL dimensions.

9.4 SUMMARY

This chapter presented a discussion on major qualitative and quantitative findings in the context of the literature. At the outset, the perception of QWL among the surveyed PHC nurses and the influencing factors were discussed. Respondents were largely dissatisfied with their QWL. This was supported by findings from the qualitative data, where almost half (47.1%, $n = 147$) of respondents to the related question (Q1) indicated that they were

not happy in terms of their QWL. This finding was also supported by findings from prior nursing research (Khani et al., 2008). Factors reported for nurses' dissatisfaction included: work life/home life (conflict between work and family, working hours and childcare facilities); work design (staffing policy, non-nursing tasks, level of autonomy), work context (management and supervision, opportunities for professional development and working environment), work world (public image of nursing and payment) (Brooks & Anderson, 2004; Khani et al., 2008). Evidence from the literature was found to support the importance of these factors. Additionally, other important factors emerged from the qualitative data such as social life, facilities for nurses, and relationships with patients and the community.

Moreover, significant relationships were found between QWL and the demographic variables, with the exception of the location of the PHC (Hypothesis 1). Similarly, significant relationships were revealed between turnover intention and the demographic variables (Hypothesis 2). The variables of nationality, ethnicity and the location of the PHC were not significant to turnover intention. However, the location of the PHC was repeatedly reported in the qualitative data as a main factor for both the dissatisfaction with QWL and the serious intention to leave the current organisation. These findings were discussed in light of prior research. PHC managers have nothing to do with changing the demographic variables of their employees; however, understanding the association between these factors and the perception of QWL and turnover intention may help in developing different approaches and strategies to retain nurses. For example, PHC managers may provide work environments that take into account the diverse needs of the nursing workforce according to their demographic group, based on the findings (Borkowski et al., 2007).

Furthermore, in using the Anticipated Turnover Scale (ATS), 40.4% of the respondent nurses indicated that they intended to leave their current employment. This finding was supported by the qualitative findings. Approximately 29.3% and 46% of the respondents to the open-ended questions intended to leave their current PHC during the next 12 months and the next five years, respectively. These findings were consistent with the literature (Al-Ahmadi, 2006; Chan et al., 2009; Saeed, 1995).

The ability of the QWL dimensions to predict nurses' turnover intention was tested in three hypotheses. Using standard multiple regression, 26% of the turnover intention among the PHC nurses was explained by knowing the scores on the four dimensions of QWL (Hypothesis 3a). Further analysis using hierarchical multiple regression demonstrated the ability of QWL dimensions to predict the turnover intention after controlling for the selected demographic variables of the PHC nurses (Hypothesis 3c). The four QWL dimensions explained 19% of the variance in turnover intention. However, the model as a whole (demographics and QWL dimensions) explained 32.1% of variance in the nurses' turnover intention. This was similar to findings from prior nursing research (Larrabee et al., 2003; Shader et al., 2001; Tourangeau & Cranley, 2006). Using standard multiple regression to identify the best variables to explain turnover intention, the work context dimension had the strongest unique contribution, followed by the work design dimension (Hypothesis 3b).

The next chapter will provide conclusions, suggestions for future research, and recommendations for improving nurse's QWL and retention.

Chapter 10: Conclusion

10.1 INTRODUCTION

The final chapter of this thesis discusses the implications of the findings for theory and practice. It presents a set of recommendations for improving quality of nursing work life and nurses' retention in the field of PHC. It also evaluates research limitations and identifies the directions for future research. Finally, this chapter ends with a general conclusion for the whole study.

10.2 UNIQUE CONTRIBUTION

The studies of QWL among PHC are rare, especially in developing countries, including Saudi Arabia. This research is noted as the first study of its kind that examines the relationship between QWL and turnover intention among PHC nurses using nursing instruments and the qualitative method. It identified a significant relationship between these two variables. The present study also tested Brooks' survey of QNWL on PHC nurses for first time and identified a number of variables that should be included into the survey, based on the qualitative findings.

The qualitative findings of this study confirm Brooks' dimensions and their applicability to non-western cultures. Additionally, it has revealed a number of new variables regarding QWL and turnover intention of PHC nurses that could enhance some of the dimensions. Such variables could also be used to develop new research surveys or improve the current

tools. These variables may also help in constructing plans and strategies to enhance QWL and retention of PHC nurses.

This study has created new knowledge on QWL and turnover intention of PHC nurses from a different culture and different healthcare system to that found in the extant literature. This will contribute to the growing research, which to date has mainly been based on research from developed countries regarding the impact of QWL on retention of qualified employees, especially nurses at a time of global shortage and high turnover rates.

The research has also developed and introduced a framework for understanding the relationship between QWL and turnover intention among PHC nurses. This model may assist other researchers in furthering their understanding of retention and QWL.

The study is the first of its kind in Saudi Arabia, especially in the field of PHC. Additionally, it provides a comprehensive review and description of the healthcare system and nursing profession in Saudi Arabia. This contribution addresses the current void in the scholarly literature and provides useful information for researchers, managers and policy makers. Finally, the study also adds new knowledge around the work life of expatriate employees (nurses) in the PHC organisations in Saudi Arabia. No previous studies have examined this group's QWL.

10.3 LIMITATIONS OF THE STUDY

As with any investigation, limitations have been identified. Thus, this study must be interpreted in the context of its limitations, as described below.

1. The information was gathered through a self-reporting survey leaving the interpretation to the participant. The use of self-reporting instruments may have decreased the reliability of responses due to misinterpretation of some of the items (Cabigao, 2009).
2. The sample was drawn from nurses who were willing to participate in the study. Although all of the PHC centres ($n = 134$) in the Jazan region were included in this research, the voluntary sampling methodology may limit the generalisability of the findings (Cox, Teasley, Lacey, Carroll, & Sexton, 2007). Voluntary participation meant that it was possible that nurses who did not choose to participate differed from those who did participate (Cabigao, 2009). However, the response rate was high where 532 (91%) out of 585 PHC nurses in the Jazan region responded to the survey (effective response rate = 508; 87%). This high response rate suggests that response bias will be minimal.
3. For the purpose of the data analyses, each participant was provided with an empty envelope tagged with an individual tracking number. However, the majority of the nurses did not use the empty numbered envelopes to return the completed questionnaire; instead, they used unidentified envelopes. Other participants took out the tracking numbers before they returned their questionnaires. Consequently, the researcher was unable to identify the PHC or the sector of the returned

surveys. The response rate for each PHC or sector was therefore not known and the comparison between organisations and/or health sectors was not possible. However, considering this fact in relation to what was presented in limitation one, it could be argued that the extraordinarily high response rate indicates that the respondents had been given the opportunity to express some deeply-held frustrations, which they have clearly been too afraid to express before. This is also borne out by the fact that most respondents refused to use the envelopes with tracking numbers, making it impossible to link the responses back to the individuals or centres.

4. About 72% of the study sample were Saudi nurses, which is different from workforce statistics. The majority of the nursing workforce in Saudi Arabia comprises expatriates (71%). However, the sample of this study is close to the nursing population in PHC facilities in Saudi Arabia, and specifically in the Jazan region as the location of the study where 67% and 73.4% are Saudis, respectively. Therefore, this study is limited to RNs of PHC in Saudi Arabia and in particular for nurses in PHC facilities in Saudi Arabia and in the Jazan region. Generalisation of this finding beyond this population should be applied with caution.
5. The measurement instrument used in this study may not cover all items of QWL and turnover intention, for example the work life/home life dimension. This dimension was not significant in predicting turnover intention; however, in the open-ended questions, it was often cited as one of the main reasons for leaving the organisation. It could be argued that the QNWL survey has omitted other important factors related to the work life/home life dimension. There is a need to

revise the current QNWL survey or develop another one that focuses on the PHC organisations and considers the local culture.

6. The questionnaires were distributed to the PHC nurses through their managers. This strategy could have allowed the managers to put some pressure (intentional or unintentional) on RNs to complete the survey in a particular way (Day, 2005). However, there were no reports of pressure placed on respondents from managers.
7. Lastly, the four dimensions of QWL that were examined in this study in relation to turnover intention have not previously been studied among PHC nurses. No such studies in the field of PHC were found with which to directly compare the results of the present study (Cabigao, 2009). Therefore, studies from hospitals were used, which may be different in some ways from the PHC working environment.

Despite these limitations, the study has provided valuable findings and contributed significantly to the body of research knowledge regarding QWL and the turnover intention of RNs in PHC organisations. Nurse Managers, PHC directors, healthcare leaders and policy makers who are interested in enhancing the work life experience of PHC nurses, improving the productivity of their employees and organisations and developing a retention process for their nurses may still benefit from this research.

10.4 SUGGESTIONS FOR FURTHER RESEARCH

This study highlights several areas requiring further research. These areas can be grouped under two categories: firstly, research that focuses on QWL and turnover intention in PHC

facilities to consolidate the current growing theory; and secondly, research that focuses on the situation of Saudi Arabia, the location of the current study.

10.4.1 Further research for QWL and turnover intention

A review of previous studies reveals a dearth of research regarding the PHC workforce, especially regarding QWL and organisational turnover in developing countries. Much of the literature is focused on hospital personnel in western societies. This may be because collecting data from hospitals is easier than PHC facilities. Moreover, the number of nursing staff in a hospital is larger than in individual PHC organisations. Additionally, support for nursing research in developing countries, including Saudi Arabia, lags behind western countries.

Further research to develop a QWL tool for PHC nurses taking into consideration the findings of the current study along with local culture is required. Another option is to develop another version of Brooks' QNWL survey specialised for PHC nurses, adopting the new factors in this study such as social and cultural aspects, being with the family, relationships with patients and the community, and facilities for nurses. This will help in better assessment of their QWL and the development of effective strategies to stem nurse turnover.

The revised theoretical framework of the current research should be tested in further research to identify its ability to examine the QWL of PHC nurses (in other regions and countries) and their turnover intention.

The current study used a cross-sectional survey design which limits the observation of change over time. There is a need to conduct longitudinal research using a few selected

PHC organisations to gain an in-depth understanding of the determinants of and changes in QWL and turnover intention of PHC nurses at various points in time. Such methodology would enable actual attrition to be monitored against turnover intention.

An intervention study to improve QWL and intention to stay among PHC nurses using the findings of the current study is required. For example, a PHC centre or a small group of PHC centres could be chosen for a longitudinal intervention study to assess the impact of providing supportive facilities for nurses, clearly identifying roles and tasks, and offering better payment and professional opportunities to improve the QWL and retention of nurses. This would help in assessing the impact of such strategies on reducing turnover of PHC nurses.

10.4.2 Further research within the Saudi context

It would be valuable to conduct another study in five years' time to find out the percentage of actual turnover among PHC nurses compared with reported turnover intention in the current study. This will provide further understanding of the relationship between turnover intention and actual turnover among PHC nurses.

Working in PHC services requires a comprehensive understanding of people's culture and lifestyles in order to provide quality PHC nursing. Further in-depth research is needed to assess the impact of the local culture and language challenges on the perception of expatriate nurses, who have come from different working environments and cultural backgrounds, towards their QWL and their turnover intention.

Contrary to a number of recent studies, the current research found a significant relationship between gender (male) and QWL and turnover intention. Further research is

required to examine if there is any association between this finding and the impact of local culture.

The positive change in the number of married Saudi nurses that was revealed in this study is different from the situation in previous studies. Prior research attributed the issue to the poor public image of nursing. There is a need to conduct a study to identify determinants of this change, improvement of public image towards nursing or other latent factors.

A comparative study between PHC centres and hospitals as well as public sector and private sector organisations in terms of QWL and turnover intention of nursing personnel is required. Such a study may assist in identifying the detriments of QWL and turnover intention in each sector that may be different from sector to sector according to differences in the working system and environment. A further comparative study regarding QWL and turnover intention between nurses and other health professionals in PHC services is required.

10.5 IMPLICATIONS FOR THEORY AND PRACTICE

The findings of this study have significant implications for PHC nursing, PHC organisations, nursing and PHC managers, and research. The implications will be addressed according to theory and practice.

10.5.1 Implications for theory

The current study revealed a number of important findings regarding the QWL of PHC nurses and their turnover intention. Although the bivariate correlations between turnover intention and the four dimensions of QWL were statistically different from zero, using

multiple regression analysis only two dimensions ‘work context’ and ‘work design’ were found to be statistically significant to explain the variance in the scores of turnover intention among the PHC nurses. These findings do not eliminate the importance of the other two dimensions of ‘work life/home life’ and ‘work world’. The qualitative findings showed that the family and family needs, the socio-cultural aspects, and payment were frequently reported by respondents as ‘push’ factors for their turnover intention. It could be argued that the questionnaire’s items regarding these two dimensions were not adequate to cover all the variables. Including a larger number of scale items may explain more variance in nurses’ intention to leave or stay (Tourangeau & Cranley, 2006). It would be useful to add the variables mentioned in the qualitative findings to Brook’s current survey of QNWL in order to develop a particular survey for PHC nurses.

This study also provided a framework for the relationship between QWL and turnover intention, including the demographic characteristics of nurses (see Figure 10.1). This framework has been revised in light of the findings of the current study. It would be useful to examine the appropriateness of this framework on PHC nurses in other regions and countries in order to improve it. Such an initiative will contribute significantly to the pool of QWL and turnover scholarly research.

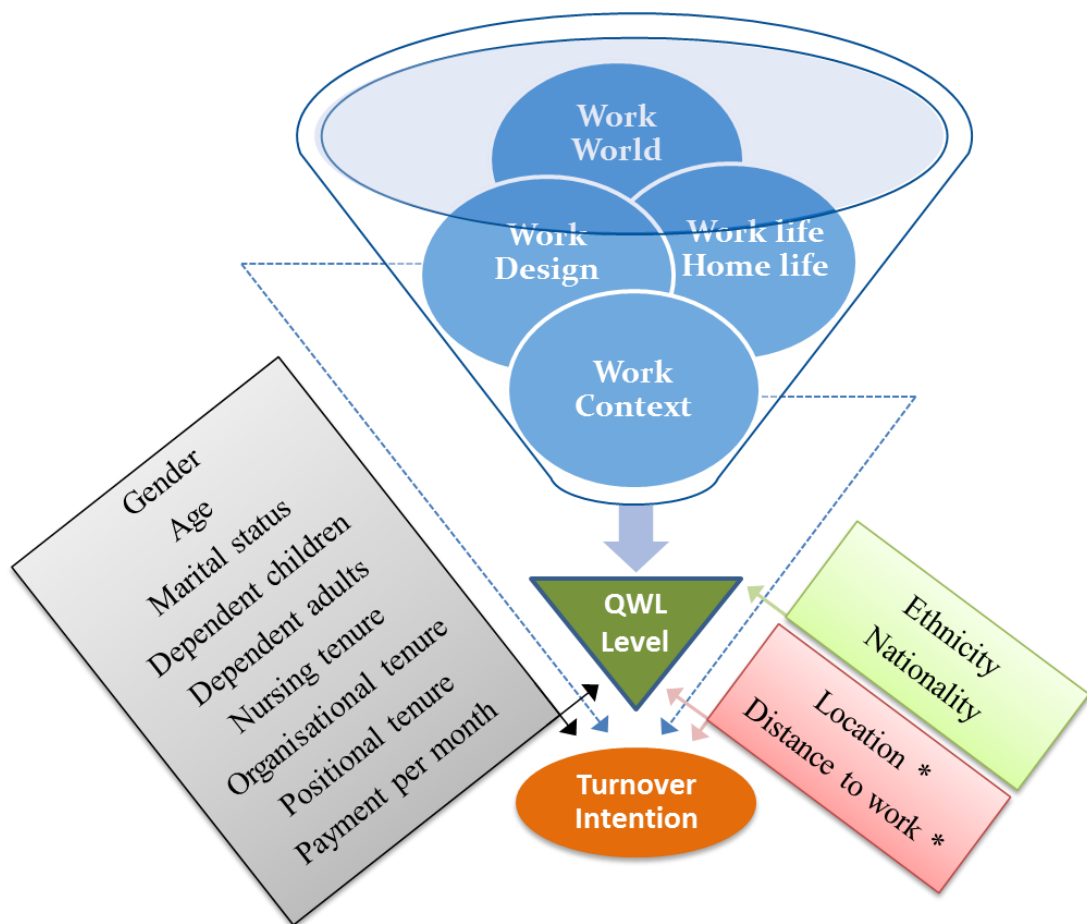


Figure 10.1. The revised framework for the relationship between QWL and turnover intention.

* Based on the qualitative findings.

10.5.2 Implications for practice

This study provides a set of findings regarding nurses' QWL and their turnover intention from the current PHC organisations. The study also revealed a number of factors affecting both variables (QWL and turnover intention) through analysing quantitative and qualitative data that were provided by the nurse respondents. The study found a significant relationship between QWL and turnover intention of the PHC nurses. Prior research argued the importance of QWL to employees' satisfaction, commitment and performance, productivity of the organisation, and satisfaction of service receivers (Hsu & Kernohan, 2006; Huang et al., 2007). Similarly, previous research has argued the impact of employees' turnover intention on their performance (Dolan, Van Ameringen, Corbin, & Arsenault, 1992). Therefore, low QWL may influence the nurses' productivity and commitment as well as the PHC performance. To ensure high quality PHC services and to attract and retain nurses, QWL needs to be improved.

The shortage and high turnover of qualified nurses are challenges for many developing countries, including Saudi Arabia. In particular, the majority of expatriates use the Saudi healthcare facilities as a temporary location to obtain training and experience. Then they move with marketable skills to developed countries such as the USA, the UK, Canada, and Australia (Alamri et al., 2006; Alhusaini, 2006). This study identified factors that influence QWL and turnover intention of PHC nurses. The findings can be used by nursing leaders, PHC managers and policy makers for developing and appropriately implementing effective health and human resource policies that consider the needs of their nurses, organisations and community. This may help to enhance the home and work environments, improve individual and organisational performance, and increase nurses' commitment.

10.6 RECOMMENDATIONS TO IMPROVING QWL AND RETENTION OF PHC NURSES

Based on the findings of the current study and the literature review, key suggestions are proposed to improve QWL of PHC nurses, and in turn, decrease their turnover intention.

10.6.1 Work life/home life

Recommendations for work life/home life dimension include:

- Reducing daily working hours to allow nurses look after their families. PHC nurses work between 47.5 and 49 hours per week compared to 35 hours for other public jobs. However, they only receive 20% extra in their salary compared to 70% for physicians and 45% for pharmacists. Additionally, part-time work is not available in the PHC centres in Saudi Arabia. The introduction of part-time jobs could assist nurses to balance work with family needs.
- Providing nurses with break-time for their lunch. Nurses work long hours with no rest time. Nurse Managers should address this by advocating for the rights of their nurses to the Civil Affairs Ministry, the legislative party for civil employees, and the MOH.
- Providing day-care services for the children of nurses during work hours through the provision in-service facility, arrangements with external child-care services or financial support paid directly to nurses who are in need of such services.

- Improving the system of annual vacation and family leave and ensuring the equality between Saudis and non-Saudis. For example, Saudi nurses have access to long maternity vacation (about 3 months), while non-Saudi nurses do not.
- Coordination with security agencies to provide non-Saudi nurses with a family visa so they can bring their dependents to Saudi Arabia. Such a strategy will encourage the stability and retention of non-Saudi nurses, and in turn help in the stabilisation of the PHC nursing workforce.
- Making efforts to integrate expatriate nurses into the work environment as well as the whole community. It will be useful to provide nurses in each sector with a social club where they are able to engage and spend their leisure time with their friends and colleagues. Encouragement of peer support and mentoring practice may help expatriate nurses to overcome social and culture challenges (Bozionelos, 2009). Nursing leaders should also provide expatriate nurses with training courses on the Arabic language, communication skills, and in the local culture. Such efforts may help to increase expatriate nurse satisfaction and to improve their performance, and in turn reduce the turnover of such nurses.

10.6.2 Work design

Recommendations for the work design dimension include:

- Providing adequate numbers of RNs and nursing assistants, and ensuring equitable distribution of the current nursing workforce to reduce any experienced workload, and to ensure adequate nursing services for patients, families and the community.

The PHC department can take advantage of unemployed nurses who graduated

from private health institutes after providing them with a preparation course in the field of PHC. However, to achieve this, PHC organisations should be financially independent. Currently, the funding policy is governed by the Central Department of PHC and the MOH. Additionally, PHC organisations should retain the current nursing workforce. More social, managerial, professional and organisational support should be directed to young and novice nurses who were found in this study and in the literature to be more likely to leave the organisation than experienced nurses. Older nurses with longer nursing careers and with organisational and positional tenure were less likely to leave their current organisation. This could be attributed to their strong commitment to their current employers and to their ability to cope successfully with their stressful work environments (Kudo, Satoh, Sinji, et al., 2006). Additionally, older nurses may have more family obligations compared with younger nurses; thus, they need stable employment. Older nurses may require a greater sense of appreciation, valuation and respect.

- Limiting the engagement of PHC nurses into non-nursing duties such as working in pharmacy, medical records and management. The multiplicity of roles undertaken by PHC nurses does not give them an advantage, but instead may diminish their professionalism as they work as standbys for other employees. However, it would be a good innovation to introduce new nursing roles such as the 'Practitioner Nurse'. This may help them to develop better sense towards the nature of nursing work within the PHC organisations.

10.6.3 Work context

Recommendations for the work context dimension include:

- Appointment of specialised healthcare managers to be in charge of PHC services instead of giving such important roles to health professionals (e.g. doctors, nurses or pharmacists). Such a strategy may improve the organisations' outcomes and keep health professionals, especially nurses, in their main jobs.
- Providing nurse manager/supervisor with short training programs on the art of management, leadership and communication skills. 'Management and supervision' was one of the most influencing factors on the QWL and turnover intention of PHC nurses.
- Recognition of nurses' achievements through the provision of an effective reward system (e.g. recognition for initiatives award, promotions, and financial rewards). Nurses need to feel respected and valued for their skills, their knowledge, their performance and their participation in the creative improvement process.
- Involvement of PHC nurses in the decision-making process at all levels of their organisations, particularly in decisions regarding their profession and practice. Engagement of nurses in such processes may increase their confidence and trust in their organisation and managers. Additionally, nurses as well as other employees should be informed about the vision and detailed goals of their organisation. This may help to increase their organisational commitment and improve their performance and productivity.

- Limiting unnecessary transfer of nurses in between PHC organisations. Employees need to feel a high level of trust towards their managers and supervisors as well as a high sense of stability at the workplace. Unfortunately, frequent transfer of PHC nurses from one centre to another can end their relationships with other parties (managers, co-workers, patients and the community) which may have taken a long time to be consolidated. This may affect their organisational commitment, performance and productivity.
- Provision of accurate and comprehensive job descriptions for PHC nursing that take into account all levels of nurses, as well as the provision of adequate and realistic work plans and procedures. Nurses in PHC reported a critical lack of such policies and procedures.
- Encouraging the professional growth of PHC nurses through the provision of a systematic career ladder. Currently, there is no significant difference in roles and positions of PHC nurses, irrespective of their qualifications or experiences.
- Supporting PHC nurses to further their education in the field of PHC nursing. Currently, nurses with pre-degree preparation such as an Associate degree or diploma cannot pursue their education inside the country. Even if they were accepted for a Bachelor degree, they would be required to enrol in year 1 of the program, regardless of their previous studies or experiences. Part-time study is not available for nurses, including expatriate nurses. Nurse Managers should work with relevant departments and educational institutions to run part-time and distance-learning PHC nursing programs to enable nurses to further their

education and develop their nursing knowledge and skills while working in PHC centres.

- Running free-of-charge continuing nursing programs and various training workshops at PHC centres and paying for those in other organisations. The current study revealed that about 72% of nurse respondents did not receive support to attend continuing and in-services education programs. A related strategy would be to establish a nursing library and learning class in each PHC or for each group of PHC centres. Another suggestion is to provide nurses with access to current nursing publications and books in the field so they can keep abreast of the current knowledge and advancements. Nurses as healthcare professionals always need to refresh their knowledge and skills to provide quality patient and community care and to also foster their QWL. Lack of training programs for nurses will impact on their competence and performance (Alhusaini, 2006).
- Improving the working environment in terms of building and infrastructure, security, and supplies for patient care. It is important to speed up the establishment of new PHC centres that have been approved by the MOH. The majority of PHC centres are rented or old and they lack the necessary infrastructure; thus, they are not purpose-built for providing healthcare services. For the comfort of nurses, they should be provided with a furnished break-area for their rest and to place their private belongings in security. Additionally, the security of the PHC working environment must be improved through the introduction of security departments as in other healthcare organisations. Finally, to provide a quality nursing care, PHC

centres must be supported with the required materials and equipment for healthcare services. Nurses reported a lack of client/patient care supplies and equipment. This lack may influence the level of nurses' QWL and their performance and productivity. Nurses need more efficient and effective working environments which ensure the needs of patients, employees and providers.

10.6.4 Work world

Recommendations for the work world dimension include:

- Working with the media to demonstrate the vital role of PHC nurses in the care of the community, in the provision of healthcare services and in the advancement of the population's health. The poor social image of nursing is a critical factor that contributes to a low level of QWL among PHC nurses. Greater attention should be directed towards male nurses since they always tackle social criticism by performing managerial duties while officially being counted in the nursing workforce. This intensifies the issue of nursing shortages and puts more pressure on practical nurses, especially expatriate nurses.
- Re-examining the salary scale for nurses in PHC organisations, especially for expatriates. As revealed by this study, the current salary system is problematic for PHC nurses. It is not equitable to pay nurses who have the same qualifications, experience and duties with a different salary, based on their nationality. In addition, the salary of nurses should be increased in accordance with the tasks they perform. There is a big difference between the salary of nurses and other health professionals. Nurses also should be provided with fair financial benefits such as

allowances for housing, working in remote areas, dealing with infectious diseases, or working in open-public areas. Other health professionals in Saudi Arabia receive several of these benefits.

- Enhancing job security among PHC nurses, especially expatriates. Expatriate nurses should be assured about the future of their jobs. Applying the short-term contract policy may raise job insecurity, as the chance to extend the contract is uncertain. Such experience may lead to a lack of trust in their jobs, organisations and managers, and in turn lead to poor QWL.

Finally, in light of the current situation of the PHC nurses, it would be an important advance to establish a National Commission for PHC Nursing in Saudi Arabia. This Commission would aim to develop PHC nursing practice, shape future plans for the advancement of the profession, and advocate for nurses' rights to the appropriate authorities such as the MOH, Ministry of Higher Education, Ministry of Finance, Ministry of Civil Services, Ministry of Labour, and Ministry of Interior Affairs.

10.7 CONCLUSION

The purpose of this doctoral study was to provide an evidence base for improving the retention of PHC nurses through exploring and assessing QWL and organisational turnover intention. The PHC nurses in the current study indicated low satisfaction with their QWL and a high turnover intention. Significant relationships were found between the majority of the examined demographic characteristics and both QWL and turnover intention. Similarly, a significant association between QWL and turnover intention of PHC nurses was also revealed by this research. The QWL dimensions were significantly

associated to turnover intention. The strongest QWL variables that contributed significantly to turnover intention of respondents were the work context and work design, respectively. The qualitative findings reaffirmed the quantitative findings. However, the home life/work life and work world dimensions were of great important to both QWL and turnover intention. A number of new factors that were not included in the survey questionnaire were revealed by the qualitative findings. These included being away from family, lack of family support, social and cultural aspects, accommodation facilities, transportation, building and infrastructure of PHC, nature of work, job instability, privacy at work, patients and the community, and distance between home and workplace. All of these factors were classified under the main dimensions of QWL. Creating and maintaining a healthy work life for PHC nurses is very important to improving their satisfaction, reducing turnover, enhancing productivity and improving nursing care outcomes. It is anticipated that improving these factors will lead to high QWL, increase retention rates and hence reinforce the stabilisation of the nursing workforce.

This study added to the pool of research knowledge from a different culture and different healthcare system, namely Saudi Arabia. The study is the first of its kind in Saudi Arabia that explores the QWL and turnover intention of PHC employees, including nurses. It also studied the relationship between QWL and turnover intention of PHC nurses for the first time using nursing instruments. The study also provided a new framework for the relationship of QWL and turnover intention of PHC nurses that could be used and tested by other researchers.

Finally, this study highlighted several areas requiring further research. There is a clear shortage of QWL and turnover intention studies among PHC nurses in developing

countries. Further research is needed to develop a QWL instrument for PHC nurses, considering the findings of the current study and the local culture. Clinical longitudinal and intervention nursing studies are required to understand and improve QWL and retention of PHC nurses. Focusing on the location of the current study, it would be valuable to conduct another study in five years' time to examine the actual turnover among PHC nurses compared with reported turnover intention in the current study. Further in-depth research is needed to assess the impact of local culture on the perception of expatriate nurses towards their QWL and their turnover intention. A comparative study between PHC centres and hospitals as well as the public and private sectors in terms of QWL and turnover intention of nursing personnel is required. Findings may be different from sector to sector according to differences in the working system and environment. It would also be a useful to compare the perception of nurses and other health professionals of PHC centres in terms of QWL and turnover intention.

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Appendices

**Appendix A:
Summary of the 32 Studies Included for Review**

No.	Authors, year, article and the source information	Country	Aim(s) of study	Sample	Setting of study	Data collection method and study design	Analysis procedure	Findings related to the review purpose
1.	(Apker, Propp, & Ford, 2009) Investigating the effect of nurse-team communication on nurse turnover: Relationships among communication processes, identification, and intent to leave. <i>Health Communication</i> , 24(2), 106-114.	USA	To examine the relationships among nurse–team communication, identification (organisational and team), and intent to leave.	Hospital nurses Convenience sample <i>N</i> = 201	Various wards in 348-bed tertiary hospital	A questionnaire using the 65-item Nurse-Team Communication Inventory; Organisational Identification Questionnaire; Team Identification Questionnaire; and, Intention to Leave Scale by O'Reilly, Chatman, and Caldwell (1991). A survey design (Quantitative study) RR= 33%	<ul style="list-style-type: none"> • Multiple regression • Post hoc exploration 	<ul style="list-style-type: none"> • Promoting team synergy was significantly related to intent to leave, and this relationship was inverse ($\beta = -.30$), accounting for 6.4% of the variance in intent to leave. • Further analyses showed that the relationship between promoting team synergy and intent to leave was partially mediated by team identification or by organisational identification. • Mentoring peers was a significant predictor of intent to leave, and the relationship was inverse ($\beta = -.30$).
2.	(Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010) The impact of environmental factors on nursing stress, job satisfaction, and turnover intention. <i>Journal of Nursing Administration</i> , 40(7/8), 323-328.	USA	To investigate relationships between environmental factors of odour, noise, light, and colour and perceived stress, job satisfaction, and turnover intention.	Full-time medical-surgical nurses Convenience sample <i>N</i> = 116	500-bed level 1 trauma centre	A 36-item questionnaire using the Perceived Stress Scale, Nurses' Intent to Stay Questionnaire, M.D. Anderson Patient Contact Survey. A descriptive, correlational design (Quantitative study) RR= 41%	<ul style="list-style-type: none"> • Descriptive statistics • Pearson's correlation • Two-tailed tests of significance. • Backward regression 	<ul style="list-style-type: none"> • Significant relationships were found between noise and perceived stress, perceived stress and job satisfaction, job satisfaction and turnover intention ($r = 0.74, p = .00$), and perceived stress and turnover intention ($0.34, p = .00$). • Using backward regression, job satisfaction having the strongest influence on turnover intention ($p = .00$).
3.	(Cai & Zhou, 2009) Structural empowerment, job satisfaction, and turnover intention of Chinese clinical nurses.	China	To examine the levels of workplace structural empowerment perceived by Chinese clinical nurses, as well as to identify the relationship between nurses'	Staff Nurses Convenience sample <i>N</i> = 189	Two first-class teaching hospitals (~600 beds each)	A self-administered questionnaire consisted of six scales. Demographic Questionnaire, Global Job Satisfaction Questionnaire, Conditions for Work Effectiveness Questionnaire	<ul style="list-style-type: none"> • Descriptive statistics • Cronbach's α • Pearson's correlation 	<ul style="list-style-type: none"> • No statistically significant relationships were found between the self-reported turnover intention and the demographic variables of age, number of years worked in nursing, number of years worked in the current job, and level of education. • Structural empowerment was positively

No.	Authors, year, article and the source information	Country	Aim(s) of study	Sample	Setting of study	Data collection method and study design	Analysis procedure	Findings related to the review purpose
	<i>Nursing & Health Sciences</i> , 11(4), 397-403.		perceptions of empowerment and job satisfaction, and turnover intention.			(modified), Job Activates Scale, Organisational Relationship Scale and Turnover Intention Scale. A survey design (Quantitative study) RR= 98.4%		related to the perceived job satisfaction ($r = 0.56, p = 0.01$) and turnover intention ($r = -0.31, p = 0.01$). <ul style="list-style-type: none"> • Turnover intention was significantly negatively correlated with the job activities (job flexibility, discretion, visibility, and recognition within the work environment) ($r = -0.27, p = 0.05$). • Job satisfaction were found to be negatively related to turnover intention ($r = -0.49, p = 0.01$).
4.	(Chan, Luk, Leong, Yeung, & Van, 2009) Factors influencing Macao nurses' intention to leave current employment. <i>Journal of Clinical Nursing</i> , 18(6), 893-901.	Macao	To investigate factors associated with nurses' intention to leave current employment in Macao.	Full-time nurses Convenience sample $N = 426$	Two hospitals; one public and one private hospital	Job Satisfaction Questionnaire, including questions for demographics and intention to leave. A descriptive design (Quantitative study) RR= 81.8% (Effective RR= 53.8%)	<ul style="list-style-type: none"> • Descriptive statistics • Factor analysis • Cronbach's α • Cluster analysis. • Univariate analysis • Multiple logistic regression 	<ul style="list-style-type: none"> • 39.0% indicated an intention to leave current employment. • Age ($p < .001$), work experience ($p < .001$), workplace ($p = 0.015$) and job satisfaction: pay and benefits ($p < .001$) were significant risk factors to predict nurses' intention to leave current employment.
5.	(Chan & Morrison, 2000) Factors influencing the retention and turnover intentions of registered nurses in a Singapore hospital. <i>Nursing and Health Sciences</i> , 2, 113-121	Singapore	To explore some demographic and work-related factors which influenced the retention and turnover intentions of RNs	RNs Convenience sample $N = 114$	Various units in a major hospital with 1,028 beds	Adapted questionnaires from the tool developed by Batters by et al. (1990), which provides a measure of both demographic and work-related factors. A cross-sectional descriptive design (Quantitative study) RR = 95%	<ul style="list-style-type: none"> • Descriptive statistics • Chi-square tests 	<ul style="list-style-type: none"> • Leavers and stayers are statistically different in terms of qualifications, area of work and years of experience as a RN ($p < 0.05$). Leavers – Certificate or diploma, work in non-ICU and RNs 2–4 years; while, Stayers – Specialized qualification, work in ICU, RNs either 02 years or between 6-10 years. • Major factors influencing the RNs' decision to leave are uncooperative nurses; staffing

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6.	<p>(Chen, Chu, Wang & Lin, 2008)</p> <p>Turnover factors revisited: A longitudinal study of Taiwan-based staff nurses.</p> <p><i>International Journal of Nursing Studies</i>, 45(2), 277-285.</p>	Taiwan	<p>To investigate whether the same mechanisms and factors that affect employees' turnover intentions can be applied to actual turnover in a longitudinal way in an effort to expose causal relationships.</p>	<p>RNs - managers excluded</p> <p>Convenience Sample</p> <p>$N = 308$</p>	<p>A 600 beds hospital in Taichung</p>	<p>A posted questionnaire in the first wave covering demographic data; job involvement; positive and negative affectivity; distributive justice; total yearly income; other variables (Job stress, promotional chances, autonomy, routinisation, social support and pay). Three years later (wave two), the turnover data were collected from the hospital personnel records.</p> <p>A longitudinal study design. (Quantitative study) RR= 74.8%</p>	<ul style="list-style-type: none"> • Descriptive statistics • Exploratory factor analysis • Multiple regression • Logistic regression 	<p>levels; disliking the work; uncooperative medical staff; supervisor's leadership; salary; nurses' welfare; inability to use nursing skills; no recognition for work done; physical demands of nursing care; inadequate resources/equipment; non-dedicated nurses; no opportunity to work in preferred area; uncaring environment; and standard of patient care.</p> <ul style="list-style-type: none"> • Qualitative findings indicate that poor staffing, heavy workload, encounters with doctors, supervisors and administrators in the nursing hierarchy were problematic, even among most stayers. • Distributive justice, workload, resource inadequacy, supervisory support, kinship support, and job satisfaction were established to be highly associated with intent to stay/leave. • Nevertheless, with the exception of workload ($\beta = -.321$; $p \leq .014$), these indicators worked poorly when predicting the actual turnover. • Data from wave two had divided the wave one's respondents into 132 leavers (42.9%) and 176 stayers (57.1%).

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7.	<p>(El-Jardali, Dimassi, Dumit, Jamal, & Mouro, 2009)</p> <p>A national cross-sectional study on nurses' intent to leave and job satisfaction in Lebanon: implications for policy and practice.</p> <p>BMC Nursing, 8, doi:10.1186/1472-6955-8-3</p>	Lebanon	To determine the extent of nurses' intent to leave and examine the impact of job satisfaction on intent to leave. Intent to leave was explored to differentiate between nurses who intend to leave their current hospital and those intending to leave the country.	<p>RNs with at least 1 year of experience</p> <p>Convenience sample</p> <p>$N = 1,793$</p>	<p>69 hospitals</p> <p>47 small-size (20-100 beds), 15 medium (101-200 beds) and 7 large (>200 beds) hospitals</p>	<p>A survey questionnaire. Questions included those relating to demographic characteristics, intent to leave, and the McCloskey Mueller Satisfaction Scale.</p> <p>A cross-sectional design (Quantitative study) RR= 76.17%</p>	<ul style="list-style-type: none"> • Univariate descriptive statistics • Bivariate associations (Pearson Chi-square) • <i>t</i>-test • ANOVA • A multinomial logistic regression 	<ul style="list-style-type: none"> • 67.5% reported intent to leave within the next 1 to 3 years, many of whom disclosed intent to leave the country (36.7%). Within nurses who reported intent to leave the hospital but stay in Lebanon, 22.1% planned to move to a different health organisation in Lebanon, 29.4% planned to leave the profession and 48.5% had other plans. • A common predictor of intent to leave the hospital and the country was dissatisfaction with extrinsic rewards. Other predictors of intent to leave (country or hospital) included gender, age, marital status, degree type, and dissatisfaction with scheduling, interaction opportunities, and control and responsibility.
8.	<p>(Fang, 2001)</p> <p>Turnover propensity and its causes among Singapore nurses: An empirical study.</p> <p><i>International Journal of Human Resource Management</i>, 12(5), 859-871.</p>	Singapore	To gain a better understanding of the turnover phenomenon by exploring the impact of a number of attitudinal and perceptual predictors on turnover cognition and turnover intention.	<p>RNs</p> <p>Random sample</p> <p>$N = 180$</p>	A large general hospital	<p>A survey questionnaire including: demographic data; Stress Scale; Job Descriptive Index; Organisational Commitment Questionnaire; Supervision Satisfaction Scale; Professional Commitment; and, Turnover Cognition & Turnover Intention.</p> <p>A survey design (Quantitative study) RR =90%</p>	<ul style="list-style-type: none"> • Descriptive statistics • Correlation regression • Multiple regression 	<ul style="list-style-type: none"> • Stress strikes throughout different stages in turnover development ($b=.351, p<.001$); • Professional commitment is an important cause of turnover cognition, but not turnover intention ($b= -.24, p < .01$); • Organisational commitment ($b=.301, p < .01$), stress ($b=.29, p < .01$) and supervision satisfaction ($b = -.168, p < .05$) are among the top predictors of turnover intention. Jointly, they accounted for 32% of the total predictors in the turnover intention.

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9.	(Fitzpatrick, Campo, Graham, & Lavandero, 2010) Certification, empowerment, and intent to leave current position and the profession among critical care nurses. <i>American Journal of Critical care</i> , 19(3), 218-226.	USA	To examine relationships between American Association of Critical-Care Nurses (AACN) specialty certification and empowerment, and to examine these variables as related to intent to leave the current position and the nursing profession.	Critical care nurses (those who had e-mail on file with AACN) Convenience sample <i>N</i> = 6,589	American Association of Critical-Care Nurses (AACN)	Web-based survey running the Conditions of Work Effectiveness Questionnaire, Revised (CWEQ-II), Intent to Leave and demographic data. A survey design (Quantitative study) RR= 15%	<ul style="list-style-type: none"> • Descriptive statistics • <i>t</i>-test • ANOVA • Chi-square tests 	<ul style="list-style-type: none"> • 41% of the critical care nurses indicated intent to leave their current position; only 7% intended to leave the profession. • Those participants who held AACN certification were less likely to leave their position ($r=4.70$, $df=1$, $p=.05$). • Nurses who did not intend to leave either the position or the profession had higher empowerment scores. • Nurses who intend to leave their position were significantly male, African American, younger than other nurses, had less experience, and holding bachelor degrees.
10.	(Gardulf et al., 2005) Why do nurses at a university hospital want to quit their jobs? <i>Journal of Nursing Management</i> , 13(4), 329-337.	Sweden	To investigate to what extent the RNs at a university hospital intend to quit their present jobs and the reasons for this.	RNs, Registered Midwives, Head Nurses, Head Midwives & Clinical Teachers Convenience sample <i>N</i> = 918	Huddinge University Hospital in Stockholm (900-bed hospital)	Two mailed questionnaires were used: Quality Work Competence Questionnaire and Huddinge University Hospital Model Questionnaire. A survey design (Quantitative study) RR= 52% RNs & RNMs in clinical care ($n = 833$, 51%); and, HNs, HNMs and clinical teachers ($n = 85$, 67%)	<ul style="list-style-type: none"> • Chi-square tests • Mann–Whitney U-test • Kruskal–Wallis test • A 0.017 significance criterion (Bonferroni adjustment) 	<ul style="list-style-type: none"> • 55% ($n = 449$) intended to quit and 35% ($n = 155$) had already taken steps to do so . • Main reasons were dissatisfaction with the salary (65%), psychologically strenuous and stressful work (32%), a wish to try something new (28%), limited opportunities to make a professional career (19%), and support from their superiors for participating in nursing research and developing projects.

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11.	(Hart, 2005) Hospital ethical climates and registered nurses' turnover intentions. <i>Journal of Nursing Scholarship</i> , 37(2), 173-177.	USA	To investigate (a) the effects of hospital ethical climates on positional and professional turnover intentions of RNs, and (b) the relationships among demographic factors, employment characteristics, and positional and professional turnover intentions of RNs.	RNs working in direct patient care Random sample N = 463	Acute care hospitals in Missouri State	A self-administered questionnaire containing the following instruments: Hospital Ethical Climate Survey; the Anticipated Turnover Scale; the Nurse Retention Index and the demographic and employment data. A non-experimental, cross-sectional design (Quantitative study) RR= 38.5%	<ul style="list-style-type: none"> • Descriptive statistics • Pearson's correlation • Hierarchical regression 	<ul style="list-style-type: none"> • The hospital ethical climate (HEC) explained 25.4% of the variance in positional turnover intentions and 14.7% of the variance in professional turnover intentions. • Together, HEC, control over practice, the use of educational reimbursement as a retention strategy, gender, and staff sufficiency explained 29.7% of the variance in positional turnover intentions. • HEC, patient load, and control over practice together explained 15.8% of the variance in professional turnover intentions.
12.	(Kudo et al., 2006) Factors associated with turnover intention among nurses in small and medium-sized medical institutions. <i>Environmental Health and Preventive Medicine</i> , 11, 128-135.	Japan	To evaluate factors associated with turnover intention among nurses in small and medium-sized medical institutions.	RNs, Licensed Practical Nurses and Assistant Nurses working full-time – excluding of Nursing Directors A non-random sample N = 168	Internal medicine & surgery sections of 4 various hospitals	A self-administered questionnaire survey developed by the authors. It covers turnover intention; job satisfaction; basic attributes of subjects. A cross-sectional design (Quantitative study) RR= 71.0% Effective RR = 57.3%	<ul style="list-style-type: none"> • Multiple Linear analysis • Mann-Whitney U test • Kruskal-Wallis test • Pearson's correlation 	<ul style="list-style-type: none"> • As for nurses' basic attributes, turnover intention was significantly associated with RNs (90%), younger nurses (97%) and those with low satisfaction with sleep (83%). • Number of nurses with turnover intention was significantly higher for those with low satisfaction with salary, low satisfaction with welfare, poor implementation of fair salary raise, and poor cooperation among nurses.

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13.	(Larrabee et al., 2003) Predicting registered nurse job satisfaction and intent to leave. <i>Journal of Nursing Administration, 33 (5), 271-283.</i>	USA	To investigate the relative influence of nurse attitudes, context of care, and structure of care on job satisfaction and intent to leave.	RNs employed in the study units for at least 3 months Convenience sample N = 90	A 450-bed university medical centre in north central West Virginia, including two medical, two surgical, and three intensive care units	The questionnaire includes demographic data; Work Quality Index; Multifactor Leadership Questionnaire (Short); Psychological Empowerment; Nurse Collaborative Practice Scale; Personal Views Survey III; Support Services Instrument; Group Cohesion Scale; and Intent to Leave. Unit turbulence and staffing data were collected from existing records. A none-experimental, predictive design (Quantitative study) RR = NA	<ul style="list-style-type: none"> • Descriptive statistics • Correlation analyses • Factorial ANOVA • Multivariate regression analyses • Logistic regression • Multiple regression 	<ul style="list-style-type: none"> • More RNs indicated intent to stay (40.55%) than to leave (22.5%); but over a third of the sample indicated uncertainty (37.1%). • RNs who had graduated less than 5 years earlier and RNs who had been in their current job for less than 5 years were more likely to indicate intent to leave. • The major predictor of intent to leave was job dissatisfaction, and the major predictor of job satisfaction was psychological empowerment ($p < .0001$). • Predictors of psychological empowerment were hardiness, transformational leadership style, nurse/physician collaboration, and group cohesion - Explained 63% of the variance ($p < .0001$).
14.	(Liou & Cheng, 2010) Organisational climate, organisational commitment and intention to leave amongst hospital nurses in Taiwan. <i>Journal of Clinical Nursing, 19(11-12), 1635-1644.</i>	Taiwan	To examine the Taiwanese nurses' perceptions of organisational climate, levels of organisational commitment and intention to leave, as well as relationships between these three variables.	RNs with more than six months organisational tenure Convenience sample N = 486	Eight hospitals (3 district, 2 regional and 3 teaching hospitals)	Organisational Climate Questionnaire, Organisational Commitment Questionnaire and Intention to Leave Scale. A cross-sectional, correlational and descriptive design (Quantitative study) RR= 85.5% ERR=79.4%	<ul style="list-style-type: none"> • Descriptive statistics • <i>t</i>-test • ANOVA • Mann–Whitney U test. • Pearson's correlation. • Multiple linear regression • Sobel test 	<ul style="list-style-type: none"> • Nurses were generally satisfied with their hospital's climate and yet claimed low commitment to their organisation and reported low intention to leave their job. • Single nurses were more satisfied with their hospital's climate and were more committed to their hospital and had a lower intention to leave their job compared to married nurses. • Organisational climate was statistically and positively correlated with organisational commitment ($r = 0.57$); and negatively associated with intention to leave ($r = -0.40$). • Organisational commitment was negatively

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15.	(Lu, Line, Wu, Hsieh & Change, 2002) The relationships among turnover intentions, professional commitment, and job satisfaction of hospital nurses <i>Journal of Professional Nursing</i> , 18 (4), 214-219	Taiwan	To investigate the relationships among turnover intentions, professional commitment, and job satisfaction of RNs.	RNs- Female Random Sample <i>N</i> = 2,197	Hospitals in the southern area of Taiwan	A self-administered questionnaire including demographic data; Professional Commitment Scale; Job Satisfaction; Turnover Intentions; and, Family Support. A cross-sectional survey design (Quantitative study) RR = 86.2%	<ul style="list-style-type: none"> • Descriptive statistics • Correlation matrices • Discriminate analysis 	<p>related to intention to leave ($r = -0.51$).</p> <ul style="list-style-type: none"> • Organisational climate had almost 60% indirect effect on organisational commitment related to intention to leave. • Nurses in district hospitals had a lower intention to leave than nurses in teaching or regional hospitals. • There were significant negative correlations between professional commitment and turnover intentions, and between job satisfaction and turnover intentions. • The discriminate analysis showed that 38.4% of nurses can be correctly classified as having the intention to leave the organisation and 30.4% as intending to leave the profession because of lack of job satisfaction. On the other hand, 30.5% of nurses can be correctly classified as having the intention to leave the organisation and 39.7% as having the intention to leave their profession because of lack of professional commitment. • Level of education was positively correlated with intent to leave the organisation (0.054, $p < 0.05$) and the profession (0.058, $p < 0.01$).
16.	(Lynn & Redman, 2005) Faces of the nursing shortage: Influences on staff nurses' intentions to leave their positions or nursing. <i>Journal of Nursing</i>	USA	To examine the relationship between organisational commitment, job satisfaction, and nurses' intention to leave their current position or nursing.	RNs Random sample <i>N</i> = 787	Acute care hospitals in 8 states	A mailed survey questionnaire including demographic data; Professional Satisfaction; Satisfaction in Nursing Scales; Organisational Commitment Questionnaire; Intent to Leave Position; and	<ul style="list-style-type: none"> • Descriptive statistics • Multiple regression • Stepwise regression 	<ul style="list-style-type: none"> • Predictive relationships were found between financial status, organisational commitment, job and professional satisfaction, and intent to leave the current position ($R^2 = 0.42$), and between financial status, professional satisfaction, and intention to leave nursing ($R^2 = 0.45$). • Nurses whose families are dependent on

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	<i>Administratio</i> , 35(5), 264-270.					Intent to Leave Nursing. Descriptive design (Quantitative study) RR = 33% (Varied across states and ranged from a low of 21% to a high of 39%)		them for their income are less likely to leave nursing.
17.	(Ma, Lee, Yang, & Chang, 2009) Predicting factors related to nurses' intention to leave, job satisfaction, and perception of quality of care in acute care hospitals. <i>Nursing Economic</i> , 27(3), 178	Taiwan	To compare the differences in nurse characteristics, level of job satisfaction, and perception of quality of patient care between those who intended to stay and those who intended to leave their current job and to identify the important factors that predicted their intention to leave their current job.	RNs Convenience sample N = 1,016	Non-profit organisation affiliated with the Presbyterian Church in four hospitals (400-1,200 beds)	A self-reported questionnaire with two parts: demographics and three questions on quality of care, job satisfaction and turnover intention. A cross-sectional design (Quantitative study) RR=63.4%	<ul style="list-style-type: none"> • Descriptive statistics • Chi-square tests • t-test • Logistic regression 	<ul style="list-style-type: none"> • Statistically significant differences were only found in variables of age, marital status, number of children, yearly salary, nursing experience, shift, and incident reports between those who intended to leave and those who intended to stay ($p < 0.05$). • The results of logistic regression analysis demonstrated that age, working evening shift, and level of job satisfaction were significant in predicting whether or not a nurse intended to leave a current job ($p < 0.05$). Of the three, job satisfaction was the most significant predictor of nurses' intention to leave their current jobs ($p < .001$).

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18.	(McCarthy, Tyrrell, & Lehane, 2007) Intention to 'leave' or 'stay' in Nursing. <i>Journal of Nursing Management</i> , 15(3), 248-255.	Ireland	To investigate RNs 'intent to stay or leave' employment.	RNs who had been employed for a minimum of 6 months Random sample N = 352 (Female = 97%)	10 hospital sites throughout the Republic of Ireland	A questionnaire which drawn by authors from a conceptual framework based on findings from the literature. It contains sections on factors influencing the turnover process. A cross-sectional design (Quantitative study) RR = NA	<ul style="list-style-type: none"> • Descriptive statistics • Logistic regression 	<ul style="list-style-type: none"> • Overall, 83 nurses (23%) expressed an intent to leave. Of these, 77% were aged between 21 and 35 years, and 92% were female and almost single. • The most statistically significant predictors of intent to leave were 'kinship responsibilities' ($p < 0.05$) and 'job satisfaction' ($p < 0.0001$).
19.	(Palumbo, Rambur, McIntosh, & Naud, 2010) Registered nurses' perceptions of health and safety related to their intention to leave. <i>AAOHN Journal</i> , 58(3), 95-103.	USA	To examine the perception of health and safety in relation to intention to leave among a sample of RNs.	RNs. Convenience sample N = 3,955	Health facilities in the state of Vermont	A survey questionnaire including the Minimum Data Set for Nurse Workforce Assessment ; National Health and Retirement Survey; and Intention to Leave. A cross-sectional design (Quantitative study) RR=53%	<ul style="list-style-type: none"> • Descriptive statistics • Kruskal-Wallis • ANOVA • Bonferroni adjusted α • Logistic regression 	<ul style="list-style-type: none"> • In nurses younger than 55, intention to leave decreased as age increased from 20 to 54 years. Women were less likely to plan on leaving than men (23% vs. 33%). The lower the perception of the employers' health and safety practices, the higher the intention to leave. • In nurses 55 years and older, increasing age was associated with increased intention to leave. The lower nurses' perceived emotional health and the lower nurses' perceived employer safety practices, the higher their intention to leave.
20.	(Rambur, Palumbo, McIntosh, & Mongeon, 2003) A statewide analysis of RNs' intention to leave their position	USA	To examine the effect that gender, age, educational preparation, setting, position, clinical practice area, and population density have on nurses' intention to leave their current primary	RNs in Vermont Convenience sample (Secondary	Hospital & non-hospital settings	A secondary analysis of survey data gathered by the Vermont State Board of Nursing, USA focusing on intent to leave; reason for leaving current position; and, demographic and	<ul style="list-style-type: none"> • Descriptive statistics • Chi-square tests • t-tests • Logistic regression 	<ul style="list-style-type: none"> • 20.5% of the participants have intention to leave their current position. • Differences in intention to leave vary by educational attainment, hours worked per week, gender, practice role, and practice activity. • Intent to leave position for career

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	<i>Nursing Outlook</i> , 51(4), 182-188		position in the next 12 months, for career advancement, situational, or job dissatisfaction reasons.	Data) N = 4,418		working data. A secondary data analysis design (Quantitative study) RR = 85%	<ul style="list-style-type: none"> • Hosmer-Lemeshow goodness-of-fit test • Area under the receiver operating characteristic curve 	<p>advancement reasons increased with level of education, while intent to leave for reasons associated with job dissatisfaction decreased with education level ($\chi^2 = 64.28, P < .01$).</p> <ul style="list-style-type: none"> • Race and gender were not significant determinants of intention to leave, with 23% of males and 20% of females indicating such intent. • Nurses aged 51 and above were less likely to be leaving their positions because of job dissatisfaction compared to nurses in the 40-50 age group. • Nurses currently enrolled in an educational program were also less likely to be leaving their positions than those not enrolled in any program. • RNs who work 30 hours or less were less likely to be intending to leave when compared to those who work full time (36-40 hours).
21.	(Reeves, West, & Barron, 2005) The impact of barriers to providing high-quality care on nurses' intentions to leave London hospitals. <i>Journal of Health Services Research & Policy</i> , 10(1), 5-9.	UK	To examine the impact of nurses' perceived barriers to delivering high-quality patient-centred care on their intentions to leave their current employers.	Nurses Convenience and random samples Hospitals \leq 400 nurses - all nurses included Hospitals \geq 400 nurses - random	20 hospitals: 19 acute general and one specialist hospitals (300 nurse or more).	A survey questionnaire including the Picker Employee Questionnaire, History Information and demographic data A cross-sectional design (Quantitative study) RR=47%	<ul style="list-style-type: none"> • Descriptive statistics • <i>t</i>-test • Bonferroni's correlations 	<ul style="list-style-type: none"> • 41% were unsure about how long they would stay, 27% planned to stay more than 3 years and 32% intended to leave their current employer within the next 3 years. There was a strong association between intention to leave nursing and intention to leave current employer. • Nurses who reported more problems in both nurse-centred (respect at work, working conditions, and good management) and patient-centred (patient information, patient involvement and respect, patient care, and adequate resources) dimensions

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				sample of 300 nurses $N = 2,880$				were more likely to intend to leave their current employers ($p < .001$). <ul style="list-style-type: none"> • Satisfaction with pay and the cleanliness of work areas were also important factors.
22.	(Shader, Broome, Broome, West, & Nash, 2001) Factors influencing satisfaction and anticipated turnover for nurses in an academic medical centre. <i>Journal of Nursing Administration, 31(4), 210-216.</i>	USA	To examine the relationships between work satisfaction, stress, age, cohesion, work schedule, and anticipated turnover in an academic medical centre.	RNs and Nurse Managers Convenience sample $N = 241$	12 units in a 908-bed university hospital in the southeast of USA	A self-report survey using the Index of Work Satisfaction; Modified Job Stress Scale; Bryne Group Cohesion Scale; Anticipated Turnover Scale; and Nurse and Unit Demographic Questionnaires A cross-sectional survey design (Quantitative study) RR = (RNs = 63% and NMs = 42%)	<ul style="list-style-type: none"> • Pearson's correlations • Stepwise regression • Cronbach's α 	<ul style="list-style-type: none"> • Job stress, low work satisfaction, low group cohesion and weekend overtime were predictors of anticipated turnover ($p < .001$). They explained 31% of variance in the anticipated turnover. • More job stress result in low group cohesion ($r = -0.41, p < .001$); low work satisfaction ($r = 0.51, p < .001$), and high anticipated turnover ($r = 0.37, p < .001$). • More work satisfaction result in high group cohesion ($r = 0.42, p < .001$), and low anticipated turnover ($r = -0.47, p < .001$) • More stable work schedule result in less work-related stress ($r = -0.205, p < .001$); low anticipated turnover ($r = -0.29, p < .001$); high group cohesion ($r = 0.43, p < .001$); and, high work satisfaction ($r = 0.44, p < .001$) • There were differences in the factors predicting anticipated turnover for different age groups ($p < 0.001$). For 20-30-year-old nurse (work satisfaction and job stress), for 31-40 (work satisfaction), for 41-50 (work satisfaction and group cohesion) and for 51 or older (no significant predictors of turnover). • The anticipated turnover and actual turnover were positively correlated ($r = 0.24, p < .001$).

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23.	(Shields & Ward, 2001) Improving nurse retention in the National Health Service in England: The impact of job satisfaction on intentions to quit. <i>Journal of Health Economics</i> , 20, 677-701.	England	To investigate the determinants of job satisfaction for nurses and establish the importance of job satisfaction in determining nurses' intentions to quit the NHS.	Staff Nurses aged between 21 and 60 (State Enrolled and Registered General Nurses) Stratified sample N = 9,625	91 NHS employers (general medicine and surgery, Primary and community care, mental illness, care of elderly, midwifery, mental handicap, paediatric)	A secondary analysis of national survey data conducted by the Policy Studies Institute for the Department of Health that used a postal questionnaire focusing on: the state of the NHS nursing profession; the attitudes of nurses towards their jobs and more generally towards the NHS; and, a host of job-related and employer size and type of employer and location. A secondary data analysis design (Quantitative study) RR = 62%	<ul style="list-style-type: none"> • Cross-tabulations • <i>t</i>-tests • Probit estimates • Marginal probability 	<ul style="list-style-type: none"> • Job satisfaction is most important determinant in intent to quit, more so than outside opportunities. Nurses who report overall dissatisfaction with their jobs have a 65% higher probability of intending to quit than those reporting to be satisfied. • Dissatisfaction with promotion and training opportunities had a stronger impact than workload or pay. Dissatisfaction with workload and pay are still important predictors of turnover intention. • Work dissatisfaction was greater in young, male, ethnic minority and highly educated nurses.
24.	(Simon, Müller, & Hasselhorn, 2010) Leaving the organization or the profession - a multilevel analysis of nurses' intentions. <i>Journal of Advanced Nursing</i> , 66(3), 616-626.	Germany	To examine the intention of nurses to leave the profession as well as the organisation and to find out how the related variables differ between intentions in a secondary analysis of data of the German part of the European Nurses' Early Exit Study.	RNs. N = 2,119	71 departments of 16 hospitals	A secondary data analysis of a self-administered survey to the German sample of the European Nurses' Early Exit-Study. A multilevel analysis (Quantitative study) RR= 37.5% - 82.6%	<ul style="list-style-type: none"> • Generalized linear mixed model • Highest posterior density intervals 	<ul style="list-style-type: none"> • Models for intentions to leave the profession explained more of the variance ($r^2 = 0.46$) than models for intentions to leave the organisation ($r^2 = 0.28$). • Both leaving intentions were associated with age, professional commitment and job satisfaction. • Intentions to leave the profession were strongly associated with variables related to the personal background and the work/home interface, whereas intentions to leave the organisation were related to organisational leadership and the city size.

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25.	(Sofield & Salmond, 2003) Workplace violence: A focus on verbal abuse and intent to leave the organization. <i>Orthopaedic Nursing</i> , 22 (4), 274-283.	USA	To describe the experience of verbal abuse in a large multi-hospital system and determine the relationship of verbal abuse with intent to leave the organisation.	RNs Random sample N = 461	Three hospitals located in metropolitan suburb in the Northeast	A mailed questionnaire using a modified version of Cox's Verbal Abuse Survey. It covers different sections regarding prevalence, sources, and perceptions of verbal abuse, oppressed group behaviour, intent to leave, and demographics. A descriptive correlational design (Quantitative & qualitative study) RR = 46%	<ul style="list-style-type: none"> • Descriptive statistics • Kruskal-Wallis test • Content analysis for qualitative data 	<ul style="list-style-type: none"> • 91% had experienced verbal abuse in the past month. The physician was the most frequent source of verbal abuse, followed by patients, patients' families, peers, supervisors, and subordinates. • More than 50% of the sample did not feel competent in responding to verbal abuse. • Amount of abuse and intent to leave were significantly related ($r = 0.211, p < 0.01$). • 13.6% responded that they had left a nursing position because of verbal abuse incurred in the position. • Nurses believed that verbally abusive incidents cause an increased turnover in staff ($n = 255, 62.2%$) and that verbal abuse contributes to an increased shortage of nurses ($n = 273, 67%$). • About 11.9% ($n = 54$) of the nurses would actively look for a new job within the next year. • 33.4% ($n = 151$) would consider resigning as a result of verbal abuse. • There were weak but significant correlations between verbal abuse and looking for a new job ($r = .211, p < .001$) and between verbal abuse and considering quitting in the next 6 months ($r = .250, p < .001$).
26.	(Stone et al., 2009) Organizational climate and intensive care unit nurses' intention to leave.	USA	To estimate the incidence of intensive care units nurses' intention to leave due to working conditions, and to identify factors predicting	RNs employed in adult intensive care units	66 hospitals and 110 critical care units	The 42- item Perceived Nurse Working Environment Survey, Intention to leave single question 'Do you plan to leave your current position	<ul style="list-style-type: none"> • Descriptive statistics • Bivariate analyses • Logistic regression 	<ul style="list-style-type: none"> • 17% ($n = 391$) of the respondents indicated intending to leave their position in the coming year. Of those, 52% ($n = 202$) reported that the reason was due to working conditions. • Organisational climate factors that had an

No.	Authors, year, article and the source information	Country	Aim(s) of study	Sample	Setting of study	Data collection method and study design	Analysis procedure	Findings related to the review purpose
	<i>Journal of Nursing Administration, 39(7/8), S37-S42.</i>		this phenomenon.	Convenience sample <i>N = 2,323</i>		in the coming year?', and Nurse Characteristics Questions. A Cross-sectional design (Quantitative study) RR= 41%		independent effect on intensive care unit nurse intention to leave due to working conditions were professional practice, nurse competence, and tenure ($p < .05$).
27.	(Stone et al., 2007) Nurse working conditions, organizational climate, and intent to leave in ICUs: An instrumental variable approach. <i>Health Services Research, 42(3p1), 1085-1104.</i>	USA	To investigate causes of nurse intention to leave while simultaneously considering organisational climate in intensive care units (ICUs) and identify policy implications.	Nurses employed in adult intensive care units Convenience sample <i>N = 837</i>	23 hospitals and 39 adult intensive care units located in 20 separate metropolitan statistical areas	Data were obtained from multiple sources including nurse surveys, hospital administrative data, public use, and Medicare files. The 42- item Perceived Nurse Working Environment Survey, Intention to leave single question 'Do you plan to leave your current position in the coming year?', and Nurse Characteristics Questions. An instrumental variable technique (Quantitative study) RR= 41%	<ul style="list-style-type: none"> • Descriptive statistics • Ordinary Least Squares regression • Chi-square testes 	<ul style="list-style-type: none"> • 15% of the nurses indicated their intention to leave in the coming year. • Nurses' intention to leave contributed little if anything directly to organisational climate, but that organisational climate and the tightness of the labour market had significant roles in determining intention to leave ($p < .05$). • Organisational climate was affected by the average regionally adjusted ICU wages, hospital profitability, teaching, and Magnet status ($p < .05$).
28.	(Takase, Yamashita, & Oba, 2008) Nurses' leaving intentions: Antecedents and mediating	Japan	To investigate how nurses' work values, perceptions of environmental characteristics and organisational commitment	RNs Convenience sample	Three public hospitals in the central-west region	A survey questionnaire including Job Orientation Questionnaire, Organisational Commitment Scale, Withdrawal Cognitions Scale, and	<ul style="list-style-type: none"> • Regression analysis 	<ul style="list-style-type: none"> • Nurses' work values and their perceptions of their workplace environment interacted to influence leaving intentions. • When there was a match between the importance nurses placed on being able to challenge current clinical practices and the

Appendices

No.	Authors, year, article and the source information	Country	Aim(s) of study	Sample	Setting of study	Data collection method and study design	Analysis procedure	Findings related to the review purpose
	factors. <i>Journal of Advanced Nursing</i> , 62(3), 295-306.		are related to their leaving.	<i>N</i> = 331	of Japan	demographic data. A cross-sectional observational design (Quantitative study) RR= 39%		number of the actual opportunities to do so, leaving intentions were low. <ul style="list-style-type: none"> • When there was a mismatch, intention to quit the job became stronger. • Organisational commitment intervened between nurses' perceptions of the match in clinical challenges and leaving intention.
29.	(Tsai & Wu, 2010) The relationships between organisational citizenship behaviour, job satisfaction and turnover intention. <i>Journal of Clinical Nursing</i> , 19(23-24), 3564-3574.	Taiwan	To explore the relationships between organisational citizenship behaviour, job satisfaction and turnover intention.	Nurses Convenience sample <i>N</i> = 237	One medical centre, 3 regional hospitals and 7 district hospitals	A self-reported questionnaire consisted of the Organisational Citizenship Behaviour, Job Satisfaction and Turnover Intention Scale. A Cross-sectional design (Quantitative study) RR= 84.67% ERR=79%	<ul style="list-style-type: none"> • Pearson's correlation • ANOVA • Scheffe's <i>post hoc</i> • Cronbach's α • Factor analysis 	<ul style="list-style-type: none"> • Nurses' job satisfaction has a significantly positive correlation with organisational citizenship behaviour and a negative correlation with turnover intention. • The education level and the position in the organisation influence turnover intention, $p = 0.03$ and $p = 0.002$, respectively.
30.	(Tzeng, 2002) The influence of nurses' working motivation and job satisfaction on intention to quit: An empirical investigation in Taiwan. <i>International Journal of Nursing Studies</i> , 39, 867-878.	Taiwan	To investigate the influence of nurses' working motivation and job satisfaction on intention to quit.	RNs Convenience sample <i>N</i> = 648	3 hospitals in southern Taiwan	Nurse's Job Satisfaction and General Perceptual Questionnaire. A cross-sectional survey design (Quantitative study) RR = 82%	<ul style="list-style-type: none"> • Descriptive statistics • Logistic regression 	<ul style="list-style-type: none"> • General job satisfaction, general job happiness, satisfaction with salary and promotion, institution, educational background (Diploma or an Associate Degree), and age of nurses' youngest child were proved to be significant predictors of nurses' intention to quit.
31.	(Yildiz, Ayhan, & Erdogmus, 2009)	Turkey	To investigate the effects of motivation to work, job satisfaction, and socio-	Staff nurses working on inpatient	39 hospitals from different	A researcher developed questionnaire focusing on job satisfaction, motivation	<ul style="list-style-type: none"> • Ordinal regression 	<ul style="list-style-type: none"> • Two motivation to work and eight job satisfaction items were proven to be

No.	Authors, year, article and the source information	Country	Aim(s) of study	Sample	Setting of study	Data collection method and study design	Analysis procedure	Findings related to the review purpose
	The impact of nurses' motivation to work, job satisfaction, and sociodemographic characteristics on intention to quit their current job: An empirical study in Turkey. <i>Applied Nursing Research</i> , 22(2), 113-118.		demographic characteristics on nurses' intention to quit.	units Convenience sample <i>N</i> = 936	regions	to work and demographic data. A Cross-sectional design (Quantitative study) RR= NA	model • Pearson's Chi-square	significant predictors of nurses' intention to quit ($p < .05$). • These include: interest, no other choice, working hours, worry about losing her job, opportunities and arrangement of on-the-job training, independent work, writing or publication, competency toward their job, support and caring from their supervisors, and interaction with colleagues working in other units.
32.	(Zurmehly, Martin, & Fitzpatrick, 2009) Registered nurse empowerment and intent to leave current position and/or profession. <i>Journal of Nursing Management</i> , 17(3), 383-391.	USA	To explore the relationship between RNs' (RN) empowerment and intent to leave their current position and/or profession.	RNs <i>N</i> = 1,231	16 counties comprising West Central Ohio	A Web-based survey including the Conditions of Work Effectiveness Questionnaire II, RN Vermont Survey, Job Satisfaction and Intent to Leave. A descriptive correlational survey design (Quantitative study) RR= NA	• Descriptive statistics • Multiple regression • Pearson's Correlation • <i>t</i> -tests • Tukey's <i>post-hoc</i>	• Relationships were found between empowerment and intent to leave the current position ($F = 80.08, p < .001$) and intent to leave the profession ($F = 75.99, p < .001$).

Appendix B:
Participant Information Sheet and Instruments Used in this Study


PARTICIPANT INFORMATION for QUT RESEARCH PROJECT
Quality of Work Life and Turnover Intention in Primary Healthcare Organisations: A cross-Sectional Study of Registered Nurses in Saudi Arabia
Researcher Contacts

Name	Mohammed Almalki (PhD Candidature)
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Email	mohammed.almalki@student.qut.edu.au

Description

This project is being undertaken as a PhD for Mohammed Almalki. The researcher is sponsored by the Ministry of Health. The sponsoring body will not have access to the data obtained during the project.

The purpose of this project is to improve the retention of PHC nurses through exploring and assessing the quality of work life (QWL) and intention to leave work among this category of nurses. Additionally it will determine whether there is a relationship between QWL level and intention to leave the current job.

As a researcher I request your help as this study will assist in understanding the factors influencing high turnover rates among nurses in Saudi Arabia and particularly in Primary Health Care facilities.

Participation

Your participation in this project is voluntary. If you do agree to participate, you can withdraw from participation at any time before the submission of anonymous (non-identifiable) questionnaire without comment or penalty. Your decision to participate or not to participate will in no way impact upon your current or future relationship with working organisation or Ministry of Health.

You will be asked to complete the attached questionnaire which consists of four sections: quality of work life, intention to leave, demographic information and open-ended questions. It can be completed in 20-25 minutes. Once you complete the questionnaire; please place it in the envelope provided and send it back to the PHC Department through the internal post service. The return of the completed questionnaire is accepted as indication of your consent to participate in this project. Please contact the researcher if you require further information or clarification.

Expected benefits

It is expected that there are no direct benefits to you for participating in this research. No incentives are offered. However, the results will have scientific interest that may eventually have benefits for the primary health care organisations, Health care professionals including nurses, particularly primary health care nurses.

Risks

There are no risks associated with your participation in this project.

Confidentiality

All comments and responses are anonymous and will be treated confidentially. The names of individual persons are not required in any of the responses.

Consent to Participate

The return of the completed questionnaire is accepted as an indication of your consent to participate in this project.

Questions / further information about the project

Please contact the researcher named above to have any questions answered or if you require further information about the project.

Concerns / complaints regarding the conduct of the project

QUT is committed to researcher integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Officer on 3138 2340 or ethicscontact@qut.edu.au. The Research Ethics Officer is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

The Survey Questionnaire

Quality of Work Life and Turnover Intention in Primary Healthcare Organisations: A Cross-Sectional Study of Registered Nurses in Saudi Arabia

Are you a primary health care nurse?

1.	Yes	Please begin the questionnaire on the next page.
2.	No	You do not need to answer this survey. Thank you.

SECTION 1: Quality of Nursing Work Life

Quality of Work Life (QWL) is defined as the degree to which employees (nurses) are able to satisfy important personal and working needs through their experiences in their work organisation while achieving the organisation's goals.

Instructions: This section contains statements about nursing work life. Please indicate how much you disagree or agree with each statement using the scale given below (from 1 to 6). Number (1) indicates that you **Strongly Disagree** with statement, (2) **Moderately Disagree**, (3) **Disagree**; while number (4) indicates that you **Agree** with contents, (5) **Moderately Agree**, and (6) **Strongly Agree**. If you are unsure about your answer to a given item, think about it for a moment and then respond. Please mark your answer by circling one number for each statement. There are no right or wrong answers.

	Statements	Strongly Disagree	Moderately Disagree	Disagree	Agree	Moderately Agree	Strongly Agree
1.	I receive sufficient assistance from nursing assistants and service workers.	1	2	3	4	5	6
2.	I am satisfied with my job.	1	2	3	4	5	6
3.	My workload is too heavy.	1	2	3	4	5	6
4.	In general, society has an accurate image of nurses.	1	2	3	4	5	6
5.	I am able to balance work with my family needs.	1	2	3	4	5	6
6.	I have the autonomy to make client/patient care decisions.	1	2	3	4	5	6
7.	I am able to communicate well with my nurse manager/supervisor.	1	2	3	4	5	6
8.	I have adequate client/patient care supplies and equipment.	1	2	3	4	5	6
9.	My nurse manager/supervisor provides adequate supervision.	1	2	3	4	5	6
10.	It is important for a PHC centre to offer employees on-site/near childcare services.	1	2	3	4	5	6
11.	I perform many non-nursing tasks.	1	2	3	4	5	6
12.	I have energy left after work.	1	2	3	4	5	6
13.	Friendships/relationships with my co-workers are acceptable.	1	2	3	4	5	6
14.	My work setting provides career advancement opportunities.	1	2	3	4	5	6
15.	There is teamwork in my work setting.	1	2	3	4	5	6
16.	I experience many interruptions in my daily work routine.	1	2	3	4	5	6
17.	I have enough time to do my job well.	1	2	3	4	5	6
18.	There are enough RNs in my work setting.	1	2	3	4	5	6
19.	I feel a sense of belonging in my workplace.	1	2	3	4	5	6
20.	The system of working hours negatively affects my life.	1	2	3	4	5	6

Statements		Strongly Disagree	Moderately Disagree	Disagree	Agree	Moderately Agree	Strongly Agree
		1	2	3	4	5	6
21.	I am able to communicate well with other co-workers (pharmacist assistant, lab technician, etc.).	1	2	3	4	5	6
22.	I receive feedback on my performance from my nurse manager/supervisor.	1	2	3	4	5	6
23.	I am able to provide good quality client/patient care.	1	2	3	4	5	6
24.	My salary is adequate for my job, given the current job market conditions.	1	2	3	4	5	6
25.	My organisation's policy for vacations is appropriate for me and for my family.	1	2	3	4	5	6
26.	I am able to participate in decisions made by my nurse manager/supervisor.	1	2	3	4	5	6
27.	It is important for a PHC centre to assist in providing care for elderly parents of their employees.	1	2	3	4	5	6
28.	I feel respected by physicians in my work setting.	1	2	3	4	5	6
29.	It is important to have a designated private break area for the nursing staff.	1	2	3	4	5	6
30.	It is important to have the opportunity to further my nursing education without leaving the current job.	1	2	3	4	5	6
31.	I receive support to attend continuing education and training programs.	1	2	3	4	5	6
32.	I communicate well with the physicians in my work setting.	1	2	3	4	5	6
33.	I am recognized for my accomplishments by my nurse manager/supervisor.	1	2	3	4	5	6
34.	Nursing policies and procedures facilitate my work.	1	2	3	4	5	6
35.	The security department provides a secure working environment.	1	2	3	4	5	6
36.	It is important for a PHC centre to offer employees on-site ill child care services.	1	2	3	4	5	6
37.	I would be able to find my same job in another organisation with about the same salary and benefits.	1	2	3	4	5	6
38.	I feel safe from personal harm (physical, emotional or verbal) at work.	1	2	3	4	5	6
39.	I believe my job is secure.	1	2	3	4	5	6
40.	Upper-level management has respect for nursing.	1	2	3	4	5	6
41.	My work impacts the lives of patients, families and the community.	1	2	3	4	5	6
42.	I receive quality assistance from nursing assistants and service workers.	1	2	3	4	5	6

The total possible score for Brooks' Scale which consists of 42 items can range from 42-252. A low total scale score indicates a low overall QWL, while a high total score indicates a high QWL. For each subscale, the same is true, a high score indicating a more favourable environment. *

* Not included in the distributed version of this survey.

SECTION 2: Turnover Intention

Anticipated Turnover Scale (ATS)

Intention to leave in this study is defined as the behaviour of seriously considering leaving the primary health care sector to any other health organisation (e.g. hospital) or to resign.

Instructions: The purpose of this section is to give you the chance to express your opinion of the possibility of voluntarily leaving your present job at PHC. For each item below, tick the appropriate response. Please be sure to use the full range of responses (Agree Strongly to Disagree Strongly) and answer every item.

Scoring Key *	Items of the Scale	Disagree Strongly	Moderately Disagree	Slightly Disagree	Uncertain	Slightly Agree	Moderately Agree	Agree Strongly
(-)	1. I plan to stay in my position.							
(+)	2. I am quite sure I will leave my position in the foreseeable future.							
(-)	3. Deciding to stay or leave my position is not a critical issue for me at this point in time.							
(+)	4. I know whether or not I will be leaving this centre within a short time.							
(+)	5. If I got another job offer tomorrow, I would give it serious consideration.							
(-)	6. I have no intentions of leaving my present position.							
(+)	7. I've been in my position about as long as I want to.							
(-)	8. I am certain I will be staying here.							
(-)	9. I don't have any specific idea how much longer I will stay.							
(-)	10. I plan to hang on to this job.							
(+)	11. There are big doubts in my mind as to whether or not I will really stay in this centre.							
(+)	12. I plan to leave this position shortly.							

Give Each Item a Score: Use the + and - key provided. For each item, score it according to whether it is positive or negative. For positive items, Agree Strongly is scored 7 and Disagree Strongly is scored 1. Conversely, for negative items Agree Strongly is scored 1 and Disagree strongly is scored 5. **Compute the Scores:** The score is the simple sum of all of the items in the scale divided by the number of items in the total scale. *

* Not included in the distributed version of this survey.

SECTION 3: Demographic Information

This group of questions asks you to provide some demographic information about yourself. Please do not sign your name or enter any uniquely identifying numeric information (e.g. employee number, national identifying number, passport number, etc.) in order to assure your anonymity.

Instructions: Please mark only one answer for each question unless otherwise indicated.

PERSONAL

1. What is your gender?

1.	Male
2.	Female

2. What is your age?

(_____)

3. What is your current marital status?

1.	Never married
2.	Married
3.	Divorced
4.	Widowed

4. Is your spouse or family member living with you in Saudi Arabia?

1.	Yes
2.	No

5. Do you have children?

1.	Yes
2.	No

6. Write the number of children you have in each age category?

	Age group	Number
1.	Less than 1 year	
2.	1 to 6 years	
3.	7 to 12 years	
4.	13 to 18 years	

7. Are there dependent adults (e.g. older or disabled relatives) for whom you are a primary caregiver?

1.	Yes
2.	No

8. What is your nationality?

(_____)

9. What is your ethnicity/race?

1.	Arab
2.	Asian
3.	Indian
4.	African
5.	Caucasian
6.	Other, please specify: (_____)

10. What is your religion?

(_____)

EDUCATION

11. What is your HIGHEST level of education in nursing?

1.	Health Institute
2.	Diploma
3.	Associate degree/ Intermediate health collage certificate
4.	Bachelor degree
5.	Master's degree
6.	Doctoral degree
7.	Other (specify) _____

12. Do you hold any preparation course or an educational certificate in the field of PRIMARY HEALTH CARE?

1.	Yes
2.	No

13. Do you hold any preparation course or an educational certificate in the field of Primary Health Care NURSING?

1.	Yes
2.	No

14. Do you receive any additional FINANCIAL reward for your specialised certificates or training courses?

1.	Yes
2.	No

15. Do you receive any CAREER ADVANCEMENT reward (e.g. rank promotion or heading a department) for your specialised certificates or achieved training courses?

1.	Yes
2.	No

EMPLOYMENT

16. How many years have you been working in nursing as a REGISTERED NURSE?

(_____)

17. What is the total number of years that you have been working as a PRIMARY HEALTH CARE NURSE?

(_____)

18. How many years have you been working in SAUDI ARABIA as a Registered Nurse?

(_____)

19. How many total years of employment have you had with THIS primary health care centre?

(_____)

20. Location of your primary health care centre?

1.	Urban
2.	Rural

21. What is your current PRINCIPAL nursing position?

1.	Staff Nurse
2.	Charge Nurse
3.	Nurse Manager
4.	Other (specify) _____

22. What is the total number of years that you have been working in the current nursing position?

(_____)

23. In which department do you work? (You can choose more than one)

1.	Male Dept.
2.	Female Dept.
3.	Children's Dept.
4.	Maternity & Childhood
5.	Immunisations
6.	Mouth & Teeth Health
7.	Medical Records
8.	Management
9.	Environmental Health/Epidemiology
10.	Home Visits
11.	Other (specify) _____

24. Which system of working hours is applied in the current centre?

1.	Morning
2.	Morning - Evening

25. How long does your typical working day last for?

(_____ hours daily)

26. How many hours per week do you usually work?

(_____ hours)

27. What is your payment per month?

(_____)

28. Do you receive additional financial benefits (e.g. housing allowance, health insurance)?

1.	Yes
2.	No

SECTION 4: Open-Ended Questions

1. Considering the current job, how do you perceive your quality of work life?

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2. What factors make you satisfied with your work life?

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3. What factors make you dissatisfied with your work life?

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4. Do you have intention to leave your current job (in Primary Health Care) during the next 12 months? Why?

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5. Do you have intention to leave your current job (in Primary Health Care) during the next 5 years? Why?

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6. In the space below, please write down any comments or additional information which you feel might be helpful to this study.

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Your contribution to this research is greatly appreciated. Thank you very much.

استبانة الدراسة

جودة الحياة العملية والتوجه نحو التسرب الوظيفي في الرعاية الصحية
الأولية: دراسة مستعرضة للمرضين في المملكة العربية السعودية

هل أنت ممرض وتعمل في الرعاية الصحية الأولية؟

1.	نعم	من فضلك ابدأ الإجابة على الأسئلة في الصفحة التالية.
2.	لا	لا تحتاج إلى ملء الاستبيان. شكراً لك.

الجزء (1): جودة الحياة العملية

جودة الحياة العملية في هذه الدراسة تقيس مدى قدرة الممرض على تحقيق الرضى فيما يتعلق باحتياجاته الشخصية والوظيفية من خلال تجربته العملية في الرعاية الصحية الأولية مع قدرته على تحقيق أهداف المؤسسة.

هذا الجزء يحتوي على بنود تتعلق بجودة الحياة العملية للممرضين. من فضلك حدد مدى موافقتك من عدمها مع مضمون كل بند من البنود الواردة في الجدول أدناه مستخدماً المقياس الموضح أمام كل جملة (من 1 إلى 6)، حيث يشير الرقم (1) إلى أنك لا توافق على الجملة مطلقاً، (2) لا توافق إلى حد ما، (3) لا توافق، بينما يشير الرقم (4) إلى إنك موافق، (5) موافق إلى حد ما، ويشير الرقم (6) على موافقتك التامة على محتوى الجملة. إذا لم تكن متأكداً من إجابتك على فقرة ما، فضلاً فكر قليلاً ثم اختر الإجابة المناسبة. من فضلك حدد إجابتك من خلال وضع دائرة حول احد الأرقام المتاحة أمام كل جملة. عزيزي الممرض: ليس هنالك إجابة صحيحة وأخرى خاطئة، لذا كن حياًياً وضع الإجابة التي تراها الأنسب والتي يملها عليك ضميرك.

الاستبيان						
موافق تماماً	موافق إلى حد ما	موافق	غير موافق	غير موافق إلى حد ما	غير موافق مطلقاً	
6	5	4	3	2	1	1. أتلقى مساعدة عملية كافية من مساعدي التمريض وعمال الخدمات.
6	5	4	3	2	1	2. أنا راضي عن وظيفتي.
6	5	4	3	2	1	3. عيني العملي كبير جداً.
6	5	4	3	2	1	4. أعتقد أن لدى المجتمع تصور واضح لطبيعة عمل التمريض.
6	5	4	3	2	1	5. لدي القدرة على الموافقة بين احتياجات الأسرة والعمل.
6	5	4	3	2	1	6. لدي الحرية في اتخاذ قرارات الرعاية المتعلقة بالمراجع/المريض.
6	5	4	3	2	1	7. إمكانية التواصل بشكل جيد مع مدير/مشرف التمريض.
6	5	4	3	2	1	8. لدي أدوات وتموينات صحية كافية لرعاية المراجع/المريض.
6	5	4	3	2	1	9. يقدم مدير/مشرف التمريض إشرافاً كافياً.
6	5	4	3	2	1	10. من الضروري أن يوفر المركز خدمات الحضانة لأطفال العاملين.
6	5	4	3	2	1	11. أؤدي العديد من الأعمال غير التمريضية.
6	5	4	3	2	1	12. لا أشعر بالإرهاق بعد نهاية العمل.
6	5	4	3	2	1	13. الصداقة والعلاقة مع زملاء العمل تعتبر جيدة.
6	5	4	3	2	1	14. يوفر مقر عملي الحالي فرص للتقدم والتدرج الوظيفي.
6	5	4	3	2	1	15. مقر عملي يطبق مبدأ العمل الجماعي.
6	5	4	3	2	1	16. أواجه العديد من العوامل المشتتة للتركيز أثناء أداء عملي اليومي.
6	5	4	3	2	1	17. أملك الوقت الكافي لأداء عملي على أكمل وجه.
6	5	4	3	2	1	18. يوجد عدد كاف من الممرضين/الممرضات المؤهلين (فنيين أو أخصائيين) في مقر عملي.
6	5	4	3	2	1	19. أشعر بالانتماء الوثيق لمكان العمل.
6	5	4	3	2	1	20. أشعر بأن نظام ساعات العمل يؤثر سلباً على حياتي.
6	5	4	3	2	1	21. إمكانية التواصل بشكل جيد مع بقية العاملين بالمركز (مثل: مساعد الصيدلي، فني المختبر، الخ ...)
6	5	4	3	2	1	22. أتلقى التوجيه المناسب من مدير/ مشرف التمريض، فيما يتعلق بأدائي الوظيفي.

الاستبيان						
موافق تماماً	موافق إلى حد ما	موافق	غير موافق	غير موافق إلى حد ما	غير موافق مطلقاً	
6	5	4	3	2	1	23. بيئة العمل تساعدني على تقديم رعاية ذات جودة عالية للمراجع/المرضى.
6	5	4	3	2	1	24. راتبي يعتبر كافياً في ظل الظروف الحالية لسوق العمل.
6	5	4	3	2	1	25. يعتبر نظام الإجازات في المركز الحالي مناسب لي ولأسرتي.
6	5	4	3	2	1	26. إمكانية المشاركة في صناعة القرارات التي تُتخذ بواسطة مدير/مشراف التمريض.
6	5	4	3	2	1	27. من الضروري أن يسهم المركز في رعاية الأباء المسنين للموظفين.
6	5	4	3	2	1	28. أشعر بالاحترام من قبل الأطباء في مقر عملي.
6	5	4	3	2	1	29. من الضروري أن يوفر المركز استراحة خاصة لأعضاء هيئة التمريض.
6	5	4	3	2	1	30. من الضروري منحي فرصة لإكمال تعليمي في مجال التمريض مع احتفاظي بوظيفتي الحالية.
6	5	4	3	2	1	31. أتلقى الدعم لحضور برامج التعليم والتدريب المستمر.
6	5	4	3	2	1	32. إمكانية التواصل بشكل جيد مع الأطباء في مقر عملي.
6	5	4	3	2	1	33. مدير/مشراف التمريض يقدر إنجازاتي.
6	5	4	3	2	1	34. إجراءات وخطط التمريض في مقر العمل تسهلان من أداء عملي.
6	5	4	3	2	1	35. موظفوا الحراسة والأمن بالمركز يوفران بيئة عملية آمنة.
6	5	4	3	2	1	36. من الضروري أن يوفر المركز للموظفين خدمة داخلية لرعاية أبنائهم المرضى.
6	5	4	3	2	1	37. هنالك إمكانية للحصول على وظيفة مماثلة لوظيفتي الحالية في مؤسسة أو جهة أخرى بنفس الراتب والمميزات تقريباً.
6	5	4	3	2	1	38. أشعر بالأمان من الإعتداءات الشخصية (الجسدية، العاطفية أو اللفظية) في مكان العمل.
6	5	4	3	2	1	39. أعتقد أن وظيفتي تتمتع بأمان وظيفي ولا أخشى فقدها.
6	5	4	3	2	1	40. المستويات الإدارية العليا تحترم التمريض.
6	5	4	3	2	1	41. أشعر بأهمية عملي تجاه صحة الفرد والأسرة والمجتمع.
6	5	4	3	2	1	42. أتلقى مساعدة عملية ممتازة من مساعدي التمريض وعمال الخدمات.

الجزء (2): التوجه نحو التسرب الوظيفي

يعرف التوجه نحو التسرب الوظيفي في هذه الدراسة بأنه مدى التفكير الجدي للممرض في الانتقال من عمله الحالي في الرعاية الصحية الأولية إلى أي قطاع صحي آخر مثل المستشفيات، أو التقاعد من الوظيفة.

التعليمات: الغرض من هذا الجزء من الاستبيان هو إتاحة الفرصة لك للتعبير عن آرائك المتعلقة بتوجهك نحو التسرب الوظيفي من عملك الحالي في الرعاية الأولية. من فضلك اختر الإجابة المناسبة لكل فقرة أدناه من خلال وضع إشارة (√) تحت الخيار المناسب. أخذاً في الاعتبار جميع الاختيارات المتاحة.

موافق تماماً	موافق إلى حد ما	موافق	لست متأكد	غير موافق	غير موافق إلى حد ما	غير موافق مطلقاً	الاستبيان
							1. أخطط للبقاء في عملي الحالي.
							2. أنا واثق تماماً أنني سأترك عملي الحالي في المستقبل القريب بإذن الله.
							3. اتخاذ القرار بالبقاء في عملي الحالي أو تركه لا يعتبر بالنسبة لي مشكلة أساسية في الوقت الراهن.
							4. لدي تصور واضح حول ما إذا كنت سأغادر هذا المركز خلال فترة قصيرة قادمة.
							5. لو اتلقى عرضاً وظيفياً آخر سوف أعطيه اهتماماً جاداً.
							6. ليس لدي نية في الانتقال من مقر عملي الحالي.
							7. عملت في عملي الحالي للمدة التي أريدها.
							8. أنا متأكد من أنني سأبقى في مقر عملي الحالي بإذن الله.
							9. ليس لدي فكرة محددة عن المدة التي سوف أبقاها في هذا المركز.
							10. اخطط للتمسك بعملي الحالي.
							11. تراودني الشكوك حول نية البقاء في هذا المركز.
							12. أخطط لترك مقر عملي الحالي قريباً.

الجزء (3): المعلومات الإحصائية

هذه المجموعة من الأسئلة تتطلب منك تقديم بعض المعلومات الإحصائية عن نفسك. من فضلك لا تسجل أسمك ولا تدخل أي أرقام تعريفية (مثل: رقمك الوظيفي، رقم هويتك الوطنية، أو رقم جوازك .. الخ) وذلك حفظاً لخصوصيتك.

التعليمات: في أسئلة الاختيارات، من فضلك اختر إجابة واحدة لكل سؤال ما لم يطلب منك غير ذلك.

المعلومات الشخصية

1. ما هو جنسك؟

1.	ذكر
2.	أنثى

2. كم عمرك؟

(_____)

3. ما هي حالتك الاجتماعية حالياً؟

1.	أعزب
2.	متزوج
3.	مطلق/مطلقة
4.	أرمل/أرملة

4. هل شريك حياتك، أو أفراد أسرتك أو أحدهم يعيشون معك في السعودية؟

1.	نعم
2.	لا

5. هل لديك أطفال؟

1.	نعم
2.	لا

6. أكتب عدد الأطفال لديك موزعين حسب الفئات العمرية التالية؟

عدد الأطفال	الفئة العمرية	
	أقل من سنة	1.
	سنة إلى 3 سنوات	2.
	4 سنوات إلى 6 سنوات	3.
	7 سنوات إلى 12 سنة	4.
	13 سنة إلى 18 سنة	5.

7. هل لديك أشخاص بالغين (مثلاً: أقارب مسنين أو معاقين) يعتمدون عليك في الرعاية لأنك عائلهم وراعيهم الأول؟

1.	نعم
2.	لا

8. ماهي جنسيتك؟

(_____)

9. ما هو أصلك أو عرقك؟

عربي	.1
آسيوي	.2
هندي	.3
أفريقي	.4
قوقازي (أبيض)	.5
أخرى، من فضلك حدد: ()	.6

10. ماهي ديانتك؟

()

الخلفية التعليمية

11. ما هي أعلى شهادة تحصلت عليها في التمريض؟

معهد صحي ثانوي (بعد الكفاءة)	.1
دبلوم معهد صحي بعد الثانوي	.2
درجة مشارك/ دبلوم كلية متوسطة	.3
بكالوريوس	.4
درجة الماجستير	.5
درجة الدكتوراه	.6
أخرى (حدد من فضلك) _____	.7

12. هل لديك دورة تحضيرية أو شهادة تعليمية في مجال الرعاية الصحية الأولية؟

نعم	.1
لا	.2

13. هل لديك دورة تحضيرية أو شهادة تعليمية في مجال تمريض الرعاية الصحية الأولية؟

نعم	.1
لا	.2

14. هل تتقاضى أي محفزات مالية مقابل شهادتك التخصصية أو دوراتك التدريبية؟

نعم	.1
لا	.2

15. هل يقدم لك أي محفزات وظيفية (كالترقية أو رئاسة أحد الأقسام مثلاً) مقابل شهادتك التخصصية أو دوراتك التدريبية؟

نعم	.1
لا	.2

المعلومات والخبرات الوظيفية

16. كم سنة وأنت تعمل في مجال التمريض؟

()

17. ما هو مجموع السنوات الوظيفية التي أمضيتها كمرضى في مجال الرعاية الصحية الأولية؟

()

18. ما هو مجموع السنوات الوظيفية التي أمضيتها كمرضى في المملكة العربية السعودية؟

()

19. ما هو مجموع السنوات الوظيفية التي أمضيتها كمرضى في مركز الرعاية الصحية الأولية الحالي؟

()

20. أين يقع مركز الرعاية الذي تعمل به؟

1.	مدينة
2.	منطقة نائية

21. ما هو عملك التمريضي المناط بك داخل هذا المركز الصحي؟

1.	مرضى
2.	رئيس قسم
3.	مدير التمريض
4.	أخرى ()

22. كم مجموع السنوات الوظيفية التي أمضيتها في عملك التمريضي الحالي داخل هذا المركز الصحي؟

()

23. ما هو القسم الذي تعمل فيه داخل المركز؟ (يمكنك إختيار أكثر من قسم).

1.	قسم الرجال - ضماد
2.	قسم النساء - ضماد
3.	قسم الأطفال - ضماد
4.	الأمومة والطفولة
5.	التحصينات
6.	صحة الفم والأسنان
7.	السجلات الطبية
8.	الإدارة
9.	صحة البيئة
10.	الزيارات المنزلية
11.	أخرى - حدد من فضلك

24. ما هو نظام ساعات العمل المتبع في المركز الحالي؟

1.	صباحي
2.	صباحي - مسائي

25. كم طول فترة العمل اليومية الاعتيادية التي تؤديها؟

(_____ ساعات يومياً)

26. ماهو مجموع الساعات التي تعملها عادةً خلال الأسبوع الواحد؟

(_____ ساعة)

27. كم يبلغ الراتب الشهري الذي تتقاضاه؟

(_____)

28. هل تتلقى أي بدلات مالية أخرى (مثل بدل سكن، بدل تأمين أو ما شابه)؟

1.	نعم
2.	لا

الجزء (4): الأسئلة المفتوحة

1. بالنظر إلى عملك الحالي، كيف تقيم جودة حياتك العملية؟

.....
.....
.....
.....
.....
.....

2. ما هي أهم العوامل التي تشعرك بالرضا تجاه حياتك العملية الحالية؟

.....
.....
.....
.....
.....
.....

3. ما هي أهم العوامل التي تشعرك بعدم الرضا تجاه حياتك العملية الحالية؟

.....
.....
.....
.....
.....
.....

4. هل لديك توجه للانتقال من عملك الحالي في الرعاية الصحية الأولية خلال السنة القادمة؟ ولماذا؟

.....
.....
.....
.....
.....
.....

5. هل لديك توجه للانتقال من عملك الحالي في الرعاية الصحية الأولية خلال الخمس سنوات القادمة؟ ولماذا؟

.....

.....

.....

.....

.....

.....

6. في المساحة أدناه، فضلاً أكتب أي ملاحظات أو معلومات إضافية تعتقد أنها ستعزز من نتائج الدراسة.

.....

.....

.....

.....

.....

.....

مساهمتك في هذا البحث محل العرفان والتقدير، شكراً جزيلاً.

**Appendix C:
Collaborative Arrangement Evidence**

Kingdom of Saudi Arabia
Ministry of Health
Jazan Health Affairs



المملكة العربية السعودية
وزارة الصحة
صحة جازان


April 13, 2008
Re: ALMALKI, Mohammed
Sub: Permission to use premises
(Research Ethic Approval)

TO WHOM IT MAY CONCERN

This is to certify that **Mr. Mohammed ALMALKI**, health doctoral student of Queensland University of Technology, Kelvin Grove Campus, Australia, is completely authorized and supported to conduct a study on the quality of work life and its relation to intention of turnover among nurses of **Primary Health Care Centres**. The Directorate General of Primary Health Care Centres, Health Affairs in Jazan, is the administrative authority of the primary health care facilities in the whole region.

This document was issued upon the request of ALMALKI to confirm our agreement, collaboration and support for this study.

If you have any further enquiries please do not hesitate to contact us.


Esa Dahaln
Director General of Primary Health Care Centres
Health Affairs, Jazan Region

Ph: 0096673171696
Fax: 0096673173413



Official seal

**Appendix D:
Ethical Clearance**

Ethics Application Approval -- 0800000406

3 messages

Research Ethics <ethicscontact@qut.edu.au>

Tue, Jun 24, 2008 at 3:52 PM

To: Mr Mohammed Almalki <mohammed.almalki@student.qut.edu.au>

Cc: Ms Janette Lamb <jd.lamb@qut.edu.au>

Dear Mr Mohammed Almalki

Re: Quality of work life (QWL) in relation to turnover intention: a quantitative study of primary health care nurses in Saudi Arabia

This email is to advise that your application has been reviewed and confirmed as meeting the requirements of the National Statement on Ethical Conduct in Human Research. Your ethics approval number is 0800000406. Please quote this number in all future correspondence.

Whilst the data collection of your project has received ethical clearance, the decision to commence and authority to commence may be dependant on factors beyond the remit of the ethics review process. For example, your research may need ethics clearance from other organisations or permissions from other organisations to access staff. Therefore the proposed data collection should not commence until you have satisfied these requirements.

If you require a formal approval certificate, please respond via reply email and one will be issued.

Decisions related to Low Risk ethical review are subject to ratification at the next available Committee meeting. You will only be contacted again in relation to this matter if the Committee raises any additional questions or concerns.

This project has been awarded ethical clearance until 24/06/2011 and a progress report must be submitted for an active ethical clearance at least once every twelve months. Researchers who fail to submit an appropriate progress report may have their ethical clearance revoked and/or the ethical clearances of other projects suspended. When your project has been completed please advise us by email at your earliest convenience.

Please do not hesitate to contact the unit if you have any queries.

Regards

Research Ethics Unit | Office of Research
O Block Podium | Gardens Point Campus
p +61 7 3138 5123 | f +61 7 3138 1304
e ethicscontact@qut.edu.au
w <http://www.research.qut.edu.au/ethics/>

Appendix E:
Permissions to Use Copyright Protected Materials

Approval to use Brooks' Questionnaire (QNWL)

Mohammed almalki <mohammed.almalki@gmail.com> **Mon, Apr 7, 2008 at 5:13 AM**
To: brooksbe@uic.edu

Dear Brooks,

I am emailing you regarding the QNWL Questionnaire. My name is Almalki, and I am currently doing my PhD at Queensland University of Technology, Australia. My thesis includes part on the quality of nurses work life and I am interested in using your questionnaire. Thus, I am requesting your permission to use this questionnaire in my proposed study.

Looking forward to hearing from you.

Best regards,
Almalki, Mohammed

PhD Candidate
Queensland University of Technology
Kelvin Grove campus, Queensland
Australia
Fax: +61733414850
Email:
mohammed.almalki@student.qut.edu.au
mohammed.almalki@gmail.com

beth.brooks@jwt.com <beth.brooks@jwt.com> **Mon, Apr 7, 2008 at 11:32 PM**
To: mohammed.almalki@gmail.com

Greetings from Chicago!

Yes, Mohammed I would be happy to give you permission to use my QNWL Survey. I am on the road traveling this week for work, so do not have access to my files. I can send you the survey when I return to my office.

This email address is my full-time work email address. While I remain on faculty at UIC, I do not teach full time (I participate on Master's and Doctoral research committees, guest lecture) but do not carry a teaching course load.

All the best in your studies.

Regards,

Beth A. Brooks

beth.brooks@jwt.com <beth.brooks@jwt.com> **Thu, May 15, 2008 at 12:21 AM**
To: mohammed.almalki@gmail.com

Hi. Attached here is the questionnaire itself, along with the reliability and validity data from my dissertation.

Then, I have attached a table from my dissertation so you can see which items are included in which subscale.

I attached the SAS code as well. I'm not sure what software you are using for data analysis, but this might save you some time.

I hope this is helpful. Beth

Approval to use the Anticipated Turnover Scale (ATS)

April 14, 2007

Almalki, Mohammed
Doctoral Health Student
Queensland University of Technology
Kelvin Grove Campus
Queensland, Australia
FAX: +61733414850
Email: mohammed.almalki@student.qut.edu.au; almalki.qut@gmail.com

Dear Doctoral Student Amalki, Mohammed:

Thank you for your recent email in which you requested information about instruments in the Anticipated Turnover Among Nursing Staff study (#R01 NU00908). We are pleased to be able to share this information with you.

We have sent by email the Anticipated Turnover, Nurse Job Satisfaction, Work Satisfaction, Job Stress, Group Cohesion, and both portions of the Autonomy along with the scoring key, validity and reliability estimates obtained on our sample. References to use in crediting the work are on the documents, as well. You have permission for use, and we trust this information will be helpful.

If we can be of any other assistance to you, please let us know. Also, we would request that you share any information regarding the process of using the instrument and the results or outcomes of its use. We wish you much success in your doctoral research involving nurses' intention to leave their posts.

Sincerely,

Jan R. Atwood, PhD, RN, FAAN
Professor Emerita, College of Nursing
& College of Public Health
University of Nebraska Medical Center
2331 E. Nasturtium St.
Tucson, AZ 85755
j.atwood@worldnet.att.net
phone and FAX: (520) 825-8298

cc: A.S. Hinshaw, PhD, FAAN, Professor and Dean Emerita, University of Michigan School of Nursing, Co-Principal Investigator

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Dec 25, 2011

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From: Joe Tonzelli [joe.tonzelli@ajj.com]
Sent: Wednesday, 1 June 2011 11:05 PM
To: MOHAMMED ALMALKI
Subject: Re: Enquiry reg. reprint of copyright materials
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To: brownlok@ajj.com
Sent: Tuesday, May 31, 2011 1:38:09 AM
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Brooks, B. A., & Anderson, M. A. (2005). Defining quality of nursing work life. *Nursing Economics*, 23(6), 319-326.

Table 1 – page 321

Table 3 – page 323

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Waiting for your kind reply.

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Mohammed Almalki
Queensland University of Technology
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EMR: EMHJ Eastern Mediterranean Health Journal <EMHJ@emro.who.int>
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24 March 2011 18:13

Dear Dr Almalki,

Thank you for your email of 24 March requesting a permission of using a figure.

EMHJ has no objection to you using a figure published in the paper by M. Al-Yousuf, T. M. Akerele & Y. Y. Al-Mazrou entitled "Organization of the Saudi Health system". *Eastern Mediterranean Health Journal*, 2002 8(4-5): 645-653. However, you mention Figure 2 and this particular paper only has one figure (Figure 1. Organization of health care, Saudi Arabia). If Figure 1 is the one you wish to use, we are happy to grant permission for its use. We only require that the source is fully acknowledged and referenced in your theses. In this regard, the original source of Figure 1 is in fact: M.H. Baldo et al. Augmenting hospital support of maternal and child health care, Saudi Arabia. *Eastern Mediterranean Health Journal*, 1998, 4(1):11-20, and we suggest that this be cited as the source rather than the Al-Yousuf paper.

Concerning the publication of your paper (08/342), please note your paper has serial no. 90.

Best regards.

Appendix F:
Examples of responses to the open-ended questions

Examples of negative responses to the open-ended Question 1

Participant no.	Negative statements of responses to the open-ended Question 1
5	“Very bad work life. I work in a mountain area where there are no networks, no electricity, no safe roads, etc.”
30	“There is a shortage in the number of health professionals. For example, our centre does not have a pharmacist, epidemiological technician, statistical technician, medical record specialist. The building is not suitable for PHC purposes. We do not receive any incentives for distinguished employees. Most important, our team is not constant. They transfer us from one centre to another. I’m not happy with my overall work life.”
73	“My working life is very difficult in terms of my obligations to my family, my brothers and sisters, and my sick parents.”
99	“I am not satisfied at all. Working at the PHC does not assist in building my nursing knowledge. We perform routine duties.”
106	“I am not satisfied with QWL for a number of reasons. For example, long working duties lead to loss of energy and creates lots of family problems, especially for female nurses, and there is a lack of medical and nursing supplies.”
249	“I believe my QWL is not good. I try my best to do a good job, but the work is boring. There’s not enough equipment, important departments like x-ray and lab are not available, and working hours are not suitable for our lifestyle.”
286	“My QWL is not acceptable since there is the PHC infrastructure is neglected, and there’s a lack of equipment and materials, and a lack of a whole policy for the PHC services.”
302	“Our work life is not good because of the heavy workload, long working hours, management, and my family is not happy with my work.”
348	“My feelings regarding my quality of work life is that it is not OK. I am not happy. We don’t get what we need in terms of personal and functional demands.”
350	“My work life is not happy. Now I am working in the dental department. I don’t have any experience in dental care. Besides this work, I have to complete the duty for the male and female departments as well. We need more staff in this PHC.”
376	“I can’t say that there is a QWL in PHC facilities! No QWL will be achieved where there is a critical lack in equipment and supplies for patient care and a lack of in-service education courses.”
412	“I am not satisfied with my work in a PHC. There is a big difference between working in a hospital and in a PHC. The hospital has all the potential to achieve goals, but here it is deficient in almost every aspect.”
417	“The QWL in my present condition is not good. It is poor, maybe because of the present problem we are facing, which is the shortage of staff.”
490	“Our work life is not satisfactory. There are not enough instruments or equipment to perform our duty at a high level. There also no facilities for nurses such as an area for our breaks.”

Examples of positive responses to the open-ended Question 1

Participant No.	Positive statements of responses to the open-ended Question 1
4	“The QWL is acceptable. I’m satisfied.”
24	“My job is a staff nurse. I like this job and I don’t have any problems with my work life. I have good quality of work life.”
54	“I am greatly satisfied with the quality of work life that I have in this PHC.”
135	“I feel that my work is very good. I like it. I can say that I’m happy.”
138	“I perceive a good quality of work life.”
147	“I really like my work. I enjoy helping others. I thank Allah [God] who has guided me to this smart job. Through it, I have satisfied myself and benefited my community.”
154	“From my experience as a PHC nurse in this centre I feel happy.”
158	“I feel satisfied in terms of personal and professional concepts in my current work. I like nursing and I am dedicated to performing a good job. I feel happy when I help patients.”
194	“My feeling towards the QWL is getting better. I hope that it will be very good in the foreseeable future.”
201	“I am totally happy with my current work.”
272	“Quality of work life is excellent.”
328	“Very nice working life. It suits my family circumstances.”
342	“My QWL is good. I think this is because I perceive my responsibility towards my work as a PHC nurse. I put all efforts into helping patients. I thank God for giving me the opportunity to work in this humane job of nursing.”
351	“I am happy and contented. I am alone here so I can use my time as I like.”
406	“In this centre, I feel satisfied with my personal and working needs”

Factors influencing PHC nurses' satisfaction with their QWL, with examples of responses to the open-ended Question 2

Q2 What factors make you <u>satisfied</u> with your work life?				
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics
166	“Working in PHC is nice in terms of the family.”	• Balance work with family needs	Family and family needs	Work life/home life
178	“In the PHC, I can balance my work with the family needs.”			
225	“Being at the PHC, I can cater for my personal and family responsibilities.”			
53	“I enjoy the chance to work beside my husband in the same organisation. I also have the chance to live with my children here in Saudi Arabia until they reach school age when we will send them home to study.”	• Being with the family		
140	“I feel happy because my family is happy too and they provide helpful support for me.”	• Family support		
415	“I have a good relationship with my family members so they give me strong support to enjoy the working life.”			
417	“One factor that makes me satisfied with my work life is the time of duty. No night duty. I prefer to work at day-time than at night-time.”	• Time and length of duty	Working hours	
491	“Working hours are suitable for my life. I also have 2 days off per week.”			
498	“No rotating shifts. Because of our straight duty periods, we have enough time to manage our personal needs as well.”			
44	“I can spend some time with my family after work and fulfil my personal duties.”	• Energy left after work		
178	“I have a great level of energy after work. My duty is not too hard.”			
67	“I love my work. It helps me to build my knowledge and skills in the field of PHC	• Work experience	Nature of the work	Work Design

Q2 What factors make you <u>satisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
	nursing.”				
101	“Knowledge and experience I get from working in PHC.”				
11	“I like my work as a PHC nurse.”			Level of job satisfaction	
40	“Being in a noble profession and doing my job sincerely is making me satisfied with my work life.”				
157	“I like my job. I’m happy in PHC nursing.”				
427	“I am satisfied to work in a PHC.”				
128	“I have good communication with the nurse manager and the director of the centre.”	• Communication with the manager		Management and supervision	Work Context
485	“I am able to communicate well with my manager.”				
384	“If there is any problem, the upper-level managers always care for the nurses.”	• Supervision by the manager			
468	“The nurse manager provides adequate supervision.”				
329	“My managers appreciate my efforts towards the patients and their families.”	• Appreciation for accomplishments			
342	“Praise for my efforts by my nursing manager/supervisor.”				
180	“The nursing policies facilitate my work.”	• Policies and procedures			
468	“This organisation provides us with nursing policies and procedures that direct our performance.”				

Q2 What factors make you <u>satisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
109	“Cooperation of my managers.”	• Support and cooperation			
202	“Support and direction by my manager.”				
202	“Good communication with my colleagues.”	• Communication with co-workers	Co-workers		
418	“Communication with my colleges is good.”				
11	“I am happy with my colleagues. We have good friendships and relationships.”	• Friendships and relationships with co-workers			
468	“I have good relations with all the team members.”				
487	“Satisfaction with the relationships with our co-workers, doctor, health technicians, nurses...”				
97	“We are cooperative so we help each other as needed.”	• Support and cooperation of co-workers			
370	“We are working harmoniously.”				
392	“My colleague in the same unit is very cooperative.”				
342	“Praise and encouragement for my efforts by my co-workers.”	• Respect and appreciation by co-workers			
365	“Working with people who value my work.”				
426	“The respect I receive from my co-workers.”				
202	“Good communication with the patients.”	• Communication with	Patients and the		

Q2 What factors make you <u>satisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
		patients	community		
343	“I can well communicate with the patients.”				
204	“Our patients are cooperative.”	• Cooperation of patients			
205	“The patients show good cooperation with our programs.”				
379	“I am satisfied with the relationships with the patients.”	• Relationships with and respect from patients			
499	“People ... are friendly.”				
61	“I am proud and happy to serve and help people. It is my duty.”	• Helping patients and the community			
70	“I feel happy when I serve my community.”				
147	“I help people who need health care.”				
150	“When patients get healed and are happy, I also feel the same, because when they are in pain, my heart feels their pain.”				
165	“I feel satisfied when I perform a good job with my patients. I am looking for rewards from Allah (God).”				
69	“I feel satisfied when I help patients and their families and I hear their nice feedback, pray to God to bless me.”	• Acceptance of service by patients			
70	“I feel happy when I serve my community and they show satisfaction with my job.”				
342	“I really feel happy when I see my patients happy.”				

Q2 What factors make you <u>satisfied</u> with your work life?				
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics
202	“They will not ask me to leave.”		Security of job	Work World
319	“The future of PHCs in Saudi Arabia looks secure so I think my job is OK.”			
41	“My current job in a PHC is a good way to get acceptable remuneration.”	• Salary	Payment	
61	“Here as RNs we get a better salary than in our country.”			
303	“The salary only ... makes me satisfied with my work life.”			
73	“Nursing is the basis of healthcare services in health centres and hospitals.”		Belief of nurses towards nursing	
180	“I am happy. I recognise the importance of my job for individuals, families, and the community at large.”			
202	“I really understand the importance of my work so I like it.”			
327	“I advise young people to have a health career, including nursing. It is very nice and helpful.”			
64	“Although the centre is in a rural area, I feel happy. It is located in my area.”		Location of the PHC	Demographics
436	“My workplace is near to my husband’s place of work.”			
130	“I like the location of the PHC. It is close to my house.”		Distance from home to work	
249	“I can walk to the centre in a few minutes.”			
420	“The PHC is near and suitable for me and for my family.”			

Factors influencing PHC nurses' dissatisfaction with their QWL, with examples of responses to the open-ended Question 3

Q3 What factors make you <u>dissatisfied</u> with your work life?				
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics
99	“We experience great conflict between our work and the needs of our families.”	<ul style="list-style-type: none"> • Balance work with family needs 	Family and family needs	Work Life/ Home Life
102	“Old nurses who have a large family and personal circumstances will not be able to last in a PHC.”			
120	“I believe that the PHC nurses would not be able to balance the work and family needs. We spend most of our time at work and we get back home tired.”			
140	“As a mother, I can’t look after my kids. Yes, I bring them money, but money is not everything.”			
22	“We prefer to work in areas close to our families. Currently, I work so far from my family.”	<ul style="list-style-type: none"> • Being away from the family 		
78	“Female nurses must have the chance to bring their family to this country. Why are male nurses and physicians (male or female) offered visa for their families while the female nurses are not? To ensure high QWL, female nurses should have the opportunity to bring their families.”			
364	“Working so far from my family. I can’t see my family except during annual vacations.”			
374	“The majority of nurses here are away from their families. They are living and working with lot of tension and emotion. If they have the chance to live with their families, their quality of work will increase, so please allow the family visa for nurses, too.”			
311	“Absence of the family support makes me dissatisfied with my work life.”	<ul style="list-style-type: none"> • Family support 		
99	“Long hours at work. We prefer one work period instead of two. But two work periods will give us rest time in between. The length of duty must be changed to ensure high	<ul style="list-style-type: none"> • Time and length of duty 	Working hours	

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
	quality of work life for nurses.”				
112	“In my opinion, one factor that needs to be fixed as soon as possible to make PHC nurses more satisfied with their working lives is the length of working duty, because the PHC nurses are unable to meet both the requirements of work and the family.”				
150	“Long duty hours and no rest in between. No lunch time. In addition, people ask about evening shift [duty period], especially working mothers. For example, we can’t give the polio vaccine in the morning; we have to give it in the evening hours at the houses. If duty should return to how it was before, this would be nice.”				
171	“Long duty for one work period and the two work periods strategy is not suitable for us. It interrupts the working and personal life. The solution is to reduce the length of the duty to 7 hours per day.”				
303	“Working hours are 9 hours daily. This is too long, so I am thinking seriously about leaving my job. I would suggest that the working hours should be reduced so nurses can balance work and family needs.”				
388	“Long working hours create many family problems for me. Really my husband is not happy with my work. I wish the duty period would be made a bit shorter.”				
106	“No energy after work. We can’t do anything after hours.”		• Energy left after work		
120	“We spend most of our time at work and we get back home tired.”				
151	“No childcare services. It’s necessary for the PHC to provide us with such services.”		• Caring for children	Facilities for nurses	
420	“Absence of childcare in the workplace for the children of workers during working hours.”				
45	“Staying in the same hostel alone with a group of other nationalities.”		• Hostel and accommodation		

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
59	“The hostel is in a very bad condition. We have not had a fridge for at least seven years. Improving the nurse hostel is very important.”				
198	“Nurses who come from far away must be provided with accommodation or allowances so they can live close to their work organisation.”				
397	“Our PHC centre and accommodation are so far from the city and it is very difficult to get things.”				
100	“Short annual vacation. It is only one month after a long year of heavy working. One month is too short compared with the annual vacation of female teachers.”	• Leave and vacations			
256	“We nurses (foreigners) need maternity leave for at least 3 months. Saudi nurses have this benefit. Nurses are staying without their husband and children in Saudi Arabia. (Those who are married) should also get enough annual vacation.”				
463	“We should have our vacations without conditions. Managers always ask us to cover in other departments or the PHC for some time before we enjoy our vacations. They should employ more nurses instead of bothering us. However, this is not the case for all nurses, but only for some!”				
97	“It would be very nice if we were provided with transportation to and from work.”	• Transportation			
256	“The PHC nurses are facing many problems in terms of transportation (e.g. shopping, airport, tickets, work etc.”				
321	“Absence of transportation to and from work. We are in need for this facility, even if it is a public service.”				
425	“In almost all PHC hostels, nurses stay alone without their family. No enjoyment, only monthly shopping. Please, this must be changed. Take staff for a picnic, because if they	• Social life and enjoyment	Social and cultural aspects		

Q3 What factors make you <u>dissatisfied</u> with your work life?				
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics
	are well (mentally and physically), they will give better care for the patients.”			
429	“We want to meet our friends on the weekends at any of our hostels.”			
499	“No social life. I am really grateful to work in the PHC, but we feel like we're in jail. We need to mix with people and the community, but there is no way to do that”			
73	“The number of nurses is not enough. It needs to be increased.”	• RNs	Lack of PHC workforce (staffing)	Work Design
82	“Lack of RNs; there is only one nurse - me.”			
148	“Shortage of nurses in the PHC sector. More nurses are required for better health care.”			
216	“Inequity in the distribution of the nursing workforce in the PHC centres.”			
403	“The number of nurses is not enough compared to the workload.”			
424	“One essential factor that makes me dissatisfied with my QWL is the small number of nurses in this centre.”			
37	“Provide us with nursing assistants so we can focus on patients and their families.”	• Nursing assistants		
277	“The auxiliary workforce is not trained. They have no idea of what to do inside the centre.”			
402	“Support personnel such as nursing assistants are not available.”			
20	“Lack of health workforce, including physicians. Availability of female physicians is a basic need to look after the female patients. This is a basic requirement for all PHC centres according to the local culture; however, there is a critical shortage.”	• Other health professionals		
30	“We have a shortage of pharmacists, technicians, epidemiologists, health records’			

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
	technician, and technical statisticians.”				
421	“We are pressured to do the jobs of others as well – like covering the pharmacy and other departments, too. I can do my work, but sometimes it's not possible to run everywhere.”				
160	“Heavy workload; I can say nurses perform about 90% of PHC tasks.”			Heavy workload	
283	“The population of this centre is about 7,000. In addition to caring for males, I also care for the children who come with their fathers. This condition puts a heavy workload on me and affects my life.”				
330	“Multiplicity of getting permission and leave among our colleagues makes our duties very difficult, affecting the final productivity of our organisation.”				
350	“One staff nurse can’t manage a big PHC.” “The local PHC staff never report for duty. This is the burden for non-Saudi staff.”				
308	“Nurses should not be asked to do other non-nursing jobs, and they also should not work as managers instead of nurses.”			Non-nursing tasks	
362	“The roles assigned to the nurses in the PHC must be controlled. They should not cover in departments such as dental, pharmacy, management, medical records and so on.”				
383	“Nurses should do all the work in all the wards. For example, they also work in pharmacy and in wards as well. I think this does not match our professionalism.”				
417	“One factor that makes me dissatisfied with my work life now is working from one area to another, and we even cover the work of other health staff in the PHC, when they fail to come for duty... like in the male dept., pharmacy dept. The nurse in PHC is always in a hurry to accomplish the work of the day. I believe to achieve good work, staff must concentrate on one area”				

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
9	“My current job does not entail a bright future in the job market, because nowadays they prefer hospital experience.”			Nature of the work	
98	“Working in a PHC is a sort of routine. What we do today we will do again tomorrow and every day. My previous work in the hospital was full of knowledge and experience compared to my current work.”				
428	“I don't have enough experience to improve my knowledge in the field of PHC nursing. There are very few patients.”				
459	“Not getting the experience in new life-saving equipment, treatments and adequate information on new diseases and their treatment.”				
62	“Provide us with good supervisors who listen to our problems and solve them.”	• Communication with the manager		Management and supervision	Work Context
184	“Lack of communication with our managers. They do not listen to our complaints.”				
123	“Our managers and supervisors do not understand our challenges. They are only concerned about the work and the organisation.”	• Supervision by the manager			
249	“The supervisors only search for tiny mistakes. They do not care about the things we need or that help improve our performance.”				
386	“The gap between the nurses and the nursing directors needs to be reduced. The leaders are required to come out into the field and share in our working life. The leaders should not only manage from their offices.”				
9	“It affects the personal aspect of a nurse if she is dedicated and straightforward with her job, and yet it is not recognised.”	• Appreciation for accomplishments			
151	“I feel dissatisfied when managers and supervisors do not appreciate my efforts. I really				

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
	like the nursing, but when you have no appreciation or support, you will be upset.”				
190	“In a remote PHC, there is no differentiation between serious and careless nurses. They work so far from supervision and accountability. Higher managers who stay away from the PHC do not appreciate our achievements.”				
286	“Lack of job description and healthcare policy for PHC nursing. Our work depends on personal vision.”	• Policies and procedures			
304	“Work in the PHC needs to be well defined so each person knows their job exactly.”				
386	“We should be provided with standard procedures for nursing practices.”				
36	“Lack of support and encouragement by our managers and supervisors.”	• Support and cooperation			
315	“Lack of cooperation between the management department and nurses.”				
391	“We ask managers to be more cooperative, especially when we face some challenges that could stop us from attending to our duties.”				
490	“Managers do not cooperate with us. They do not care about our requests.”				
30	“Transferring nurses between PHC centres affects our stability and reduces the loyalty to our organisations.”	• Sense of instability			
95	“When we make small mistakes, the managers transfer us from our centres that we feel belong to and where we have spent many years.”				
258	“Lack of stability in one workplace. They always relocate us from one centre to another.”				
25	“Lack of communication with colleagues such as nurses, physicians, pharmacists.”	• Communication with co-workers	Co-workers		

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
207	“Poor communication with co-workers.”				
41	“Dissatisfied relationship with co-workers.”	<ul style="list-style-type: none"> • Friendships and relationships with co-workers 			
69	“There are some conflicts at work with colleagues.”				
193	“Lack of cooperation between the members of our PHC team.”	<ul style="list-style-type: none"> • Support and cooperation of co-workers 			
322	“My colleague ‘nurses’ are uncooperative and do not show feelings of responsibility.”				
152	“Managers and physicians do not appreciate our efforts as PHC nurses.”	<ul style="list-style-type: none"> • Respect and appreciation by co-workers 			
210	“Nurses need to be protected from the physicians’ dominance and lack of respect.”				
12	“We work as staff nurses from the first day in our job until we resign.”	<ul style="list-style-type: none"> • Career advancement 		Development opportunities	
30	“Absence of a ranking system for nurses. There is no significant difference in the roles and positions of RNs with different qualifications.”				
210	“It is necessary to have the chance to pursue my study in Saudi Arabia.”	<ul style="list-style-type: none"> • Access to education degrees 			
404	“Procedures for continuing study are very difficult. Access to degree and postgraduate levels should be facilitated for nurses who wish to further their education at local and international universities.”				
438	“Our managers do not encourage us to continue our studies; instead, they hide circulars				

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
	by the MOH in relation to opportunities for degree completion.”				
99	“There is a lack in training courses and continuing education. It is essential to establish a library and classes in each PHC or at least for each group of PHC centres.”	<ul style="list-style-type: none"> Continuing education and training courses 			
114	“We require more training courses and continuing education programs in our areas, but only during the weekdays.”				
123	“They force us to attend training courses in areas far from our work settings, but they do not pay for all this attendance. They should pay for our courses.”				
386	“It is necessary for the Ministry of Health to provide us with current nursing publications and books in the field. Short courses on communication skills with patients, psychology, sociology, and techniques of dealing with patients are urgently needed.”				
30	“The PHC building is inappropriate for providing PHC services. It originally was a private building.”	<ul style="list-style-type: none"> PHC building 	Work environment		
139	“The building is very old and not large enough to allow for all the PHC activities. It is not suitable for PHC services.”				
180	“There is no suitable place for the nurses and to keep their personal belongings.”	<ul style="list-style-type: none"> Break areas 			
194	“The nurses do not have a particular place for rest and prayer. They also do not have personal storage lockers.”				
179	“The furniture is very old and there is not enough. There is a critical lack in desks and cabinets where we can keep our tools and other materials.”	<ul style="list-style-type: none"> Infrastructure facilities 			
25	“Deficit in the PHC infrastructure. We do not have phone facilities in our PHC. Can you imagine it? There is also a need to introduce e-health to the PHC services as soon as possible.”				

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
359	“There is a severe deficiency in required resources and support for the PHC facilities. There are no modern tools or appliances, no service cars, no ambulances, especially in rural and remote areas. The healthcare leaders are only concerned about the quantity, but not the quality. They open more and more PHCs, but they do not think about how to operate them.”				
402	“More clinics and departments such as females, dental and x-ray are required for high level of patient care.”	• PHC departments			
462	“More departments are needed, such as an obesity clinic.”				
26	“I am dissatisfied with the equipment and supplies provided for us in this PHC.”	• Equipment and supply			
166	“There is not enough medical equipment, and the available ones are very old and out of order.”				
349	“For the benefit of our patients, we ask for the necessary supplies to be available without delay.”				
164	“The managers are all men so they give us no privacy as female nurses. Female departments must be headed by female managers.”	• Privacy at work			
388	“Male and female departments should be kept separate from each other so we can work freely.”				
463	“Female nurses should only work with female patients.”				
399	“No security is available at my workplace. We wish we could have a security department so we can feel safe from harm at work.”	• Safety at work			
487	“Lack of secure environment. Patients sometimes assault us verbally and physically.”				

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
61	“It is very difficult to understand the community people as they are uneducated.”	<ul style="list-style-type: none"> • Communication with patients 	Patients and the community		
207	“Poor communication with patients.”				
351	“Language barrier and literacy limit my role in providing health care.”				
193	“People in this area are uncooperative.”	<ul style="list-style-type: none"> • Cooperation of patients 			
392	“Lack of patients’ cooperation limits the nursing care provided.”				
256	“Misbehaviour of the patients. They do not respect us.”	<ul style="list-style-type: none"> • Relationships with and respect from patients 			
265	“People are always talking about nurses dealing with patients; however, there is a need to teach patients in how to deal with nurses, too.”				
314	“Patients have no idea about the nature of our daily work. They want to finish quickly.”	<ul style="list-style-type: none"> • Level of patient awareness 			
316	“Lack of understanding among patients regarding our work.”				
426	“People need more health education in terms of medication use, caring for ill children, and prevention of disease.”				
70	“I feel disappointed when patients are not satisfied with my services.”	<ul style="list-style-type: none"> • Non-acceptance of service by patients 			
342	“I get dissatisfied when the patient leaves without satisfaction with the provided nursing care.”				
73	“Lack of appreciation for the nursing profession by officials and citizens alike. Nursing is			Image of nursing	Work World

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
	the basis of healthcare services in health centres and hospitals. We want to be treated as specialists.”				
303	“The image of nursing among people does not make me feel happy. I want to transfer to the city where there are more chances for work and people are more educated and have a better image of nurses.”				
349	“The view of the community towards nursing in general and to the local nurses in particular. They believe that the expatriate nurses are more qualified than the Saudis.”				
396	“People should know that nurses are professionals. We are professionals with high levels of education. Exactly like other specialists such as doctors, pharmacists, and teachers. We make a great effort to look after their health.”				
53	“The two-year contract policy.”			Job insecurity	
386	“My job is not secure. It could be unemployed at any time. I am working on a contract job. For example, last year while I was preparing for health education lectures, I was surprised that my contract was terminated. It was like a shock, because just a few days before, I received an appreciation certificate. If my direct manager had not fought to keep me within his teamwork, I could now be out of the country.”				
430	“I am afraid about my job, because I can lose it at any time.”				
30	“Low nurses’ salaries compared to the tasks they perform, particularly compared with the salaries of people in other disciplines.”	• Salary		Payment	
73	“The salary is low and not commensurate with the number of working hours. It is also not equal to the salaries in other sectors.”				
266	“According to the current market condition, the salary must be increased.”				

Q3 What factors make you <u>dissatisfied</u> with your work life?					
Participant no.	Examples of responses	Sub-factors	Factors	QWL dimensions & demographics	
425	“My friend and I have the same experience, but she gets a higher salary than me”. “I want to leave within 5 years, because I have a lower salary which is not enough for my family's needs. I spend half the salary in this country on food and other life requirements.”				
487	“According to my education and experience, the salary is unfair; the increment is not the same for all nurses.”				
66	“Dissatisfied with our ‘food-money’ allowances. We have not received them yet.”			<ul style="list-style-type: none"> • Allowances and financial incentives 	
74	“Why don't nurses receive additional payment for working in risky environments (financial support for risky jobs)?”				
152	“We must be provided with financial rewards for working over holidays such as the Eid holidays. They do not give us anything.”				
172	“We receive no financial compensation in return for working on public holidays and festival days.”				
421	“For many years, we have not been getting food money. Every month, they send the paperwork for food money to the head office, but to no use.”				
5	“I work in a mountain area where there are no networks, no electricity, no safe roads, etc.”				
73	“Nurses should be given the opportunity to choose their workplace. Forcing them to work in remote areas will affect their lives and their giving process.”				
335	“When new staff are appointed in the PHC sector, it is better to post them in centres which are not so rural. Appoint them in centres with telephone and communication				

Q3 What factors make you <u>dissatisfied</u> with your work life?		Sub-factors	Factors	QWL dimensions & demographics
Participant no.	Examples of responses			
	facilities, because first impressions are last impressions. If they work in a rural area first, they will be in trouble and they will think about giving up their job.”			
15	“Location of the workplace. . . .is far from where I live and my family.”		Distance from home to work	
22	“We prefer to work in areas close to our families. Currently, I work so far from my family.”			
500	“The PHC is far from where I live.”			

Factors influencing PHC nurses' intention to stay in their PHC organisations in the next 12 months, with examples of responses to the open-ended Question 4

Participant no.	Examples of responses	Factors	QWL Dimensions & Demographics
25	"I do not have any intentions to leave due to my current family circumstances."	Family & family needs	Work Life/ Home Life
148	"No intention to leave my current workplace in the next 12 months, because it fits the life of my family."		
178	"No. I need my work to support my family in my country."		
277	"I do not intend to leave this centre, because I am married and have children, and my husband refuses to work in a hospital."		
23	"I am satisfied in my current job in the present PHC centre."	Job satisfaction	Work Design
84	"No intention to leave. I am satisfied with my work."		
147	"No intention to leave. I like my job and the PHC."		
323	"I will stay. I like the PHC and I'm satisfied with my work."		
43	"I want to stay to have more experience in the PHC field."	Nature of the work	
271	"No. The PHC is the closest to the community. It looks after the health of all (individual, family and the community). I like it."		
272	"No. In the PHC, I work with patients, families and the community."		
495	"No. I love my work and I am really skilled in PHC."		
59	"My intention is to stay in this job ... People here are friendly and very cooperative."	Co-workers	Work Context
97	"No intention to leave, because I have good relationships with my colleagues and for the teamwork strategy."		
249	"No intention to leave, because I have good relationships with my colleagues ..."		

Participant no.	Examples of responses	Factors	QWL Dimensions & Demographics
358	“No, because I’m happy to work in my PHC and with my companions.”		
66	“No, as I have come to love this place and the residents here and I love my work.”	Patients & the community	
70	“No, working in the PHC is a comprehensive service to the community. I feel satisfied when I serve the community and when they get happy with my performance.”		
150	“Frankly, I do not want to leave the PHC. God knows when I shall leave, because I have been a diabetic for the last 7 years. We have good responses from the community and we give them good care and health education for risks and how to prepare themselves.”		
75	“No. I want to stay in this centre that's located where I live.”	Location of the PHC	Demographics
244	“No intention. I work in my village where my husband and family live.”		
320	“The location of my current PHCC encourages me to stay here.”		
16	“No. I want to stay in the current job, because it is close to my home.”	Distance from home to work	
103	“No intention to leave this centre because of its near location.”		
190	“No. My work is very close to my home ...”		

Factors influencing turnover intention of PHC nurses in the next 12 months, with examples of responses to the open-ended Question 4

Participant no.	Example of responses	Factors	QWL Dimensions & Demographics
29	“I am planning to leave this job because of family problems. My family does not live with me.”	Family & family needs	Work Life/ Home Life
42	“I want to resign early to give more time to my family.”		
67	“Yes. I want to transfer to my area for my dad's financial and health condition. My family lives in another region.”		
256	“Yes, my family is staying in my country ... The children are growing and they need their mother for better care ... no family visa.”		
129	“Yes. Because of long working hours.”	Working hours	
179	“Yes. I plan to move to a hospital for more experience and for better working hours.”		
303	“The work duty is too long, affecting my family and personal life.”		
349	“Yes. I am not happy with the conditions of my work, such as the working hours.”		
15	“Heavy workload.”	Workload	Work Design
82	“Yes, if I get a better working chance in another organisation where the workload and working hours are lighter.”		
278	“Yes. I have the intention to transfer because of the heavy workload. It affects my life.”		
283	“Yes. If I get the chance to transfer to a hospital, I will not say no. I want to work within a team of male nurses so we can share the work and the workload.”		
9	“Yes. I am trying to transfer to a hospital (if given the chance), because sooner or later I will leave my job and go back home. I need a fall-back and greater chances with those who have hospital experiences.”	Nature of the work	
35	“I'll move to a hospital to improve my nursing knowledge and experience. Experience in the PHC is limited to few areas.”		
133	“Yes. I intend to leave to work in a hospital to try a new environment and to get new experience.”		

Participant no.	Example of responses	Factors	QWL Dimensions & Demographics
212	“Yes. I plan to move to a hospital to get current knowledge and experience in nursing practice. There I will get the chance to see new cases, medications and modern equipment.”		
251	“Yes. There is no support or appreciation for our efforts; our managers are busy with attendance papers.”	Management & supervision	Work Context
252	“Yes. I want to find more stability in my work, without frequent transfers to other PHC centres.”		
372	“Yes, if given the chance, I will transfer from the PHC to a hospital because of management challenges.”		
484	“Yes. There is no hope that the health leaders will pay attention to the PHC.”		
11	“Yes. I want to pursue my study.”	Development opportunities	
160	“Yes. For family circumstances and for professional needs such as career advancements.”	(career advancement & education)	
184	“Yes. There is no respect or cooperation among co-workers and I want to get the opportunity for advancement in my career.”		
493	“Yes. In this centre, there is a lack of continuing education and little practice for what we have learned.”		
6	“Yes. I am not satisfied with work conditions including ... lack of salary.”	Payment (Salary & Allowances)	Work World
7	“Yes to the lack of financial incentives ...”		
458	“Yes. Because of lack of ... salary ...”		
496	“Yes. I’ll leave if given the chance to work in another country for a better salary ...”		
4	“Yes. I suffer from the daily drive to the workplace. It is located in a remote area. I am really about to leave this work.”	Location of the PHC	Demographics
6	“Yes. I am not satisfied with the work conditions, including the location of my work.”		
443	“Yes. If I get another job with better amenities, I will leave. Currently, I work in a rural area with little support. I do not receive		

Participant no.	Example of responses	Factors	QWL Dimensions & Demographics
	any rewards for working in a rural area. I was not provided with accommodation, like other expatriate nurses.”		
198	“Yes. My workplace is far from home and my family.”	Distance from home to work	
220	“Yes. It is far from where I live.”		
364	“Yes, this centre is too far. I want to move to the area where my family lives.”		

Factors influencing PHC nurses' intention to stay in their PHC organisations in the next 5 years, with examples of responses to the open-ended Question 5

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
66	"No. I have to support the medical expenses of my daughter and I still love my work here."	Family & family needs	Work Life/ Home Life
107	"No. I can't transfer to any other area, because my little child is disabled and I need to look after him."		
144	"No. My work is suitable for my life and for my family as well."		
190	"No. ... I have a large family and I need to spend money on them."		
26	"I am satisfied with my current job; I would like to stay here until the MOH terminates my contract."	Job satisfaction	Work Design
58	"No. I want to stay in the PHC, because I am satisfied with my work."		
139	"No. I am happy working here in this PHC."		
213	"No. I am happy in the PHC. I have no plans to leave my workplace."		
319	"I will stay at this centre ... it is where I can practise my knowledge and skills."	Nature of the work	
321	"No. Because work in PHC is commensurate with my competences and desire."		
380	"I do not want to transfer from my work, because I have sufficient experience in the PHC field."		
471	"No. I am really fully knowledgeable in the PHC field and its nature."		
135	"No intention. I am satisfied and I have a good relationship with my co-workers ..."	Co-workers	Work Context
301	"I have no intention to leave because of the ... good cooperation of ... my colleagues."		
324	"No, I am not intending to leave. I am satisfied with my ... co-workers ..."		
326	"No intention to leave, because I am happy and agree with the staff in this organisation ..."		

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
135	“No intention. I am satisfied and I have a good relationship with ... patients.”	Patients & the community	
172	“No ... I know all the people in this area and I know their health conditions and social circumstances. I am almost one of them.”		
301	“I have no intention to leave, because I am satisfied with my experience in the PHC and with good cooperation of patients.”		
97	“No intention to leave within the next 5 years. I have spent many years in this centre and if I leave, it will be just for retirement.”	Tenure in PHC	Demographics
172	“No. I have been in this centre for many years. I know all the people in this area and I know their health conditions and social circumstances. I am almost one of them.”		
199	“No intention to leave. I am happy with the current work and with this PHC. I have been here for many years and I feel like a part of this centre. I want to continue here.”		
200	“No. I have spent many years in this PHC.”		
64	“I want to stay in this PHC. I work where I live and am serving my community.”	Location of the PHC	
24	“I am living and working in the city. I am happy.”		
276	“No, this centre fits my personal and family life. It is close to my house.”	Distance from home to work	
305	“No. I plan to stay here, because it is close to my home.”		
330	“I want to stay in this job since the location of my work is really near to my home.”		

Factors influencing turnover intention of PHC nurses in the next 5 years, with examples of responses to the open-ended Question 5

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
62	“Yes. I have some family problems so I want to transfer to Madina Monawara. My husband and children are there and they suffer from being apart from me. I hope and wish for a transfer.”	Family & family needs	Work Life/ Home Life
130	“Yes. I want to move to another organisation or to resign to care for my family. I cannot balance my long working hours with caring for my family.”		
499	Yes, I will not stay here longer than 3 years. I have a family who I could not bring here, because the MOH did not provide a family visa.”		
508	“Yes, I want to stay with my family – my family can’t stay here. There is no visa.”		
99	“Yes. I will leave this centre as soon as I can, because the long working hours do not fit with my family life as a wife and mother. I want to spend more time with my husband and kids.”	Working hours	
236	“Yes, because our working hours are very long so we cannot balance our work and family needs.”		
304	“Yes. I want to work in a hospital so I can ... work for one duty period per day.”		
391	“Yes, I fervently plan to leave this PHC as early as possible. I am totally unhappy about ... the long working hours).”		
21	“Yes, I want to leave the PHC, because I’m not satisfied.”	Job dissatisfaction	Work Design
322	“I want to leave for I am highly dissatisfied.”		
385	“I am not satisfied with my current job. I want to transfer to a hospital.”		
483	“Yes. I don’t like to continue working in this centre.”		
15	“Heavy workload.”	Workload	
82	“Yes, if I get a better working chance in another organisation where the workload and working hours are lighter.”		
278	“Yes. I have the intention to transfer because of the heavy workload. It affects my life.”		
283	“Yes. If I get the chance to transfer to a		

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
	hospital, I will not say no. I want to work within a team of male nurses so we can share the work and the workload.”		
29	“I am also planning to leave this job, because by staying in the PHCC, I’ll lose all my experience as a staff nurse - new medicines, new methods of treatment, new medical equipment. Everything is below my level of knowledge.”	Nature of the work	
166	“I want to move back to my previous hospital. I do not like the routine of work at the PHC centre.”		
362	“I am fully frustrated with the daily routine. I want to try something else.”		
497	“Yes. I wish to go back to King Fahd Hospital. Working in a PHC is boring. In a hospital, one can increase one’s experience regarding diseases, medications and nursing practices.”		
6	“Our managers do not hear us.”	Management & supervision	Work Context
99	“Upper management does not respect nurses or appreciate their efforts. For making small mistakes, nurses are penalised by transferring them to other centres or by reducing their salaries.”		
236	“... our managers do not understand our situation as working mothers. They are only concerned about work.”		
492	“Yes, fed up with frequent transfers. Nobody is thinking about our personal problems and difficulties in transferring to new accommodation and related things. Working in the same place makes it easy to get to know the people and the community so one can give good service to the people.”		
176	“Yes. I have the intention to leave in order to pursue my degree study.”	Development opportunities	
263	“Yes, I have the intention to leave my current centre in the next 5 years in order to get better career advancement.”	(career advancement & education)	
338	“I have the intention to leave for educational purposes. I want to study a degree and a Master.”		
452	“Yes. I’d like to work in a hospital. More experience. More career opportunities.”		

Participant no.	Example of Statements	Factors	QWL Dimensions & Demographics
22	"I'm thinking seriously about leaving the PHC. I do not receive any financial incentives."	Payment (Salary & Allowances)	Work World
73	"I have the intention to leave, because nurses do not receive fair payments. All the major increases are only directed to the physicians. We work more than them."		
120	"Yes. I want transfer to the psychiatric hospital to get new experience and to benefit from high financial support given to the employees there."		
398	"I planned to only work here for 3 years, because my salary does not increase. I never receive additional financials."		
102	"Yes. If I get the chance to work in the management department where the working hours are less than in nursing, I will not hesitate. I'm older than a few years ago and I won't be able to perform nursing services properly."	Age	Demographics
113	"Yes. I will resign because of my age at that time."		
233	"I will leave the PHC when the MOH stops renewing my contract; by that time, I will reach the age of 60."		
367	"Yes, because at that time, I'll already be old and I want to be with my family."		
15	"My workplace is located on the border area. It is far from the city and social life."	Location of the PHC	
223	"Yes. It is a very rural area with no facilities to live happily. My family is here so I want to be able to go anywhere with them with my husband's job."		
433	"Yes. I wish to leave within the next five years in order to live in a city where everything is available."		
165	"Yes. I have the intention to leave, because this centre is far from my home."	Distance from home to work	
308	"During the next 5 years, I will try to get closer to my house and family. I will look for another centre or hospital."		
392	"Yes. I may transfer within the next five years since this centre is far from where I live and the transportation is difficult."		