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QUALITY OF NURSING WORK LIFE AMONG LEBANESE NURSES

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AMERICAN UNIVERSITY OF BEIRUT

QUALITY OF NURSING WORK LIFE AMONG LEBANESE NURSES

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AN ABSTRACT OF THE THESIS OF

<u>Yara Hazouri</u> for <u>Master of Science</u> Major: Nursing

Title: Quality of Nursing Work Life among Lebanese Nurses

Quality of nursing work life is linked with better outcomes for individual nurses and healthcare organizations. Despite the interventions Lebanese health care organizations have employed to recruit and retain nurses, the shortage of professional nurses remains to be the top challenge. As a response to this situation, organizations are focused on identifying factors that attract qualified nurses and those that keep hold of these nurses.

Purpose: The purpose of this study was to assess the quality of nursing work life among Lebanese nurses working in hospital settings. Other aims were to assess the association of quality of nursing work life with different socio-demographic and work-related variables; and to explore its relationship with leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and nurses' perceived health status.

Sample: The sample included 710 registered nurses from 13 major hospitals (four public hospitals and nine private hospitals) in the five Lebanese geographic areas (Beirut; Mount Lebanon; North; South; Beqaa). Registered nurses were all Lebanese. They had been working in a hospital setting for at least one year, and providing direct patient care. All other nursing staff whether from the management level or practical nurses and auxiliaries were excluded.

Ethical Considerations: Institutional review board approval and approvals from the different hospitals' administration were obtained prior to conducting the study. An informed consent preceded the survey explaining the benefits and risks and the voluntary participation in the study.

Instrument: A self-administered questionnaire was used for data collection. The questionnaire included sociodemographic and work-related questions, Brook's Quality of Nursing Work Life (QNWL) survey and global statements about leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and nurses' perceived health status. Brook's QNWL survey is formed of 42 items distributed over four subscales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World), and rated on a six-point Likert scale with higher scores reflecting better quality of nursing work life.

Method: A non-experimental descriptive research design was used, and a cross-sectional approach was applied for data collection. An invitation letter was sent to the administration of each of the 13 hospitals. After obtaining their approval, enveloped containing the informed consents and the questionnaires were sent to the hospitals through postal services. The study was communicated to the nurses through each hospital's internal communication system, and the envelopes were distributed through each hospital's administration. Nurses filled the questionnaires and returned them in their sealed envelopes to a locked box located in an administrative office. The boxes were brought back through postal services in a month time, which was the time allocated for data collection. A database was created using Statistical Package for the Social Sciences (SPSS) 25.0. Research questions were analyzed using descriptive and inferential statistics.

Results: The mean Brook's QNWL score was 168.27 (SD 26.46); the total score ranged between 52 and 241. The calculated mean score shows moderate quality of nursing work life based on the interpretation criteria that was recommended by the author of the tool. The lowest scored items were energy left after work (2.81, SD 1.58), salary (2.91, SD 1.55) and image of nurses (3.15, SD 1.54); and the highest scored items were designated break area (5.21, SD 1.12), ability to provide quality patient care (4.98, SD 1.02) and availability of nursing degree-granting programs (4.96, SD 1.23). Significant relationships between quality of nursing work life and gender (p = 0.005), number of dependents (p = 0.042), work unit/service (p = 0.001), number of assigned patients per shift (p = 0.050), private versus governmental hospital (p = 0.000) and geographic living area (p = 0.015) were identified. As for age, marital status, income, nursing educational credential, years of experience, number of working hours per week, nursing shift and geographic work area, these variables were not significantly related to quality of nursing work life. Quality of nursing work life was significantly and positively correlated with the nurses' rating scores of leadership style (r = 0.556, p = 0.000), organizational culture (r = 0.626, p = 0.000), job engagement and commitment (r = 0.626) 0.545, p = 0.000), job performance (r = 0.469, p = 0.000), job satisfaction (r = 0.517, p = 0.000) and perceived health status (r = 0.363, p = 0.000). No significant correlation was realized between the quality of nursing work life and the nurses' intention to leave.

Conclusion: Quality of nursing work life has become the center of attention for researchers, administrators and unions. The study assessed the quality of nursing work life among Lebanese nurses for the first time, and explored its relation to different sociodemographic and work-related variables, and to job engagement and commitment, performance, satisfaction and intention to leave, all of which are of great interest and importance to nursing policy and decision makers. The findings of the study represent a drive for action plans to face the nursing shortage and mitigate the nursing turnover, and a basis for future research.

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CHAPTER I

INTRODUCTION

Quality of work life in the health care sector, mainly among nurses, had become the center of attention among researchers, organizations and unions. Previous publications link good quality of work life for health care personnel with better outcomes (Brooks & Anderson, 2005). Nevertheless, health care institutions worldwide continue to face substantial problems due to the nursing shortage and the tendency of nurses to leave the profession (Vagharseyyedin, Vanaki, & Mohammadi, 2011). For healthcare institutions to retain the largest population in health care sector and enhance the institutions' outcomes, quality of nursing work life should be the target of attention (Brooks & Anderson, 2005).

A. Background

Quality of work life was first used as a term in the late 20th century (Hian & Einstein, 1990). However, many general efforts were previously made in an attempt to improve working conditions. Martel and Dupuis (2006) reported that the particular contribution came from Frederick Taylor who believed that employees had the right to be matched to jobs based on their capabilities, to make suggestions, to get appropriate training and to receive constructive feedback rather than be blamed. This approach was adopted by scientific management, and it guided the human relations movement which later became the sociotechnical movement; the origin of what is currently referred to as "quality of work life" (Martel & Dupuis, 2006).

Martel and Dupuis (2006) indicated however that it was not until several decades after that when the relationship between the quality of work life and the productivity of workers got the attention of activists in the fields of social sciences and humanities. In reality, the

Hawthorne study, which was conducted in 1933 and which examined the effects of environmental factors at the workplace on the performance of workers, was the main drive for these groups to consider the concept of quality of work life (Martel & Dupuis, 2006). Likewise, psychologists and business men started to examine the concept, discuss its different aspects and debate its components (Kiernan & Knutson, 1990).

Martel and Dupuis (2006) described how the concept of quality of work life then marginally progressed in the industrialized countries of Europe, especially with the major shift of the post war economy towards the service sector which represented 60% of jobs at that time, and the continuously increasing levels of education among workers. The main organization of work started in Sweden where the governmental socio-democratic policies supported the adoption of working conditions that concentrated on the welfare of the employees. As for the other European countries such as Netherlands, Denmark, France, Ireland, England and Norway, these also made several efforts to reorganize work, but they were not as successful as Sweden since their initiatives were "unorganized and isolated" (Martel & Dupuis, 2006).

Bagtasos (2011) continued on how the pressure to go along with the movement that was started in Europe went across the Atlantic to the United States. In the States, the first program to address quality of work life actively included workers in the decision making process related to their working conditions, and aimed at increasing the workers' productivity through increasing their satisfaction. This was the starting point after which many more studies and programs followed to look at the different factors affecting the quality of work life of employees as well as the various effects the latter has on the employees on one hand and the organization on the other hand (Bagtasos, 2011). They "wished to define and monitor the common denominator that would enable them to reconcile the goals and aspirations of all parties involved in the working world" (Martel & Dupuis, 2006, p. 336).

Soon after that, several organizations in the United States, Canada, Japan and European countries adopted the quality of work life concept and operated programs accordingly, while at the same time numerous research papers were published tackling many issues such as perceptions of quality of work life, its dimensions and ways for measuring it (Bagtasos, 2011). Martel and Dupuis (2006) explained that all these attempts formed the basis for the international conference on quality of life which was run at Arden House, Harriman, New York in 1972. In spite the assent of the different groups in the conference on the importance of incorporating quality of work life within job designs, they couldn't arrive at a commonly approved and precisely clarified definition of quality of work life. This is because the present groups which included organizations, unions, employers and activists expressed a wide range of interests and concerns. Nevertheless, among the points agreed upon during the conference was the importance of creating a solid theoretical basis for research in the area of quality of work life through the spread of information and the coordination of efforts (Martel & Dupuis, 2006).

By the early 1980s, the concept of quality of work life had already taken various paths and got modified several times; for some, quality of work life meant better relationship between employers and employees; for others, it was represented by a set of standards to be applied in the workplace; while for a third group, it was perceived as a tool that modifies the workplace to fit the desires of employees (Martel & Dupuis, 2006). The discrepancy and ambiguity of the concept were described by Sashkin and Burke (1987):

Quality work life may mean different things to different people in different roles or to the same person in different roles (...) [or to] different people in the same role [who] may have discrepant views of QWL, not merely on the basis of different personal values but as a result of different abilities and aptitudes. (pp. 398-399)

The reasons behind the ambiguity of the concept were the nonexistence of a clear and accepted definition of the concept; the exclusive concentration on "low-level jobs"; and the early and false hopes directly linking it to productivity (Sashkin & Burke, 1987).

According to Martel and Dupuis (2006), concerned parties were then determined to combine their efforts in order to reach a consensus. The work on shaping the concept of quality of work life hit its target by having the group decide on three key points that later guided the development of the concept. First, it was agreed that quality of work life should be recognized as a subjective construct. Although quality of work life was matched with employment rate, salaries and benefits, job security and stability, etc. at the beginning, job satisfaction was the topmost measurement criterion used. There had to be a clear decision on whether to perceive quality of work life from an employee's aspect (subjective) or an organizational aspect (objective), but measuring objective data using a subjective assessment tool was conflicting. In comparison with quality of life, researchers found that within the context of the same physiologic disease i.e. same objective conditions, one patient might have a better quality of life than another, thus quality of life is subjective. Similarly, within the same specific organizational work conditions, one employee might have a better quality of work life than another (Martel & Dupuis, 2006). Thus, there was a substantial shift towards a subjective definition of the construct as exemplified in the definition of quality of work life as:

An individual's interpretation of his/her role in the work-place and the interaction of that role with the expectations of others. A quality work life means something different to each and every individual, and is likely to vary according to the individual's age, career stage, and/or position in the industry. (Kiernan & Knutson, 1990, p. 102)

Second, the group came to an understanding that individual, organizational and social factors

are interrelated and must be incorporated in the definition of the concept of quality of work

life (Martel & Dupuis, 2006). Many studies looked at the work environment as one that involves three main levels; the organization, the worker, and the community. According to Kiernan & Knutson (1990), a very complex model is integrated within the concept of quality of work life. This model necessitates that the needs and expectations of each of the employer, the employee and the marketplace all be addressed (Kiernan & Knutson, 1990). Martel and Dupuis (2006) continued to explain the third point where the group decided that there existed a strong and noteworthy relationship between quality of work life and quality of life. Many authors described how workers of that period were becoming more educated and perceiving their jobs as a tool for personal and social development rather than a solely financial means. Therefore, quality of work life took a major share in the global quality of life. Moreover, this had fallen in agreement with the two previously discussed points of subjectivity and integration of all aspects within the definition of the concept (Martel & Dupuis, 2006).

Brooks and Anderson (2005) indicated that the same concept was transferred to the nurses working in the health care settings and became quality of nursing work life with a specific focus on the sociotechnical systems theory. This is because the new concept included the technical and the social aspects related to that specific setting and of concern to that specific population of workers i.e. nurses. Policies and procedures, knowledge, skills, equipment, machines, medical technology, etc. are among the technical aspects, while the social aspects include relationship with nursing colleagues, relationship with supervisors, relationship with physicians, skill level, attitudes, etc. (Brooks & Anderson, 2005).

Vagharseyyedin et al. (2011) conducted a literature review on the definition of the concept of quality of nursing work life. The definitions varied widely among researchers, as some of them looked at the concept as an "outcome" while others perceived it as a "process". For the first group, the focus of their definition was on the different factors which affected quality of nursing work life. Alternatively, the second group incorporated the interaction of

the nurse with his/her work environment within their definition of quality of nursing work life (Vagharseyyedin et al., 2011).

B. Research Problem

Countries worldwide have to deal with the shortage of professional nursing which continues to upsurge, particularly with the increase in the demand and the decrease in the supply of knowledgeable and skilled nurses (Brooks et al., 2007). In the US alone, the nursing shortage is expected to grow to more than one million nurses by the year 2020 (Littlejohn, Campbell & Collins-McNeil, 2012). In Lebanon, the situation is similar, where inadequate numbers of graduate nurses compared to other majors and better opportunities for nurses abroad are among the factors that intensify the nursing shortage. Along with this problem, Lebanese health care organizations face the big challenge of recruiting professional nurses and retaining them (El-Jardali, Merhi, Jamal, Dumit & Mouro, 2009). As a response to this situation, organizations are focused on identifying factors that attract qualified nurses and those that keep hold of these nurses. Enhancing the nursing quality of work life achieves nurses' retention in health care organizations, and improves these nurses' performance and consequently the organization's productivity (Brooks et al., 2007).

C. Significance

Despite all the strategies that Lebanese health care organizations have employed to recruit and retain nurses, the Lebanese Order of Nurses disclosed that 10% of nurses registered in the Order are unemployed as cited in the study of El-Jardali et al. (2009). In addition, the turnover rate among nurses had increased from 13% in the year 2004 to 15.8% in 2005 and then to 16.8% in 2006. In fact, unsatisfied nurses were 65% more likely to leave the profession compared to their satisfied colleagues (El-Jardali at al., 2009). Existing studies

conducted between the years 2003 and 2013 showed that Lebanese nurses were highly and significantly dissatisfied (El-Jardali at al., 2009; Kalisch, Doumit, Lee, & El Zein, 2013; Yaktin, Azoury & Doumit, 2003), and that their dissatisfaction was related to extrinsic rewards (ex. Salary and benefits), quality of supervision, level of respect, shift working hours, career development opportunities, continuing education opportunities, workload, geographical location of the organization, etc. (El-Jardali et al., 2009; Kalisch et al., 2013).

According to Brooks et al. (2007), it is evidenced that approximately 30% of the variance explained in the different job satisfaction questionnaires and surveys is related to the employees' personality. Therefore, job satisfaction as a construct provides inadequate assessment of the job itself and the employees' feelings about their job and job environment. Researchers had not identified a strong theoretical foundation nor a clear conceptual definition for items in questionnaires used to assess nurses' job satisfaction (Brooks et al., 2007).

Since job satisfaction of nurses does not accurately reflect their quality of work life, and all the dissatisfying factors reported by nurses in Lebanon fall within the technical or the social aspects of their job, an alternative approach would be measuring the quality of nursing work life. Assessing quality of nursing work life allows health care organizations to understand the way the interaction between work environment and design and home and personal life issues affect nurses' work life. This in turn helps organizations target specific areas that enhance the work environment for nurses, and thus achieve two of the main goals: retention of nurses and high performance (Brooks et al., 2007).

D. Purpose

The purpose of this study was to assess the quality of nursing work life among

Lebanese nurses working in hospital settings. Other aims were to assess the association of

quality of nursing work life with different socio-demographic and work-related variables; and to explore its relationship with leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and nurses' perceived health status.

E. Research Questions

- 1. What is the quality of nursing work life among Lebanese registered nurses working in hospital settings?
- 2. Are the different socio-demographic and work-related variables associated with quality of nursing work life?
- 3. Are leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and nurses' perceived health status related to quality of nursing work life?

F. Conceptual and Operational Definitions

In this study, the definition of quality of nursing work life was adopted from Beth Brooks, and it is "the degree to which registered nurses are able to satisfy important personal needs through their experiences in their work organization, while achieving the organization's goals" (Brooks & Anderson, 2001, p.323). Operationally, Brook's Quality of Nursing Work Life Survey was used to measure the quality of nursing work life among Lebanese registered nurses. The survey is a valid and reliable scale, developed by Beth Brooks in 2001. It has four subscales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World) and consists of 42 items, where each item is scored using a 6-point Likert scale (Brooks & Anderson, 2005).

Having introduced the background of the development of the concept of quality of work life, the purpose of conducting the study on the quality of nursing work life among Lebanese registered nurses and the significance of such a study in Lebanon, literature on quality of work life, mainly among nurses was thoroughly reviewed and reported in the next chapter.

CHAPTER II

LITERATURE REVIEW

A thorough review of the literature on quality of work life in general, and quality of nursing work life in particular was done. The review revealed several factors associated with quality of work life. The review also presented several instruments that were used to measure quality of nursing work life. Finally, studies from different countries where quality of nursing work life had been assessed were reviewed to compare and contrast trends and deviations.

Several factors were associated with the quality of work life. Some of these factors affected quality of work life, while some others were affected by quality of work life. Literature review showed that leadership style and organizational culture predicted the quality of work life. Job engagement and commitment, job performance, job satisfaction, turnover and health status were found to be influenced by the quality of work life.

A. Factors associated with quality of work life

1. Leadership style

Gillet, Fouquereau, Bonnaud-Antignac, Mokounkolo and Colombat (2013) reviewed the research on quality of work life and indicated that it is highly affected by the relationships with supervisors in general and by the management style of direct supervisors in particular. An integrative literature review by Vagharseyyedin et al. (2011) of 23 studies undertaken in Canada, Iran, Italy, Saudi Arabia, Spain, Taiwan and the United States identified management practices and leadership issues as major predictors of quality of nursing work life. Many researchers have addressed the effect of leadership and management style on job satisfaction and performance, but very few described the relationship between certain styles and quality of work life. Transformational leadership have gained huge popularity in research

related to management and leadership, since those types of leaders grab the interest of their followers in whatever idea they suggest, involve them in achieving the desired goal of the organization and encourage them to work together and to put the good of the group above their personal benefit (Gillet et al, 2013). The research study by Gillet et al. (2013), explored the relationship between transformational leadership and quality of work life for the specific population of nurses. Results showed a significant and positive relationship between transformational leadership and nurses' quality of work life. Moreover, the study suggested that this relationship is mediated by distributive and interactional justice in the organization (Gillet et al, 2013).

2. Organizational culture

According to Gifford, Zammuto, Goodman and Hill (2002), organizational culture is another predictor of the quality of work life, as evidenced in many research studies.

Organizational culture is the set of assumptions, values and beliefs that manifest in the specific characteristics of a certain organization and guide all the operations that run in that organization. Since these assumptions and beliefs unconsciously affect how members of the organization think, feel and behave, it's no surprise that organizational culture impacts quality of work life which is the way an employee thinks, feels and interacts with his/her work environment. Accordingly, some researchers attempted to identify the organizational culture that enhances the quality of work life. The Competing Values Framework is a valid and reliable measure which compares one culture to another. The framework consists of x axis which reflects the organizational focus internally towards operations and dynamics or externally towards the outer environment, and y axis which reflects the level of flexibility versus control in the organization. This diagram brings in four different types of organizational cultures; hierarchical, rational, developmental and group. Results of two

similar studies suggest that the flexibility/control dimension of the competing values framework is of greater importance that the internal/external focus dimension with regard to quality of work life (Gifford et al., 2002; Goodman, Zammuto & Gifford, 2001). Moreover, the two studies concluded that the group culture was positively related to quality of work life, while hierarchical culture was negatively related to quality of work life. Group culture is focused on human relations, teamwork, communication and participation in decision making. It has the least emphasis on formal and managerial ways of control, and it favors training and education at the different levels. (Gifford et al., 2002; Goodman et al., 2001).

Nevertheless, it is important to note that these factors come hand in hand with the basic requirements of a proper work environment which includes, but is not limited to pay and benefits, equal opportunities, job safety and stability, pride in work and organization, honesty, transparency and fairness, and solidarity and friendliness since quality of work life is predicted by intrinsic and extrinsic stimuli (Lau, 2000; Lewis, Brazil, Krueger, Lohfeld & Tjam, 2001).

3. Job engagement and commitment

Research studies identified effects of high quality of wok life, among which is the job engagement and commitment (Kanten & Sadullah, 2012; Normala, 2010; Zhao et al., 2013). According to literature, "Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Kanten & Sadullah, 2012, p. 362), and "Organization Commitment refers to the strength of an employee's involvement in and identification with the organization" (Normala, 2010, p. 76). Based on these definitions, one can infer that for employees to be engaged and committed, they need to have high levels of energy, enthusiasm, concentration, contentment and resilience, but most importantly, their goals and priorities need to be in congruence with the organization's vision.

Thus, the better the employees' quality of work life is, the more they are engaged and committed. This hypothesis was supported by the different studies that were conducted in Turkey, Malaysia and China, and that found a significant and positive relationship between quality of work life and job engagement and commitment (Kanten & Sadullah, 2012; Normala, 2010; Zhao et al., 2013).

4. Job performance

As described by Lau (2000), ever since the concept of quality of work life had emerged, researchers looked into the relationship between quality of work life and performance which continues to be the number one aim of all institutions and businesses. This relationship had been verified and sustained through the studies that were conducted throughout the years. The studies proved the positive relationship between high employees' quality work life and high organization's performance (Lau, 2000). Correspondingly, a review of literature conducted by Gayathiri, Ramakrishnan, Babatunde, Banerjee & Islam (2013) on the impact of quality work life showed that for every article they reviewed, whenever participants reported quality of work life as undesirable, they also reported low levels of productivity. On the contrary, higher performance, in terms of growth and profitability, had been recognized in organizations where employees reported good quality of work life (Gayathiri et al., 2013).

5. Job satisfaction

Gayathiri et al. (2013) explained that job satisfaction had previously been used as a measurement tool of the quality of work life for many years. Later, theorists differentiated between the job satisfaction which is the subjective portion from an employee's perspective and the quality of work life which is the objective portion from an organization's perspective,

and researchers pointed out that quality of work life goes beyond satisfaction without denying the aspects of how an employee thinks and feels about his/her job. Hence, job satisfaction becomes one dimension of quality of work life. Findings from literature suggest that whenever quality of work life goes up, job satisfaction goes up as well (Gayathiri et al., 2013; Islam & Siengthai, 2009). However, this is not true vice versa since workers may be satisfied with a low quality work life, but they would never be unsatisfied with a high quality work life (Gayathiri et al., 2013).

6. Turnover

Nurses' turnover remains to be the top challenge faced by health care organizations worldwide as reflected in the literature review conducted by Zhao et al. (2013). Turnover leads to a huge waste of resources and an immense increase of costs, which explains the great interest of human resources personnel and administration and management personnel in literature related to nurses' turnover and retention strategies (Zhao et al., 2013). Turnover rate was assessed in relation to quality of work life among 508 nurses working in primary health care in the Jazan region of Saudi Arabia. Results indicated that nurses who reported an undesirable quality of work life were more likely to report their intention to leave, which exhibits a significant relationship between quality of work life and turnover (Almalki et al., 2012). Likewise, in Heilongjiang Province, northeast China, 1000 nurses working in five large-scale government-owned hospitals were included in a cross sectional survey which confirmed the hypothesized negative effect of high quality work life on the turnover rate among nurses as well as their intention to leave the institution or the profession (Zhao et al., 2013).

7. Health status

Shields and Wilkins (2006) indicated that nurses work in physically and psychologically demanding environments and are continuously in contact with biologically hazardous materials which predisposes them to diseases, injuries and health problems. In fact, a national cross-sectional study in Canada indicated that nurses were the sickest workers compared to all other workers, with an average of 20.9 sick days per year (Shields & Wilkins, 2006). Several other studies explored nurses' health and reported poorer health status of nurses when compared with the general population. Nevertheless, these studies associated nurses' health status with their work and work environments (Horrigan, Lightfoot, Larivière & Jacklin, 2013; Shields & Wilkins, 2006). According to Horrigan et al. (2013), nurses' poor general health was associated with unhealthy work environments and poor work life conditions among which low nurse autonomy, low control over own practice, poor relationships with physicians, supervisors, and coworkers, low respect, role overload, work stress and job strain with limited support, job insecurity, and physical job demands were identified. These led to increased stress, burnout, illness, injuries, disability, and absenteeism among nurses (Horrigan et al., 2013). Moreover, Blumberga and Olava (2016) showed a positive correlation between the quality of work life and the wellbeing of nurses.

Although extensive literature exists on the relationship between each of the predicting factors (leadership style and organizational culture) and quality of work life as well as the relationship between quality of work life and each of the implications (job engagement and commitment, job performance, job satisfaction, turnover and health status), no single study had combined them all. Analyzing the whole process of how predicting factors affect the nurses' quality of work life which in turn impacts the nurses' outcomes, and how the latter influence patient care and contribute to the organizational success is of major importance. It creates a better understanding of how work design, organization and management affect individual nurses as well as healthcare organizations.

The review of literature showed that several instruments were used to assess the quality of nursing work life. Work-Related Quality of Life (WRQoL) scale was a general instrument. Leiden Quality of Work Life Questionnaire for Nurses (LQWLQ-N) questionnaire was based on the general Leiden Quality of Work Life questionnaire and customized to specifically assess the quality of work life for nurses. Finally, Quality of Nursing Work Life (QNWL) survey was developed to specifically measure the nurses' quality of work life.

B. Instruments used to assess quality of work life

1. Work-Related Quality of Life (WRQoL)

The Work-Related Quality of Life (WRQoL) scale was initially developed by Darren Van Laar, Julian A. Edwards and Simon Easton in the year 2007 based on a large sample of staff employed by the United Kingdom's National Health Service (Van Laar, Edwards & Easton, 2007). The scale consists of 23 items distributed over six sub-factors that are perceived to affect the quality of work life. These six factors are: Job and Career Satisfaction (JCS), General Well-Being (GWB), Stress at Work (SAW), Control at Work (CAW), Home-Work Interface (HWI) and Working Conditions (WCS). Each item is scored on a five-point scale where "1" means "strongly disagree" and "5" means strongly agree. Items 7, 9, and 19 of WRQoL scale are negatively phrased and thus are reversed. Higher scores indicate better quality of working life. According to Van Laar et al. (2007), the WRQoL scale had been translated to many languages and used across the world by researchers and organizations to assess quality of work life, mainly among workers in the health care sector.

2. Leiden Quality of Work Life Questionnaire for Nurses (LQWLQ-N)

The Leiden Quality of Work Life Questionnaire for nurses (LQWLQ-N) questionnaire was developed by Maes, Akerboom, Van der Doef and Verhoeven in 1999 in the Netherlands, based on the Leiden Quality of Work Questionnaire (LQWQ) and the Organizational Risk Factor Questionnaire (ORFQ) (Maes, Akerboom, Van der Doef & Verhoeven, 1999). The original questionnaire is a reliable and valid tool used to assess the job characteristics from the aspects of the Job Demand-Control-Support model which focus on the social and the psychological stressors and the Michigan model which focus on the physical and the mental stressors. Moreover, the LQWLQ-N was modified to include items that are specific to the nursing profession. LQWLQ-N is formed of 70 items distributed over 12 sub-scales which are: Work and Time Demands, Physical Demands, Skill Discretion, Decision Authority, Social Support Supervisor, Social Support Colleagues, Nurse-Doctor Collaboration, Personnel Resources, Material Resources, Rewards, Work Agreements and Communication. Each item is rated using a four-point scale where "1" means "totally disagree" and "4" means "totally agree" (Maes et al., 1999).

3. Quality of Nursing Work Life (QNWL)

The Quality of Nursing Work Life (QNWL) Survey was developed by Beth A. Brooks in 2001 in the USA (Brooks, 2001). The survey assesses the quality of work life for the specific nursing population. It is formed of 42 items distributed over four subscales, and rated on a six-point Likert scale. Brooks (2001) expressed that higher scores indicate better quality of nursing work life.

Many other instruments had been used to assess the quality of work life, but the literature review focused on those that were used in research articles which studied nurses' quality of work life. After having described the different instruments used in literature to assess quality of work life for nurses, it was appropriate to select the instrument that

specifically matches the purpose of this study which was the assessment of the quality of nursing work life, hence Brook's QNWL was the instrument of choice. Since Brook's QNWL was used in this study to assess the quality of nursing work life among Lebanese registered nurses, the survey was later described in more details in the "instrument" section in Chapter III.

Quality of nursing work life was assessed in several research studies which were carried out in different countries. Studies from Canada, Iran, Saudi Arabia and the United States were reviewed and reported in order to compare and contrast trends in quality of work life among nurses.

C. Quality of nursing work life in different countries

1. Canada

In the study by Lewis et al. (2001), a total of 1,819 nurses working in seven different health care institutions in Central-South Ontario, Canada were surveyed to explore their quality of work life. Based on literature review, researchers constructed a questionnaire which included 65 items covering eight areas that relate to quality of work life. Results came out to suggest that more than half of the nurses in the different institutions (academic health centers; long-term care facilities; acute care facilities; rehabilitation centers; etc.) reported low quality of work life (Lewis et al., 2001).

2. Iran

A descriptive study involving 360 nurses working in different clinical areas in the hospitals of Tehran University of Medical Sciences was carried out by Dehghan Nayeri, Salehi, and Ali Asadi Noghabi (2011) to investigate the quality of work life among Iranian nurses. The researchers followed the cross sectional survey approach, and used several

instruments described in literature to construct their unique tool which matches the culture and the work environment in Tehran. Results showed that 61.4% of nurses rated their quality of work life between low and moderate while only 3.6% rated their quality of work life as high (Dehghan Nayeri et al., 2011).

3. Saudi Arabia

A cross sectional survey, following the descriptive research design, was conducted by Almalki et al. (2012) among a convenience sample of 134 nurses working in primary health care centers in the Jazan region of Saudi Arabia. Using Brook's Quality of Nursing Work Life Survey, researchers aimed at studying the quality of work life among these nurses. While scores can range between 42 and 252, the scores in that study ranged between 45 and 218 with a mean score of 139.45, which reflects an undesirable quality of work life (Almalki et al., 2012).

4. United States

A study by Brooks et al. (2007) assessed the quality of work life among a sample of 1554 staff nurses employed in three Midwestern urban and community hospitals. The nurses were surveyed at two different times as part of a five-year nurse retention project. Results revealed a moderate quality of nursing work life at the onset of the project and 18 months later. Several areas were identified for improvement including developing leadership and management competency, implementing nursing shared governance, offering onsite child and elderly care facilities, applying nonrotating schedules and utilizing both public relations and marketing to highlight the importance of the nursing profession (Brooks et al., 2007).

While there seemed to be a trend of a low quality of nursing work life among nurses worldwide, the corresponding reasons seemed to be common as well. According to the three

studies, nurses' quality of work life was particularly negatively influenced by low salary and inadequate benefits, inappropriate working hours and vacations, management practices, inadequate staffing and lack of career opportunities. These studies suggest that extrinsic factors, which organizations could control and act upon, played a big role in predicting the quality of work life among nurses.

The review of literature showed that transformational leadership style and group organizational culture enhance quality of work life. Quality of work life, in turn, positively impacts job engagement and commitment, job performance, job satisfaction and general health status, but negatively impacts turnover. The three instruments that were used in previous studies to assess nurses' quality of work life were explored and evaluated. The instrument that was specifically developed to assess nursing quality of work life was selected to answer the main research question. Additionally, studies from Canada, Iran, Saudi Arabia and the United States were reviewed and revealed a generally undesirable quality of work life among nurses.

CHAPTER III

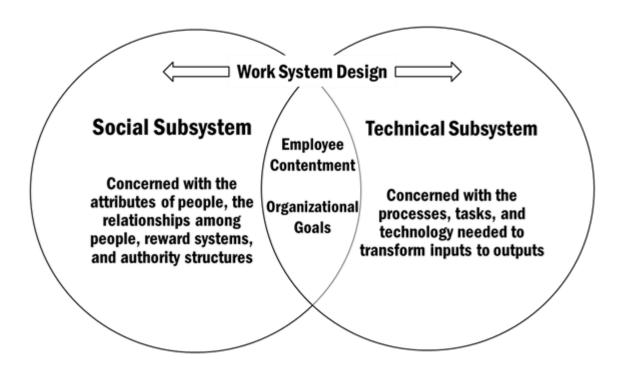
METHODOLOGY

In this chapter, the theoretical framework which guided the basis of the research study and the choice of the methods and procedures was introduced. Moreover, the research design, the study sample, the ethical considerations and the instrument used were presented. The procedures for piloting the study, collecting the data and statistically analyzing this data were also discussed.

A. Theoretical Framework

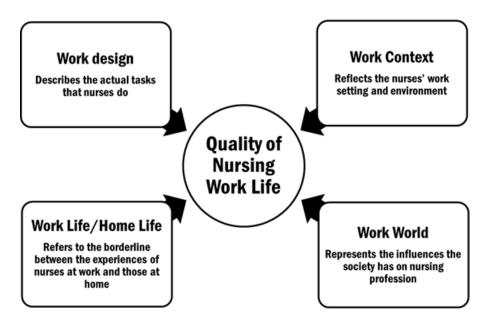
Quality of nursing work life as a concept was based on the sociotechnical systems theory. The sociotechnical systems theory was developed by Eric Trist, a researcher and a clinical psychologist who worked at the Tavistock Clinic established in 1920 in London to provide psychotherapy for those in need post World War II. This is why the theory is closely associated with the Tavistock institute and why it is believed to be a product of a group effort (Mumford, 1985). According to this theory, two main interdependent subsystems (technical system and social system) feature any job or profession; and whenever the employees' needs that fall under these subsystems are met, employees' contentment and organizational goals are achieved. Based on this theory, survey items used to assess quality of nursing work life tackled the social and the technical aspects of the nursing profession. Besides, initiatives aimed at improving quality of nursing work life followed the same concept with a specific focus on those of interest for nurses and organizations at the same time (Brooks et al., 2007; Mumford 1985).

Figure 1: Sociotechnical Systems Theory diagram



Furthermore, O'Brien-Pallas and Baumann identified and described four different dimensions of quality of nursing work life within a unifying framework: work life/home life, work design, work context, and work world. Work life/home life referred to the borderline between the experiences of nurses at work and those at home. Work design described the actual tasks that nurses do. Work context reflected the nurses' work setting and environment. Finally, work world represented the influences the society has on nursing profession (O'Brien-Pallas & Baumann, 1991).

Figure 2: O'Brien-Pallas and Baumann's framework for quality of nursing work life diagram



Based on the sociotechnical systems theory and O'Brien-Pallas and Baumann's framework, Beth Brooks developed the quality of nursing work life survey which included items related to staffing, workload, verbal and physical abuse, safety, availability of equipment and technology, scope of nursing practice, continuing education, and professional respect (Brooks et al., 2007). Since Brook's QNWL survey was used to assess the quality of nursing work life among the Lebanese registered nurses, the sociotechnical systems theory and O'Brien-Pallas and Baumann's framework guided the basis of the current study.

B. Research Design

A non-experimental descriptive research design was used. The design was economical and feasible within the limited allocated time frame for data collection. Specifically, a cross sectional approach applied as data was collected at a specific defined time from a representative sample of the population. A self-reporting questionnaire was used for data collection.

C. Sample

The study sample was recruited from 13 major hospitals (four public hospitals and nine private hospitals) in the five Lebanese geographic areas (Beirut; Mount Lebanon; North; South; Beqaa). Participants eligible to participate in the study were Lebanese registered nurses who had been working in a hospital setting for at least one year. All other nursing staff whether from the management level or practical nurses and auxiliaries were excluded as they were not registered nurses who provided direct patient care. Sample size calculation was done based on a population mean to ensure a representative sample. Assuming a 95% Confidence Interval for the mean, a width of 5, and a standard deviation of 22.7 based on the similar study conducted by Almalki et al. (2012), the minimum sample size needed was 317 participants. The number of Registered Nurses who were eligible, and who were invited to participate in the study was around 1000, out of which 726 registered nurses responded. Two questionnaires were cancelled since the nurses who had filled them did not provide direct patient care, and another 14 questionnaires were cancelled since more than 50% of the items were missing. Accordingly, 710 questionnaires were filled completely and analyzed with a total response rate of 71%.

D. Ethical Considerations

Institutional review board (IRB) approval as well as approvals from the different hospitals' administration were obtained prior to conducting the study. An informed consent preceded the survey explaining that the survey was part of a research study, the benefit of which outweighed its harm which was relatively nonexistent, the participation in which was voluntary, and that participants could choose not to answer any or all the questions of the survey. Coercion and/or undue influence were non-existent since the communication of the

study happened through a hospital administrator who occupied a low level administrative position. The survey did not include any identifiers, thus anonymity was ensured. Nurses were also instructed to fill the survey at home or in a private setting to avoid any breech of privacy. Filling in the survey and returning it implied that the nurses had consented to take part in the study. All the surveys were pooled after collecting all the boxes from the various hospitals to protect the anonymity of the participating hospitals. The information collected was kept in a secured location which was only accessible to the investigator.

E. Instrument

Data collection was done using a self-reporting questionnaire which included Brooks' QNWL survey in addition to demographic questions about age, gender, marital status, years of experience, highest nursing education, specialty certification, employment status, clinical practice area and monthly salary, and global statements about leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and nurses' perceived health status based on the literature review. Brook's QNWL was developed by Beth A. Brooks in 2001 to evaluate the quality of nursing work life. The survey consists of four subscales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World) and 42 items each scored on a six-point Likert scale with "1" indicating "strongly disagree" and "6" indicating "strongly agree". The 20th item is the only reverse coded item in the scale. The minimum total score is 42 and the maximum is 252, where the higher scores indicate better quality of nursing work life. The Cronbach Alpha coefficient of the scale is 0.83, and the Cronbach alpha coefficients for the four subscales range from 0.45 to 0.60. The total score correlation coefficient ranges from r = 0.24 to r = 0.68, and correlation coefficients for the four subscales range between r = 0.50 and 0.90. Factor analysis reveals structural validity. (Brooks & Anderson, 2005). Researchers and students

from USA, Canada, Australia, India, Iran, Turkey, Malaysia, Taiwan, Greece, Estonia and Saudi Arabia have been requesting the use of the scale (Almalki et al., 2012) which reflected global interest and recognition. Authorization to use the scale was obtained from the author Beth A. Brooks. The questions were translated from the English to the Arabic language; a nurse who is fluent in both English and Arabic, and who was blinded from the original study then back translated the items. The questionnaire was piloted among five nurses before administering it to all the study participants.

F. Pilot Study

A pilot study was conducted for content and face validity on a sample of five nurses who work in a hospital that was excluded from the study sample. This was needed to identify the tool's feasibility and suitability to Lebanese culture and understandability of the translated Arabic language. The pilot study participants were approached by the investigator who explained to them the aim of the pilot study, they were asked to complete the questionnaire and give their feedback regarding the clarity of the items, understandability of the tool wordings and suitability of the tool to the Lebanese culture. In addition, they were instructed to give feedback for making the statements clearer. The five nurses filled the questionnaire in less than 20 minutes. They stated that the purpose of the questionnaire was clear, and that the items of the tool were easy to understand; they did not suggest change of any item or item revision. All of them agreed that the questionnaire was comprehensive and suitable to the Lebanese culture.

G. Procedures and Data Collection

After obtaining the approval of the IRB, the 14 identified major hospitals in the five areas of Lebanon (Beirut; Mount Lebanon; North; South; Beqaa) were addressed through

their administrative bodies for approval of having their nurses participate in the study. One major governmental hospital was identified, while two private hospitals were selected based on the stratified random sampling method in each of the areas to reflect the difference in the number of governmental hospitals compared to that of private hospitals. The private hospitals to randomly select from were identified based on their size though, in order to match the size of the major public hospital already selected in each of the five areas. This is because the number of governmental hospitals is too small, and major governmental hospitals had been identified to ensure the biggest sample, and consequently its representativeness. The American University of Beirut Medical Center was excluded since data collection would have followed a different method which may affect the study results. Rafic Hariri University Hospital was the major governmental hospital that served the two areas, Beirut and Mount Lebanon, and the only governmental hospital which employed an adequate number of registered nurses, thus it was considered the representative governmental hospital for both areas. The other governmental hospitals were Saida Governmental Hospital, Tripoli Governmental Hospital and Baalbek Governmental Hospital in the South, North and Beqaa areas respectively. As for the private hospitals, they were as follows: Makassed General Hospital and LAU Medical Center – Rizk Hospital in Beirut, Sahel General Hospital and Mount Lebanon Hospital in Mount Lebanon, Hopital Albert Haykel and El-Youssef Medical Center in the North, Labib Medical Center and Dalla'a General Hospital in the South, and Khoury General Hospital and Hopital Libano Français in Beqaa. A letter which explained the purpose of the study, the benefits of such a study to enhance quality of nursing work life and the voluntary participation, confidentiality and anonymity of the participating nurses was sent to each hospital's administration via email or fax depending on whichever was available. The administrative body of Sahel General Hospital refused to have registered nurses participate in the study. After obtaining the approval of the administration of each of the 13 other hospitals,

hard copies of the questionnaires, preceded by the informed consents and filed in self-sealed envelopes were sent to the hospitals through postal services. The study was communicated to the nurses through the hospitals' internal communication system. Envelopes were then distributed to the units/departments through hospitals' junior administrators who occupy low level administrative positions. The nurses received the questionnaire along with the informed consent in a self-sealed envelope. They were asked to fill the questionnaire at home or in a private setting, without writing their names or any other identifiers, and to return it in its sealed envelope to a locked box with an opening thin enough to allow the sealed envelopes to be inserted inside the box, located in a locked office of a junior administrator or his/her secretary (not that of a chief executive or nursing administrator). In order to avoid linking the filled surveys with the participants through their signatures on the written informed consent form, and since the oral consent form explained the purpose of the study and assured anonymity, confidentiality and freedom of choice to fill the questionnaire, signatures were not required from participants; filling in and returning the questionnaires indicated consent. Two weeks after first distributing the questionnaires, a reminder was sent to the nurses through their hospitals' internal communication system. The boxes were brought back together to the School of Nursing through postal services in a month time, which was the time allocated for data collection. All the surveys were pooled after having collected all the boxes from the various hospitals in order to protect the anonymity of the participating hospitals. The questionnaires were handed over to thesis chair and database was created using Statistical Package for the Social Sciences (SPSS) 25.0.

H. Data Analysis

Only questionnaires with at least 50% of filled response items were analyzed.

Demographic data were reported using descriptive statistics. The categorical variables were

reported by frequency and percentage. Those included: age group, gender, marital status, number of dependents, monthly income, highest level of nursing education, years of nursing experience, clinical unit/service, number of assigned patients per shift, nursing shift, governmental versus private hospital; geographic work area and geographic living area. The number of working hours per week was reported using mean and standard deviation.

To answer the three research questions, Brook's QNWL total score was computed by summing all 42 items after reverse coding the 20th item. In addition, the scores of each of the sub-scales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World) were also computed. Means and standard deviations were used to report Brook's QNWL total score and the four sub-scales' scores. Furthermore, mean scores and standard deviations of the 42 items were derived and the three highest and three lowest items were identified. Means and standard deviations were also drawn for the question items related to leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and nurses' perceived health status. Independent samples t-test and one way ANOVA were used to compare the mean scores across the different groups in order to study the associations between quality of nursing work life socio-demographic and workrelated variables. The relationships between quality of nursing work life leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and nurses' perceived health status were analyzed using Pearson's r. All tests were twotailed and a p-value less than or equal to 0.05 was considered significant. Statistical analyses were performed using SPSS 25 for Windows.

This chapter discussed the methods and the procedures used to conduct the study on the quality of nursing work life among Lebanese nurses and to answer the research questions. The study used non-experimental descriptive research design. A cross sectional approach was used for data collection from a stratified random sample. After obtaining the approval from

the IRB in AUB and approvals from the different hospitals' administration bodies, the data was collected from 710 registered nurses who work in 13 different hospitals between April and June of the year 2019. Brook's QNWL survey was used to assess the quality of nursing work life. Research questions were analyzed using descriptive and inferential statistics.

Statistics were calculated using SPSS 25.0.

CHAPTER IV

RESULTS

The purpose of this study was to assess the quality of nursing work life among

Lebanese nurses working in hospital settings. Other aims were to explore the associations

between quality of nursing work life and sociodemographic and work-related factors on one
side, and leadership style, organizational culture, job engagement, job performance, job

satisfaction, nurses' intention to leave and perceived health status on the other side. In this
chapter, description of the sociodemographic characteristics of the sample was presented in
addition to the results of the descriptive and inferential statistics.

A. Description of Sample

The sample consisted of 710 Lebanese Registered Nurses who have been working in one of the 13 hospitals for at least one year, and who provide direct patient care. The participants filled the questionnaires between April and June of the year 2019. The demographic characteristics of the sample are presented in **Table 1**.

All participating registered nurses were born Lebanese (100%). The majority of the nurses were between 20 and 39 years of age (86.3%), and were females (74%). Most nurses were married (58.3%) of the nurses were married, and had two to three dependents (44.8%). Most of the monthly incomes ranged between 500\$ and 1250\$ (77.1%); only few nurses (5.1%) had a monthly income less than 500\$ and few others (6.7%) had a monthly income of more than 1500\$. Nearly half of the participants (47.6%) had a BSN degree and the minority (7.5%) had a Master degree in Nursing. Nurses' other credentials included midwifery, psychology and alternative therapies in addition to the specialty diplomas and certifications. Around half of the nurses had been in the nursing profession between six to 15 years (50.9%). Nurses were recruited from different units including medical surgical, intensive care,

pediatrics, obstetrics and gynecology, kidney dialysis, oncology, emergency, operating rooms, recovery, outpatient clinics, diagnostic areas and procedural areas, but more than half of the nurses (51.3%) were divided between medical surgical units and intensive care units. More than one third of nurses (36.2%) reported caring for more than nine patients per shift, while very few nurses (4.2%) reported caring for one to two patients per shift, knowing that almost quarter of these nurses (24.5%) worked in intensive care units. The mean number of working hours per week was around 43 hours (SD 8.57); self-reported working hours ranged between 16 and 84 hours per week. The minimum and maximum values reflected the fact that some nurses work part-time jobs and some others work different shifts in two different hospitals. Almost half of the nurses (49.5%) worked permanent day shifts (7am-3pm or 7am-7pm), less than one third (31.6%) worked rotating shifts (day, evening & night). More than half of the nurses (60.8%) worked in private hospitals. The geographic distribution of the work area of nurses was as follows: Beirut (8.6%); Mount Lebanon (22.5%); North (27.3%); South (20.9%); Begaa (20.7%). The majority of the nurses worked in the same area where they lived; thus the similar percentage of the geographic distribution of the nurses' living area.

Table 1. Characteristics of Study Sample

Variable	Frequency (Percentage)	
Age		
Less than 20 years	3 (0.4)	
20-29 years	304 (42.9)	
30-39 years	307 (43.4)	
40-49 years	78 (11.0)	
50 years and above	16 (2.3)	
Gender		
Female	483 (74.0)	
Male	170 (26.0)	
Marital Status		
Single	263 (37.8)	
Married	406 (58.3)	

Divorced	23 (3.3)	
Widowed	4 (0.6)	
Number of Dependents		
None	171 (24.5)	
1	99 (14.2)	
2-3	313 (44.8)	
4-6	96 (13.7)	
More than 6	20 (2.9)	
Monthly Income		
Less than \$500	36 (5.1)	
\$500-\$750	172 (24.4)	
\$751-\$1000	211 (29.9)	
\$1001-\$1250	161 (22.8)	
\$1251-\$1500	79 (11.2)	
More than \$1500	47 (6.7)	
Highest Level of Nursing Education		
BT	40 (5.7)	
TS	99 (14.2)	
LT	172 (24.7)	
BSN	331 (47.6)	
MSN	52 (7.5)	
Other	2 (0.3)	
Years of Nursing Experience		
Less than 2 years	94 (13.5)	
3-5 years	144 (20.6)	
6-10 years	161 (23.1)	
11-15 years	194 (27.8)	
16-20 years	52 (7.4)	
More than 20 years	53 (7.6)	
Unit or Service of Work		
Medical surgical	186 (26.8)	
ICU	170 (24.5)	
Pediatrics	66 (9.5)	
OB/GYN	52 (7.5)	
Dialysis	34 (4.9)	
OR	55 (7.9)	
Outpatient clinics	4 (0.6)	
Emergency	52 (7.5)	
Post anesthesia/recovery	19 (2.7)	
Oncology	47 (6.8)	

Other	10 (1.4)
Number of Patients Assigned per Shift	
1-2	29 (4.2)
3-4	122 (17.8)
5-7	129 (18.8)
7-9	158 (23.0)
More than 9	249 (36.2)
Number of Working Hours per Week	
Mean (Standard Deviation)	42.75 (8.57)
Shifts	
7am - 3pm	135 (19.2)
7am - 7pm	213 (30.3)
3pm - 11pm	12 (1.7)
11pm - 7am	4 (0.6)
7pm - 7am	117 (16.6)
Rotating	222 (31.6)
Geographic Work Area	
Beirut	61 (8.6)
Mount Lebanon	159 (22.5)
North Lebanon	193 (27.3)
South Lebanon	148 (20.9)
Beqaa	146 (20.7)
Geographic Living Area	
Beirut	106 (15.0)
Mount Lebanon	116 (16.4)
North Lebanon	187 (26.5)
South Lebanon	148 (21.0)
Beqaa	149 (21.1)
Governmental vs Private Hospital	
Private	429 (60.8)
Public	277 (39.2)

B. Findings

1. Research Question 1

The first research question aimed at assessing the quality of nursing work life among Lebanese Nurses working in hospital settings. The question was answered through Brook's Quality of Nursing Work Life (QNWL) survey. The mean total score of Brook's QNWL

survey, and the mean scores of the four sub-scales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World) as reported by the study are presented in **Table 2**. In addition, the mean score of each of the 42 items is shown in **Table 3**. It is important to highlight that the lowest mean scores which are energy left after work, adequate salary and image of nurses, and the highest mean scores which are designated break area, ability to provide quality patient care and availability of nursing degree-granting programs.

Table 2. Mean Score of Brook's QNWL Survey and its four Sub-scales

Scale	Mean (Standard	Cronbach's Alpha
	Deviation)	Coefficient
Brook's QNWL Survey	168.27 (26.71)	0.903
Home/Work Life Sub-scale	26.46 (5.03)	0.443
Work Organization/Design Sub-scale	39.28 (6.78)	0.612
Work Conditions/Contention Sub-scale	84.88 (15.68)	0.888
Work World Sub-scale	17.64 (4.27)	0.463

The mean Brook's QNWL score was 168.27 (SD 26.46); the total score ranged between 52 and 241. The calculated mean score shows moderate quality of nursing work life based on the interpretation criteria that was recommended by the author of the tool. For Home/Work Life sub-scale which consists of items five, 10, 12, 20, 25, 27 and 36 of the survey, and which defines the interface between the nurses' work and home life, the mean score was 26.46 (SD 5.03) reflecting a moderate score. The score ranged between 9 and 40. Similarly, the moderate mean score for Work Organization/Design sub-scale was 39.28 (SD 6.78); the score ranged between 12 and 57. The Work Organization/Design sub-scale consists of the items one, two, three, six, 11, 16, 17, 18, 23 and 42 as it is the composition of nursing work and describes the actual work nurses perform. As for the Work Conditions/Contention sub-scale which consists of 20 out of the 42 items of Brook's QNWL Survey (items seven, eight, nine, 13, 14, 15, 19, 21, 22, 26, 28, 29, 30, 31, 32, 33, 34, 35, 38 and 40), the mean score was 84.88 (SD 15.68), with the score ranging between 28 and 120. The calculated mean

score is high as per Brook's QNWL scores' interpretation criteria, which reflects a highly positive impact of the work environment on both the nurse and the patient systems, as these aspects are explored within this sub-scale. Lastly, the mean score of the Work World sub-scale was 17.64 (SD 4.27); the score ranged between 1 and 30. The sub-scale consists of items four, 24, 37, 39 and 41, and it reflects the effects of broad societal influences and change on the practice of nursing. The calculated mean score is again a moderate score.

Table 3. Mean Score of each of Brook's QNWL Survey Items

	Item	Mean (Standard Deviation)
1	I receive a sufficient amount of assistance from unlicensed	4.06 (1.25)
	support personnel (the dietary aides, housekeeping, patient	
	care technicians, and nursing Assistants).	
2	I am satisfied with my job.	3.98 (1.31)
3	My workload is too heavy.	4.32 (1.47)
4	In general, society has an accurate image of nurses.	3.15 (1.54)
5	I am able to balance work with my family needs.	3.82 (1.25)
6	I have the autonomy to make patient care decisions.	3.9 (1.37)
7	I am able to communicate well with my nurse	4.66 (1.31)
	manager/supervisor.	
8	I have adequate patient care supplies and equipment.	4.28 (1.35)
9	My nurse manager/supervisor provides adequate supervision.	4.46 (1.27)
10	It is important for a hospital to offer employees on-site	4.73 (1.33)
	childcare services.	
11	I perform many non-nursing tasks.	3.97 (1.55)
12	I have energy left after work.	2.81 (1.58)
13	Friendships with my co-workers are important to me.	4.73 (1.26)
14	My work setting provides career advancement opportunities.	3.98 (1.43)
15	There is teamwork in my work setting.	4.37 (1.28)
16	I experience many interruptions in my daily work routine.	4.08 (1.41)
17	I have enough time to do my job well.	3.69 (1.38)
18	There are enough RNs in my work setting.	3.21 (1.57)
19	I feel a sense of belonging in my workplace.	4.43 (1.34)
20	Rotating schedules negatively affect my life.	3.73 (1.52)
21	I am able to communicate with the other therapists (physical,	4.35 (1.30)
	respiratory, etc.).	, ,
22	I receive feedback on my performance from my nurse	4.20 (1.29)
	manager/supervisor.	
23	I am able to provide good quality patient care.	4.98 (1.02)
24	My salary is adequate for my job given the current job market	2.91 (1.55)
	conditions.	
25	My organization's policy for family-leave time is adequate.	3.56 (1.44)

26	I am able to participate in decisions made by my nurse	3.74 (1.45)
	manager/supervisor.	
27	It is important for a hospital to offer employees on-site day	4.40 (1.32)
	care for elderly parents	
28	I feel respected by physicians in my work setting.	4.45 (1.24)
29	It is important to have a designated, private break area for the nursing staff.	5.21 (1.12)
30	It is important to me to have nursing degree-granting programs available at my hospital.	4.96 (1.23)
31	I receive support to attend in services and continuing education programs.	4.27 (1.41)
32	I communicate well with the physicians in my work setting.	4.68 (1.15)
33	I am recognized for my accomplishments by my nurse	4.08 (1.38)
	manager/supervisor	
34	Nursing policies and procedures facilitate my work.	4.10 (1.26)
35	The security department provides a secure environment.	3.46 (1.57)
36	It is important for a hospital to offer employees on-site ill child care services.	4.59 (1.23)
37	I would be able to find my same job in another organization	4.12 (1.48)
31	with about the same salary and benefits.	4.12 (1.40)
38	I feel safe from personal harm (physical, emotional, or verbal) at work.	3.66 (1.50)
39	I believe my job is secure.	3.62 (1.48)
40	Upper-level management has respect for nursing.	4.08 (1.43)
41	My work impacts the lives of patients/families.	4.29 (1.35)
42	I receive quality assistance from unlicensed support personnel	4.03 (1.23)
	(the dietary aides, housekeeping, patient care technicians, and	, ,
	nursing assistants).	

2. Research Question 2

The second research question aimed at exploring the association between the quality of nursing work life and the sociodemographic and work-related variables. All the sociodemographic and work-related variables for the registered nurses were analyzed for their relationship with the total score on Brook's QNWL, as well as the scores on the subscales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World). Relationships between quality of nursing work life and gender, number of dependents, work unit/service, number of assigned patients per shift, private versus governmental hospital and geographic living area were identified. As for age, marital status, income, nursing educational credential, years of experience, number of working hours per

week, nursing shift and geographic work area, these variables were not associated with quality of nursing work life.

There was no significant correlation between nurses' age and Brook's QNWL total score (p = 0.894 and F = 0.11) and sub-scales' scores (p = 0.390 and F = 0.94 for Home/Work Life sub-scale; p = 0.275 and F = 1.29 for Work Organization/Design sub-scale; p = 0.226 and F = 1.49 for Work Conditions/Contention sub-scale; p = 0.583 and F = 0.54 for Work World sub-scale). Younger nurses tended to have higher Brook's QNWL total score compared to older nurses. The results of one way ANOVA are presented in **Table 4**.

Table 4. Association between Quality of Nursing Work Life and Age

	Age			F	
Variable	Up to 29 Mean (SD)	30-39 Mean (SD)	40 and above Mean (SD)	(2,704)	p-value
Brook's QNWL Score	168.80 (26.25)	167.95 (27.04)	167.59 (27.35)	.11	.894
Home/Work Life Sub-scale Score	26.26 (4.99)	26.75 (4.88)	26.13 (5.64)	.94	.390
Work Organization/Design Sub-scale Score	38.95 (6.61)	39.31 (6.97)	40.23 (6.71)	1.29	.275
Work Conditions/Contention Subscale Score	86.04 (15.27)	84.05 (15.91)	83.82 (16.14)	1.49	.226
Work World Sub-scale Score	17.53 (4.31)	17.82 (4.05)	17.37 (4.83)	.54	.583

Brook's QNWL total score was significantly associated with gender, t (650) = 2.82, p = 0.005. Not only did female nurses score higher than male nurses on Brook's QNWL, but also on the different sub-scales of Home/Work Life, t (650) = 2.47, p = 0.014; Work Organization/Design, t (650) = 2.79, p = 0.005; and Work Conditions/Contention, t (650) = 2.40, p = 0.017. As for the Work World sub-scale, there was no significant difference between female nurses and male nurses, t (650) = 1.44, p = 0.150. The results of the independent samples t-test are presented in **Table 5**.

Table 5. Association between Quality of Nursing Work Life and Gender

	Ger			
Variable	Female	Male	T (650)	p-value
	Mean (SD)	Mean (SD)		
Dragh's ONWI Sagra	170.37	163.70	2.82	005
Brook's QNWL Score	(25.78)	(28.08)	2.82	.005
Home/Work Life Sub-scale Score	26.79	25.68	2.47	.014
Hollie/ Work Life Sub-scale Score	(5.06)	(4.93)	2.47	
Work Organization/Design Sub-scale	39.77	38.10	2.79	.005
Score	(6.41)	(7.35)	2.19	.003
Work Conditions/Contention Sub-	86.06	82.71	2.40	.017
scale Score	(15.26)	(16.49)	2.40	.017
Work World Sub-scale Score	17.74	17.20	1.44	150
WOIK WOITH SHO-Scale Scole	(4.24)	(4.30)	1.44	.150

The association between the marital status of nurses and the quality of nursing work life was not significant for Brook's QNWL total score, nor for the scores of sub-scales except that of Work World dimension, p=0.014 and r=4.30. The results of one way ANOVA are presented in **Table 6**. For Work World sub-scale, a Tukey post hoc test revealed that married nurses had significantly higher scores (17.99 \pm 4.22), p=0.010 compared to single nurses (17.02 \pm 4.22). There was no statistically significant difference between the single nurses and the divorced and widowed nurses p=0.541, nor between the married nurses and the divorced and widowed nurses p=0.996. Divorced and widowed nurses scored the highest and single nurses scored the lowest on Brook's QNWL total score. As for the scores of the sub-scales, married nurses scored the highest on Home/Work Life and Work World sub-scales, while divorced and widowed nurses scored the highest on Work Organization/Design and Work Conditions/Contention sub-scales.

Table 6. Association between Quality of Nursing Work Life and Marital Status

	Marital Status				
Variable	Single Mean (SD)	Married Mean (SD)	Divorced/Widow ed Mean (SD)	F (2,692)	p-value

Brook's QNWL Score	166.38 (26.61)	169.47 (27.19)	171.48 (22.33)	1.28	.278
Home/Work Life Subscale Score	26.15 (4.81)	26.79 (5.13)	25.29 (4.72)	2.09	.124
Work Organization/Design Sub-scale Score	38.80 (6.66)	39.54 (6.77)	40.22 (6.60)	1.23	.292
Work Conditions/Contention Sub-scale Score	84.40 (15.08)	85.14 (16.07)	88.03 (12.11)	.72	.485
Work World Sub-scale Score	17.02 (4.22)	17.99 (4.22)	17.62 (4.35)	4.30	.014

For a better understanding of the relationship between the number of dependents and the quality of nursing work life, nurses were divided into three groups; nurses with no dependents, nurses with one to three dependents and nurses with four dependents and above. Nurses with no dependents scored the highest, while nurses with four dependents and above scored the lowest on Brook's QNWL as well as the different sub-scales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World). A significant difference was observed between the three groups on Brook's QNWL total score, p=0.042 and F=3.19 and Work Conditions/Contention sub-scale score, p=0.022 and F=3.85. The results of one way ANOVA are presented in **Table 7**. In fact, nurses with no dependents had a significantly higher Brook's QNWL total score, p=0.032 (171.23 \pm 24.63), and Work Conditions/Contention sub-scale score, p=0.016 (86.86 \pm 14.57) when compared to nurses with four dependents and above (163.15 \pm 25.76) and (81.64 \pm 15.52) respectively. The three groups did not show significant differences in their scores on the other three sub-scales of Home/Work Life, p=0.110 and F=2.21, Work Organization/Design, p=0.397 and F=0.92 and Work World, p=0.596 and F=0.51.

Table 7. Association between Quality of Nursing Work Life and Number of Dependents

		Number of Depende	nts	E	
Variable	None	1-3	4 and above	(2,695)	p-value
	Mean	Mean	Mean	(2,093)	
	(SD)	(SD)	(SD)		

Brook's QNWL Score	171.23 (24.63)	168.42 (27.73)	163.15 (25.76)	3.19	.042
Home/Work Life Sub-scale Score	26.96 (4.74)	26.43 (5.15)	25.68 (5.06)	2.21	.110
Work Organization/Desi gn Sub-scale Score	39.61 (6.40)	39.35 (6.85)	38.53 (7.17)	.92	.397
Work Conditions/Conte ntion Sub-scale Score	86.86 (14.57)	84.96 (16.11)	81.64 (15.52)	3.85	.022
Work World Sub- scale Score	17.78 (4.28)	17.67 (4.35)	17.28 (4.02)	.51	.596

No significant association was identified between the nurses' monthly income and their Brook's QNWL total score, p=0.299 and r=1.21. Similarly, no significant relationships existed between the nurses' monthly income and their scores on the different sub-scales; p=0.119 and r=1.76 for Home/Work Life, p=0.348 and r=1.12 for Work Organization/Design, p=0.162 and r=1.58 for Work Conditions/Contention and p=0.064 and r=2.09 for Work World. The results of one way ANOVA are presented in **Table 8**. Nurses with a monthly income of less than 500\$ scored the lowest on Brook's QNWL as well as the four sub-scales. In general, Brook's QNWL total score and the four sub-scales' scores increased as the nurses' monthly income increased.

Table 8. Association between Quality of Nursing Work Life and Monthly Income

			Monthly	Income				
Variable	Less than 500\$ Mean (SD)	\$501- \$750 Mean (SD)	\$751- \$1000 Mean (SD)	\$1001- \$1250 Mean (SD)	\$1251- \$1500 Mean (SD)	More than \$1500 Mean (SD)	F (5,699)	p- value
Brook's QNWL Score	162.88 (33.26)	170.77 (26.95)	165.72 (26.98)	168.35 (26.15)	169.94 (25.87)	171.95 (21.91)	1.21	.299
Home/Work Life Sub-scale Score	25.41 (5.82)	26.63 (5.29)	25.94 (4.63)	26.47 (4.82)	27.18 (5.39)	27.76 (5.16)	1.76	.119
Work Organization/Desi gn Sub-scale Score	38.83 (7.95)	39.01 (7.21)	38.69 (6.85)	39.68 (6.71)	40.21 (5.96)	40.51 (5.35)	1.12	.348

Work Conditions/Conte ntion Sub-scale Score	82.77 (19.03)	87.61 (15.58)	83.65 (15.78)	83.96 (15.14)	84.58 (15.61)	85.80 (14.38)	1.585	.162
Work World Sub- scale Score	15.86 (5.82)	17.51 (4.29)	17.43 (4.15)	18.22 (4.24)	17.96 (4.03)	17.87 (3.72)	2.096	.064

The relationship between the nurses' highest nursing educational credential and the quality of nursing work life was not significant. The results of one way ANOVA are presented in **Table 9**. No major difference between nurses with Baccalaureate Technique (BT) in Nursing, Technique Superior (TS) in Nursing, License Technique (LT) in Nursing, Bachelor of Sciences (BS) in Nursing and Masters of Science (MS) in Nursing was noted for Brook's QNWL total score, p = 0.265 and F = 1.29. Likewise, there were also no significant relationships between the nurses' highest educational credential and their scores on the different sub-scales; p = 0.054 and F = 2.18 for Home/Work Life, p = 0.283 and F = 1.25 for Work Organization/Design, p = 0.601 and F = 0.73 for Work Conditions/Contention and p = 0.166 and F = 1.57 for Work World. Nurses with MS in Nursing scored the highest on Brook's QNWL and the four sub-scales. Nurses with LT in Nursing scored the lowest on Brook's QNWL and Work Organization/Design and Work Conditions/Contention sub-scales, nurses with BS in Nursing scored the lowest on Home/Work Life sub-scale, and nurses with BT in Nursing scored the lowest on Work World sub-scale.

Table 9. Association between Quality of Nursing Work Life and Highest Level of Nursing Education

		Highest Level of Nursing Education							
Variable	BT	TS	LT	BSN	MSN	Other	F (5,689)	p- value	
	Mean	Mean	Mean	Mean	Mean	Mean	(3,00)	value	
	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)			
Brook's	168.67	170.78	166.19	167.54	174.76	189.50	1.29	.265	
QNWL Score	(29.52)	(32.05)	(23.70)	(26.55)	(24.49)	(26.81)	1.29	.203	
Home/Work Life Sub-scale Score	26.47 (4.97)	26.67 (6.27)	26.29 (4.87)	26.17 (4.72)	28.46 (4.67)	30.50 (4.94)	2.18	.054	

Work Organization/ Design Sub- scale Score	38.90 (8.21)	39.66 (8.21)	38.62 (6.21)	39.25 (6.58)	40.86 (6.14)	45.00 (7.07)	1.25	.283
Work Conditions/Co ntention Sub- scale Score	86.62 (16.68)	86.38 (18.17)	83.84 (14.75)	84.46 (15.50)	87.00 (14.65)	91.50 (14.84)	.73	.601
Work World Sub-scale Score	16.67 (4.90)	18.06 (5.02)	17.43 (3.78)	17.64 (4,24)	18.44 (3.67)	22.50 (3.53)	1.57	.166

The number of years of nursing experience was not significantly associated with Brook's QNWL total score, p = 0.471 and F = 0.91, nor with the scores of the different subscales; p = 0.283 and F = 1.25 for Home/Work Life, p = 0.185 and F = 1.50 for Work Organization/Design, p = 0.175 and F = 1.54 for Work Conditions/Contention and p = 0.415 and F = 1.00 for Work World. The results of one way ANOVA are presented in **Table 10**. In general, nurses with up to five years of nursing experience and nurses with above 20 years of nursing experience scored higher than nurses with years of nursing experience ranging between six and 20 on Brook's QNWL and the four sub-scales.

Table 10. Association between Quality of Nursing Work Life and Years of Nursing Experience

			Years of E	Experience				
Variable	< 2	2-5	6-10	11-15	16-20	>20	F	p-
variable	years	years	years	years	years	years	(5,691)	value
	Mean	Mean	Mean	Mean	Mean	Mean		
	(SD)	(SD)	(SD)	(SD)	(SD)	(SD)		
Brook's	167.81	171.12	167.22	166.46	166.65	172.88	.91	.471
QNWL Score	(26.46)	(24.99)	(25.61)	(28.09)	(26.54)	(29.79)	.91	.4/1
Home/Work	26.36	26.58	25.96	26.95	25.34	26.73		
Life Sub-scale	(4.86)	(4.82)	(5.12)	(4.9)	(5.53)	(5.43)	1.25	.283
Score	(4.60)	(4.62)	(3.12)	(4.9)	(3.33)	(3.43)		
Work								
Organization/	38.71	39.96	39.00	38.73	40.01	40.98	1.50	.185
Design Sub-	(5.89)	(6.31)	(6.93)	(7.29)	(6.76)	(7.27)	1.50	.163
scale Score								
Work	85.20	87.34	84.08	83.15	84.26	87.30	1.54	.175
Conditions/Co	(15.64)	(14.63)	(14.64)	(16.45)	(16.60)	(17.32)	1.34	.173

ntention Sub- scale Score								
Work World Sub-scale Score	17.54 (4.58)	17.23 (4.24)	18.16 (3.84)	17.61 (4.21)	17.01 (4.08)	17.86 (5.36)	1.00	.415

Brook's QNWL total score was significantly different between nurses working in open units (171.28 ± 26.71) and those working in closed units (164.41 ± 26.13) , t (692) = 3.38, p = 0.001. Nurses working in open units also scored significantly higher than nurses working in closed units on Work Organization/Design sub-scale, t (692) = 3.05, p = 0.002, Work Conditions/Contention sub-scale, t (692) = 3.14, p = 0.002 and Work World sub-scale t (692) = 2.48, p = 0.013. However, there was no significant difference in score between nurses working in open versus closed units on Home/Work Life sub-scale, t (692) = 1.85, p = 0.065. The results of the independent samples t-test are presented in **Table 11**.

Table 11. Association between Quality of Nursing and Unit or Service of Work

¥71.1-	Unit/Servi	ce of Work	T ((02)		
Variable	Open Unit Mean (SD)	Closed Unit Mean (SD)	T (692)	p-value	
Brook's QNWL Score	171.28 (26.71)	164.41 (26.13)	3.38	.001	
Home/Work Life Sub-scale Score	26.73 (5.13)	26.02 (4.81)	1.85	.065	
Work Organization/Design Sub-scale Score	40.00 (6.93)	38.42 (6.49)	3.05	.002	
Work Conditions/Contention Subscale Score	86.56 (15.46)	82.80 (15.69)	3.14	.002	
Work World Sub-scale Score	17.98 (4.31)	17.16 (4.21)	2.48	.013	

The relationship between the number of assigned patients per shift to a nurse and the nurse's score on Brook's QNWL was significant yet weak, p=0.050 and F=2.30. The associations between the number of assigned patients per shift to a nurse and the nurse's scores on the different sub-scales was only significant for Work Conditions/Contention, p=0.046 and F=2.43 but not for Home/Work Life, p=0.458 and F=0.91, Work

Organization/Design, p=0.339 and F=1.12 and Work World, p=0.105 and F=1.92. The results of one way ANOVA are presented in **Table 12**. A Tukey post hoc test showed that nurses with one to two assigned patients per shift had significantly higher Brook's QNWL total score (179.00 \pm 27.20), p=0.047 compared to nurses with three to four assigned patients per shift (163.83 \pm 24.09). Similarly, nurses with one to two assigned patients per shift had significantly higher Work Conditions/Contention sub-scale score (91.20 \pm 14.40), p=0.050 compared to nurses with three to four assigned patients per shift (82.43 \pm 14.27). Actually, nurses with one to two assigned patients per shift scored the highest, while nurses with three to four assigned patients per shift scored the lowest on Brook's QNWL as well as all the sub-scales.

Table 12. Association between Quality of Nursing Work Life and Number of Assigned Patients per Shift

	N	lumber of A	ssigned Pati	ents per Shi	ift	Б	
Variable	1-2	3-4	5-7	7-9	>9	F	p-value
	Mean	Mean	Mean	Mean	Mean	(4,681)	
	(SD)	(SD)	(SD)	(SD)	(SD)		
Brook's QNWL	179.00	163.83	168.99	170.20	167.50	2.30	.050
Score	(27.20)	(24.09)	(27.67)	(26.69)	(27.02)	2.30	.030
Home/Work	27.65	25.89	26.60	26.20	26.52		
Life Sub-scale						.91	.458
Score	(5.15)	(4.89)	(5.06)	(4.96)	(5.09)		
Work							
Organization/De	41.31	38.47	39.27	39.55	39.40	1.12	.339
sign Sub-scale	(7.18)	(6.24)	(6.12)	(7.31)	(7.05)	1.12	.339
Score							
Work							
Conditions/Cont	91.20	82.43	85.22	86.38	84.21	2.43	.046
ention Sub-scale	(14.40)	(14.27)	(16.38)	(15.53)	(15.94)	2.43	.040
Score							
Work World	18.82	17.02	17.88	18.05	17.35	1.92	.105
Sub-scale Score	(4.59)	(4.39)	(4.38)	(3.67)	(4.50)	1.92	.103

No significant correlation was identified between the number of working hours per week and the quality of nursing work life. The results of Pearson's Correlation are presented

in **Table 13**. As the number of working hours increased, the nurses' scores on Home/Work Life sub-scale (r = -0.059 and p = 0.201) and Work World sub-scale (r = -0.016 and p = 0.722) decreased. On the other hand, as the number of working hours increased, the nurses' score on Work Organization/Design sub-scale (r = 0.056 and p = 0.222) increased too, and their score on Work Conditions/Contention sub-scale significantly increased (r = 0.097 and p = 0.036). Also, as the number of working hours increased, the nurses' total score on Brook's QNWL increased, r = 0.059 and p = 0.199.

Table 13. Association between Quality of Nursing Work Life and Number of Working Hours per Week

Variable	Number of
	Working Hours per
	Week
Brook's QNWL Score	.059
Home/Work Life Sub-scale Score	-0.059
Work Organization/Design Sub-scale Score	.056
Work Conditions/Contention Sub-scale Score	.097 *
Work World Sub-scale Score	-0.016

The association between the nursing shift and the quality of nursing work life was only significant for Home/Work Life dimension, p=0.047 and F=2.42 and Work Organization/Design dimension, p=0.011 and F=3.30. No significant association existed between the nursing shift and the scores on the other two sub-scales; p=0.323 and F=1.14 for Work Conditions/Contention, and p=0.812 and F=0.39 for Work World, nor between the nursing shift and Brook's QNWL total score; p=0.117 and F=1.85. The results of one way ANOVA are presented in **Table 14**. As nurses were divided into five groups depending on the shift that they work; 7am-7pm, 7am-3pm, 3pm-11pm, 7pm-7am or 11pm-7am and rotating shifts (Day – Evening – Night), the post hoc test showed that for Home/Work Life dimension, the difference in the score was found to be significant between nurses who work 7am-3pm shift (27.37 ± 4.85) and nurses who work rotating shifts (25.82 ± 4.99), p=1.485

0.041. Likewise, nurses who work 7am - 3pm shift had a significantly higher Work Organization/Design sub-scale score (41.10 \pm 6.17) compared to nurses who work rotating shifts (38.58 \pm 6.45), p = 0.006, and compared to nurses who work 7am - 7pm shift (39.04 \pm 6.73), p = 0.044. In general, nurses who work rotating shifts scored the lowest on Brook's QNWL and the different sub-scales except the Work Conditions/Contention sub-scale on which nurses who work 3pm - 11pm shift had the lowest score. On the other hand, nurses who work 7am - 3pm shift scored the highest on Brook's QNWL and Work Organization/Design and Work Conditions/Contention sub-scales, nurses who work 3pm - 11pm shift scored the highest on Home/Work Life sub-scale and nurses who work 7pm - 7am or 11pm - 7am shifts scored the highest on Work World sub-scale.

Table 14. Association between Quality of Nursing Work Life and Nursing Shift

			Nursing Shif	ť			
Variable	7am- 3pm Mean (SD)	7am- 7pm Mean (SD)	3pm-11pm Mean (SD)	7pm-7am and 11pm-7am Mean (SD)	Rotating Mean (SD)	F (4,698)	p-value
Brook's QNWL Score	173.54 (25.67)	168.19 (26.95)	168.75 (21.95)	168.10 (29.07)	165.66 (25.64)	1.85	.117
Home/Work Life Sub-scale Score	27.37 (4.85)	26.35 (5.14)	28.25 (3.10)	26.63 (5.23)	25.82 (4.99)	2.42	.047
Work Organization/ Design Sub- scale Score	41.10 (6.17)	39.04 (6.73)	40.66 (6.67)	39.00 (7.73)	38.58 (6.77)	3.30	.011
Work Conditions/Co ntention Sub- scale Score	87.23 (15.62)	85.19 (16.01)	82.00 (13.71)	84.49 (16.37)	83.82 (15.05)	1.14	.332
Work World Sub-scale Score	17.82 (4.29)	17.60 (4.46)	17.83 (2.75)	17.96 (4.18)	17.42 (4.15)	.39	.812

The relationship between nurses' geographic work area and the quality of nursing work life was examined, and no significant difference was identified for Brook's QNWL total

score among nurses who work in Beirut, Mount Lebanon, North Lebanon, South Lebanon or Beqaa, p=0.114 and F=1.87. Likewise, there were also no significant correlations between the nurses' geographic work area and the sub-scales' scores for Home/Work Life, p=0.482 and F=0.86, Work Organization/Design, p=0.782 and r=0.43 and Work World, p=0.104 and F=1.92. As for Work Conditions/Contention dimension, a significant correlation was observed between the nurses' geographic work area and their score on this sub-scale, p=0.006 and F=3.67. The significant difference in score was noted between nurses who work in Beirut, p=0.003 (79.45 \pm 14.87) and those who work in North Lebanon (87.78 \pm 16.56). Mostly, nurses who work in Beirut and Beqaa scored the lowest, while nurses who work in North Lebanon and Mount Lebanon scored the highest on Brook's QNWL as well as the four sub-scales. The results of one way ANOVA are presented in **Table 15**.

Table 15. Association between Quality of Nursing Work Life and Geographic Work Area

			Work Area				
Variable	Beirut Mean (SD)	Mount Lebanon Mean (SD)	North Lebanon Mean (SD)	South Lebanon Mean (SD)	Bekaa Mean (SD)	F (4,702)	p-value
Brook's QNWL Score	161.91 (25.09)	168.24 (26.11)	171.66 (27.55)	168.52 (27.29)	166.21 (25.94)	1.87	.114
Home/Wo rk Life Sub-scale Score	26.01 (4.52)	26.47 (4.95)	26.79 (5.54)	26.73 (5.04)	25.91 (4.61)	.86	.482
Work Organizati on/Design Sub-scale Score	39.54 (6.67)	39.53 (6.45)	39.56 (6.81)	39.08 (7.32)	38.72 (6.63)	.43	.782
Work Conditions /Contentio n Sub- scale Score	79.45 (14.87)	84.05 (15.24)	87.78 (16.56)	84.69 (14.95)	84.43 (15.45)	3.67	.006
Work World	16.90 (4.33)	18.18 (4.23)	17.52 (4.34)	18.01 (4.54)	17.14 (3.85)	1.92	.104

Sub-scale				
Score				

Comparably, the relationship between nurses' geographic living area and the quality of nursing work life was found to be significant for Brook's QNWL total score, p=0.015 and F=3.09, as well as Work Conditions/Contention sub-scale score, p=0.000 and F=5.18. The results of one way ANOVA are presented in **Table 16**. Nurses who live in Beirut scored significantly lower (162.21 \pm 24.52) than nurses who live in Mount Lebanon (172.55 \pm 24.53), p=0.032 and nurses who live in North Lebanon (171.49 \pm 27.98), p=0.034 on Brook's QNWL. Similarly, nurses who live in Beirut scored significantly lower (79.74 \pm 13.94) than nurses who live in Mount Lebanon (86.89 \pm 14.18), p=0.006 and nurses who live in North Lebanon (87.74 \pm 16.88), 0.000 on Work Conditions/Contention sub-scale. Yet again, no significant correlations were identified between the nurses' geographic living area and the sub-scores on Home/Work Life sub-scale, p=0.351 and F=1.10, Work Organization/Design sub-scale, p=0.146 and p=1.71 and Work World sub-scale, p=0.351 and p=1.10. Once more, the highest scores on Brook's QNWL and the four sub-scales were reported for nurses who live in Mount Lebanon and North Lebanon, while the lowest scores were reported for nurses who live in Beirut and Bequa.

Table 16. Association between Quality of Nursing Work Life and Geographic Living Area

Variable							
	Beirut Mean (SD)	Mount Lebanon Mean (SD)	North Lebanon Mean (SD)	South Lebanon Mean (SD)	Bekaa Mean (SD)	F (4,701)	p-value
Brook's QNWL Score	162.21 (24.52)	172.55 (24.53)	171.49 (27.98)	167.14 (28.12)	166.28 (26.07)	3.09	.015
Home/Wor k Life Sub- scale Score	26.39 (4.43)	27.03 (5.12)	26.74 (5.60)	26.32 (5.04)	25.84 (4.60)	1.10	.351
Work Organizatio	38.47 (6.45)	40.56 (6.40)	39.49 (6.79)	39.02 (7.41)	38.80 (6.59)	1.71	.146

n/Design Sub-scale Score							
Work Conditions/ Contention Sub-scale Score	79.74 (13.94)	86.89 (14.18)	87.74 (16.88)	83.79 (15.64)	84.49 (15.64)	5.18	.000
Work World Sub- scale Score	17.60 (4.38)	18.05 (4.56)	17.50 (4.35)	18.00 (4.24)	17.13 (3.88)	1.10	.351

Quality of nursing work life was significantly different between nurses working in private hospitals and nurses working in governmental hospitals. The results of the independent samples t-test are presented in **Table 17**. Private hospitals' nurses scored significantly higher than governmental hospitals' nurses on Brook's QNWL; (172.87 \pm 25.59 versus 161.06 ± 26.87), t (704) = 5.86, p = 0.000, Work Organization/Design sub-scale, t (704) = 4.99, p = 0.000, Work Conditions/Contention sub-scale, t (704) = 7.22, p = 0.000 and Work World sub-scale, t (704) = 2.07, p = 0.038. The difference in the score on Home/Work Life sub-scale, between nurses who work in private hospitals and nurses who work in governmental hospitals, was not significant, t (704) = 0.29, p = 0.772.

Table 17. Association between Quality of Nursing and Governmental versus Private Hospital

	Government hos	T (50.1)	p-value	
Variable	Private Public Mean (SD) Mean (SD)			
Brook's QNWL Score	172.87 (25.59)	161.06 (26.87)	5.86	.000
Home/Work Life Sub-scale Score	26.49 (5.16)	26.38 (4.83)	.29	.772
Work Organization/Design Sub-scale Score	40.28 (6.47)	37.71 (6.98)	4.99	.000
Work Conditions/Contention Subscale Score	88.17 (14.91)	79.74 (15.50)	7.22	.000
Work World Sub-scale Score	17.91 (4.28)	17.22 (4.25)	2.07	.038

3. Research Question 3

The third research question aimed at evaluating the relationships between quality of nursing work life and leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and perceived health status. The mean scores of global statements on leadership style, organizational culture, job engagement, job performance, job satisfaction, intention to leave and perceived health status, as reported by nurses, are presented in **Table 18**. Brook's QNWL total score and the different sub-scales' scores (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World) were significantly correlated with the nurses' rating scores of leadership style, organizational culture, job engagement, job performance, job satisfaction and perceived health status. The correlation between the quality of nursing work life and the nurses' intention to leave was not significant. The results of Pearson's Correlations are presented in

Table 18. Mean Reported Scores on Leadership Style, Organizational Culture, Job Engagement, Job Performance, Job Satisfaction, Intention to Leave and Perceived Health

Table 19.

Status Global Statements

Global Statement	Mean (Standard Deviation)
My manager fosters trust, involvement and cooperation among team members, and encourages thinking of problems in new ways.	4.20 (1.36)
My organization fosters a positive culture in the workplace.	4.01 (1.34)
I am passionate about my job, and committed to the organization; I put extra effort into my work.	4.53 (1.28)
I am capable of completing all my expected job related tasks accurately and timely.	4.66 (1.15)
My work gives me a feeling of contentment and a sense of accomplishment.	4.32 (1.31)
I intend to quit my job and/or withdraw from the organization within the coming year.	3.31 (1.71)
In general, rate your current health status on a scale of 1 to 5, where 1 means "Very Bad Health" and 5 means "Very Good Health".	3.39 (0.99)

Leadership style significantly and positively correlated with the quality of nursing work life. In fact, as the nurses' rating of leadership style increased, their Brook's QNWL total score significantly increased as well, p=0.000 and r=0.556. Likewise, a highly

significant positive correlation was identified between nurses' reported score for leadership style and their scores on the different sub-scales; p=0.000 and r=0.313 for Home/Work Life, p=0.000 and r=0.412 for Work Organization/Design, p=0.000 and r=0.570 for Work Conditions/Contention and p=0.000 and r=0.363 for Work World.

A significant positive correlation was identified between the organizational culture and the quality of nursing work life. The higher the nurses rated the organizational culture, the higher they scored on Brook's QNWL (p=0.000 and r=0.626) as well as on Home/Work Life sub-scale (p=0.000 and r=0.336), Work Organization/Design sub-scale (p=0.000 and p=0.000 and p=0.000

The correlation between nurses' job engagement and their quality of nursing work life was found to be significantly positive. Nurses who reported a higher score on the job engagement question had significantly higher Brook's QNWL total score, p=0.000 and r=0.545. The same positive correlation was observed between nurses' reported job engagement score and their different sub-scales' scores; p=0.000 and r=0.331 for Home/Work Life, p=0.000 and r=0.455 for Work Organization/Design, p=0.000 and r=0.544 for Work Conditions/Contention and p=0.000 and r=0.298 for Work World.

A significant positive correlation existed between nurses' quality of nursing work life and their job performance. Nurses who had higher Brook's QNWL total score, had significantly higher rating of their job performance, p=0.000 and r=0.469. Similarly, the nurses' rating of job performance increased as their scores on the different sub-scales increased; p=0.000 and r=0.302 for Home/Work Life, p=0.000 and r=0.395 for Work Organization/Design, p=0.000 and r=0.458 for Work Conditions/Contention and p=0.000 and r=0.260 for Work World.

Nurses' reported job satisfaction score was significantly correlated with their total score on Brook's QNWL (p = 0.000 and r = 0.517) and their scores for Home/Work Life subscale (p = 0.000 and r = 0.316), Work Organization/Design sub-scale (p = 0.000 and r = 0.430), Work Conditions/Contention sub-scale (p = 0.000 and p = 0.500) and Work World sub-scale (p = 0.000 and p = 0.343). Nurses who reported a higher job satisfaction score, had higher Brook's QNWL score reflecting better quality of nursing work life.

There was no significant correlation between the nurses' intention to quit the job or leave from their work organization and the quality of nursing work life. Though not significant, it's worth noting that as Brook's QNWL total score increased, the nurses' reported intention to leave decreased (r = -0.020 and p = 0.596). Similarly, an insignificant negative relationship was observed between the nurses' intention to quit the job or leave from their work organization and their scores on Home/Work Life sub-scale (r = -0.033 and p = 0.384) and Work Conditions/Contention sub-scale (p = -0.049 and p = 0.201). On the contrary, nurses' intention to leave increased with the increased scores on Work Organization/Design sub-scale (p = 0.037 and p = 0.328) and Work World sub-scale (p = 0.033 and p = 0.391).

The correlation between nurses' perceived health status and their quality of nursing work life was also found to be significantly positive. Nurses who reported a higher perceived health status score had a significantly higher Brook's QNWL total score, p=0.000 and r=0.363. The significant positive correlation also presented between the nurses' perceived health status score and their sub-scales' scores; p=0.000 and r=0.287 for Home/Work Life, p=0.000 and r=0.264 for Work Organization/Design, p=0.000 and r=0.352 for Work Conditions/Contention and p=0.000 and r=0.213 for Work World.

Table 19. Pearson's Correlation between Quality of Nursing Work Life and Leadership Style, Organizational Culture, Job Engagement, Job Performance, Job Satisfaction, Intention to Leave and Perceived Health Status

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Brook's QNWL												
Score	1											
2. Home/Work Life	**											
Sub-scale Score	.690	1										
3. Work												
Organization/Des ign Sub-scale	**	**										
Score	.811	.474	1									
4. Work Conditions/Conte	**	**	**									
ntion Sub-scale												
Score	.941	.524	.657	1								
5. Work World	**	**	**	**								
Sub-scale Score	.696	.456	.508	.547	1							
6. Leadership Style	**	**	**	**	**							
	.556	.313	.412	.570	.363	1						
7. Organizational	**	**	**	**	**	**						
Culture	.626	.336	.462	.640	.411	.666	1					
8. Job Engagement	**	**	**	**	**	**	**					
and Commitment	.545	.331	.455	.544	.298	.436	.519	1				
9. Job Performance	**	**	**	**	**	**	**	**				
	.469	.302	.395	.458	.260	.336	.367	.492	1			
10. Job Satisfaction	**	**	**	**	**	**	**	**	**			
	.517	.316	.430	.500	.343	.405	.489	.573	.504	1		
11. Intention to		**	**									
Leave	-0.020	-0.033	.037	-0.049	.033	-0.029	-0.028	-0.047	.031	-0.071	1	
12. Perceived Health	**	**	**	**	**	**	**	**	**	**		
Status	.363	.287	.264	.352	.213	.266	.330	.300	.278	.305	-0.058	1

In this chapter, quality of nursing work life was found to be associated with several sociodemographic and work-related variables including the nurse's gender, the number of dependents, the geographic area where the nurse lives, the organization (private versus governmental hospital) and the unit/service where the nurse works and the number of assigned patients to the nurse's care per shift. Moreover, quality of nursing work life highly correlated with leadership style, organizational culture, job engagement, job performance, job satisfaction and perceived health status.

CHAPTER V

DISCUSSION

The main purpose of this study was to assess the quality of nursing work life among Lebanese nurses working in hospital settings. Other aims were to explore relationships between quality of nursing work life and sociodemographic factors, work-related factors, leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intention to leave and perceived health status. This chapter included discussion of the study findings in relation to those present in the literature. Further discussion covers the relationship to the theoretical framework of the study, followed by the limitations of the study, implications of the findings for nursing administration, recommendations for future research, and the conclusion.

A. Findings in Relation to the Empirical Literature

1. Research Question 1

The first question aimed at assessing the quality of nursing work life among Lebanese Nurses working in hospital settings. Results showed moderate quality of nursing work life based on the interpretation criteria that was recommended by the author of the used tool. Similar to the study that was initially conducted by Brooks and Anderson three years after the development of the tool (2004), the findings of the present study indicated that the respondents were pleased overall with their work life situation. However, these findings are inconsistent with findings of a number of previous studies carried out in Canada, Iran, Saudi Arabia and the United States, where nurses' quality of work life was undesirable (Almalki et al., 2012; Brooks et al., 2007;

Dehghan Nayeriet al., 2011; Lewis et al., 2001). While the study results showed a moderate quality of nursing work life among the participants, the nurses notably rated certain items of the different sub-scales lower than other items. The lowest three reported mean scores were for the items tackling energy left after work, adequate salary and image of nurses.

The nurses' lowest mean score was reported for the item addressing energy left after work. This result is in accordance with the results from other studies which assessed quality of nursing work life and which highlighted the significantly low rating of energy left after work (Almalki et al., 2012; Brooks & Anderson, 2004). The rating of this item is explained by the rating of the items on nurse staffing and workload, where more than half of the nurses indicated that there aren't enough nurses in their work setting and that their workload is heavy. In fact, these ratings are expected with the reported mean working hours per week of 42.75 hours, raised to 84 hours for nurses who worked two shifts in two different hospitals, and with the reported ratio of one nurse to more than nine patients by more than one-third of the sample. Nurses spent a long time at work and endured a heavy work-load, so they had little energy left after work. This in turn affected their ability to balance their work life with their family and home life, as reported by many nurses who could not achieve this balance.

With respect to salaries, more than half of the nurses did not believe that their salaries were adequate for their jobs, given the current job market conditions. This was also not unexpected with almost the same number of nurses reporting a monthly income that does not exceed 1000\$. This finding is consistent with the finding from the study on the quality of nursing work life of primary health care nurses in Saudi Arabia, whereby around 61% of nurses reported inadequate salaries for their jobs (Almalki et

al., 2012). Furthermore, an integrative review of the literature by Vagharseyyedin et al. (2011) on the predictors of quality of nursing work life identified salary and fringe benefits as one of the major predictors. AlMalki et al. (2012) went beyond that and explained this factor using the behavioral theories of Herzberg and Maslow which suggest that people cannot concentrate on their higher needs until basic needs are met, thus, satisfying basic needs including payment and financial incentives is essential.

The third least scored item was the public image of nurses in society. More than half of the nurses did not think that society has a good image of nurses. However, around three-quarters of these nurses believed that their nursing work positively impacted the lives of patients and families, indicating positive attitudes towards their career and its effect on the community health. The Lebanese society may underestimate nursing compared to other healthcare careers, since nursing is perceived as a profession that lacks appeal and prestige in the Arab countries (Shukri, 2005). This view of the nursing profession in the Arab World is in-line with other countries such as Iran and Japan as cited in the study of Almalki et al. (2012).

On the other hand, most of the nurses indicated that it is important for them to have a designated private break area, nursing degree-granting programs, friendships with co-workers, on-site childcare services, on-site ill child care services and on-site day care for elderly parents. These findings are comparable to those of another study conducted in Saudi Arabia where nurses expressed high importance and significant need for such facilities, services and programs (Almalki et al., 2012). Though regression analysis was not carried out in this study, it is important to highlight that relationships with colleagues was identified as one of the major predictors of quality of nursing work life based on the integrative literature review conducted by Vagharseyyedin et al.

(2011). This explains the high scores that nurses gave to the friendships with coworkers item. Furthermore, the highly rated nursing degree-granting programs item is also in accordance with the review of literature on the quality of nursing work life of nurses employed in the United States and Canada which identified the implementation of continuing education programs within the work place as one of the strategies to improve quality of nursing work life (Nowrouzi et al., 2016).

2. Research Question 2

The second question examined the associations between quality of nursing work life and sociodemographic and work-related variable. Relationships were identified between quality of nursing work life and gender, number of dependents, work unit/service, number of assigned patients per shift, geographic living area and private versus governmental hospital. No significant relationships were recognized in the current study between quality of nursing work life and age, marital status, income, nursing educational credential, years of experience, number of working hours per week, nursing shift and geographic work area.

The study findings revealed a significant association between the quality of nursing work life and gender. Female nurses scored significantly higher on Brook's QNWL survey similar to the female nurses in the study of Almalki et al. (2012). Taking into consideration the women's majority in the nursing profession, and the poor image of nursing in society, particularly in the Arab world (Shukri, 2005), the results can be explained. Moreover, literature shows that male nurses are at bigger risk of being unsupported and devalued when compared to their female counterparts (Evans & Frank, 2003).

With respect to the number of dependents, quality of nursing work life significantly differed between nurses with no dependents and nurses with four or more dependents. This is shown with the majority of nurses indicating the importance of having on-site childcare and elderly care services. Nurses with dependents hold bigger responsibilities, in terms of time, money and effort which affects their quality of nursing work life. The result is consistent with Brooks and Anderson's study findings (2004). The study by Almalki et al. (2012) further analyzed this factor by dividing the dependents to dependent children and dependent adults. Nurses with dependent children were found to have a significantly higher mean Brook's QNWL total score, while nurses with dependent adults were found to have a significantly lower mean Brook's QNWL total score, compared to nurses with no dependents (Almalki et al., 2012).

Quality of nursing work life was also significantly linked to the nurses' work unit/service; open versus closed. Nurses working in open units/services reported a higher mean Brook's QNWL total score, compared to nurses working in closed units. This may be explained by the increased workload in terms of tasks and responsibilities for nurses who work in critical areas. Moreover, nurses who work in closed units/services have to deal with traumas, threatening cases and death which adds to their physical and mental fatigue, an emotional component which affects their quality of nursing work life. The current study finding in in congruence with a previous study which indicated that nurses working in pediatric units, rehabilitation services and ambulatory clinics were the most satisfied with their quality of work life, while nurses working in emergency services, surgery wards and intensive care units were the least satisfied (Boyle, Miller, Gajewski, Hart & Dunton, 2006). Moreover, a study of compassion satisfaction, compassion fatigue, and burnout evidenced that emergency

nurses were at risk for less compassion satisfaction, oncology nurses were at risk for higher compassion fatigue and intensive care nurses were at risk for burnout (Hooper, Craig, Janvrin, Wetsel & Reimels, 2010).

When considering the number of patients assigned to the care of the nurse, quality of nursing work life was significantly associated. Although more than one third of the nurses indicated that more than nine patients are assigned to their care per shift, the group of nurses with the lowest mean Brook's QNWL total score constituted those with three to four assigned patient per shift. A possible explanation of this result is that out of 122 nurses who reported caring for three to four patients per shift, 85 nurses worked in intensive care units. The significant relationship is supported by a literature review on the effect of nurse staffing on the outcomes of nurses among others; lower nurse staffing levels were associated with higher stress, injuries and emotional exhaustion and lower quality of care, satisfaction and retention (Unruh, 2008). All these factors contribute to the quality of nursing work life.

The geographic living area significantly related to the quality of nursing work life as well. Observing the mean Brook's QNWL total score in a descending manner, Mount Lebanon, as a living area, came on top of the list, then North Lebanon, followed by South Lebanon, Beqaa and lastly Beirut. North Lebanon, South Lebanon and Beqaa were identified as underserved regions in a previous study based on the definition of underserved regions by the World Health Organization which encompasses specific educational, health, economic, and infrastructure indicators among others (El-Jardali et al., 2013). This may be an explanation of the mean Brook's QNWL scores of nurses living in North Lebanon, South Lebanon or Beqaa, compared to those living in Mount Lebanon. As for the reason why nurses living in Beirut reported the lowest quality of

nursing work life, environmental stressors associated with living in the capital may be the answer; residents of Beirut report common patterns of irritability, anger, headaches, and sleep disturbances (Fooladi, 2012).

Finally, nurses who worked in private hospitals reported significantly higher mean Brook's QNWL total score compared to that reported by nurses who worked in governmental hospitals. The finding from the current study is both consistent and inconsistent with literature. While nurses working in the private sector in South Africa were found to be more satisfied with their quality of work life (Pillay, 2009), Jordanian nurses working in governmental hospitals reported better quality of work life compared to nurses working in private hospitals (Abdelhafiz, Alloubani & Almatari, 2016).

Another comparative study of the quality of nursing work life in India revealed no significant difference between nurses working in private hospitals and those working in governmental hospitals (Lakshmi, Ramachandran & Boohene, 2012). The result of the present study can be attributed to the incomparable growth and progress of the private healthcare sector in Lebanon which involves better resources and management (Kronfol, 2006).

On the other hand, quality of nursing work life was not significantly associated with age in the present study. The finding is consistent with two other studies conducted in Iran and Thailand (Moradi, Maghaminejad & Azizi-Fini, 2014; Wallapa Boonrod, 2009), but inconsistent with another study conducted in Saudi Arabia (Almalki et al., 2012). Although the study carried out in Saudi Arabia reported significantly higher mean scores of Brook's QNWL among older nurses (Almalki et al., 2012), this study showed that the group of nurses who are up to 29 years old had the highest mean Brook's QNWL total score.

With respect to marital status, although no significant relationship was identified with quality of nursing work life, the findings were similar to those revealed by the similar study assessing the quality of nursing work life among nurses working in primary health care centers in Saudi Arabia (Almalki et al., 2012). Divorced and widowed nurses had the highest mean scores, while single nurses had the lowest mean scores on Brook's QNWL. On the contrary, research studies on the satisfaction of nurses from Iraq and Saudi Arabia showed that single nurses were more satisfied with their jobs compared to married nurses (Al-Ahmadi, 2002; Al-Doski, Nazar & Aziz, 2010). One possible explanation of the result of the current study is that single nurses are younger in age, thus they may not have the coping abilities to balance their work life nor the skills to understand their job expectations, compared to older nurses who are usually more experienced. Moreover, married nurses, compared to divorced and widowed nurses, have more responsibilities and concerns, and expect more understanding and support from their administration and colleagues. Interestingly though, married nurses scored the highest on the home/work life dimension sub-scale. This may be due to the familial help and support Lebanese parents and relatives offer to married working couples (Yaktin et al., 2003), or to the fact that the majority of married nurses live with their families which enhances their quality of work life (Al Otabi, Shah, Chowdhury & Al-Enezi, 2004).

As for the monthly income, analysis did not show a significant difference in the quality of nursing work life between groups of nurses with different salary ranges.

However, nurses with a monthly income that is less than 500\$ scored the lowest while nurses with a monthly income that is above 1500\$ scored the highest on Brook's QNWL survey. While findings from different studies varied between indicating the

presence of a significant relationship between nurses' salaries and their quality of nursing work life (Almalki et al., 2012; Seo, Ko & Price, 2004) versus not (Al-Ahmadi, 2002), it is important to highlight that an integrative literature review identified salary and monetary benefits as one of the predictors of quality of nursing work life (Vagharseyyedin et al., 2011).

Nursing educational credential as a variable did not significantly relate to the quality of nursing work life. This finding is consistent with the finding from the similar study that was conducted in Saudi Arabia (Almalki et al., 2012). Yet, it is inconsistent with the integrative literature review which identified educational level as one of the demographic predictors of quality of nursing work life (Vagharseyyedin et al., 2011). In fact, literature seems to be equivocal on the relationship between the nurses' educational level and their quality of work life. While some studies supported the hypothesis that highly educated nurses are more knowledgeable and skilled which positively reflects on their quality of nursing work life, other studies revealed that highly educated nurses report lower mean quality of nursing work life scores since as their expectations of the organization and the administration increase (Vagharseyyedin et al., 2011).

Quality of nursing work life was not related to the years of nursing experience in the current study. The finding is not in congruence with previous studies which revealed a significant relationship between nurses' years of experience and their quality of nursing work life (Almalki et al., 2012; Moradi et al., 2014; Sharhraky, Mardani, Asadi, Heidari & Hamedi, 2011). It's notable, however, that the group of nurses with more than 20 years of nursing experience had the highest mean score on Brook's QNWL. It is assumed that experienced nurses are more familiar with the culture, the policies and the procedures of the organization on one hand, and more competent on the other hand.

Thus, experienced nurses show better understanding of the work needs and expectations, as well as better coping and adapting abilities (Al & Kishk, 2006; Al Otabi et al., 2004).

Quality of nursing work life was not associated with the number of working hours. The finding is not consistent with the literature review which have suggested that nurse staffing, which encompasses number of working hours and nurse-to-patient ratios, directly affect the nurses' job satisfaction and multiple dimensions of the nurses' quality of work life (Unruh, 2008). Still, as the number of working hours increased, the mean score of the Home/Work Life sub-scale decreased. Even though this relationship did not reach statistical significance, it reflects how nurses spending long hours at work find it hard to keep up with their family and home activities and responsibilities.

Although shift working did not directly relate to the quality of nursing work life in the current study, it was significantly associated with the mean score of Home/Work Life sub-scale. This finding is in accordance with the finding of a study conducted in Taiwan where nurses indicated the importance of managing shift working within the demands of family life (Hsu & Kernohan, 2006). Moreover, nurses who work rotating shifts had the lowest mean Brook's QNWL total score which is consistent with the findings of two previous studies which demonstrated that rotating shifts negatively affected the participants' lives (Brooks & Anderson, 2004; Brooks et al., 2007). Despite the fact that no statistical significance existed in the present study on the relationship between quality of nursing life and shift working, the latter has been identified as one of the predictors of quality of work life among nurses (Vagharseyyedin et al., 2011).

Lastly, there was no significant relationship between quality of nursing work life and the geographic work area. Nurses working in the capital (Beirut), similar to those

living in that geographic area had the lowest mean scores on Brook's QNWL survey as well as the sub-scales. People who work in Beirut, like those who live in Beirut, report experiencing episodes of irritability, anger, headaches, and sleep disturbances (Fooladi, 2012). Environmental factors may have influenced the nurses' quality of life in general, which in turn may reflect on the quality of nursing work life as well.

3. Research Question 3

The third question explored the relationships between quality of nursing work life and leadership style, organizational culture, job engagement and commitment, job performance, job satisfaction, nurses' intention to leave and perceived health status which were then evaluated in relation to the quality of nursing work life. A strong and positive correlation was identified between Brook's QNWL score and each of the global statements' scores denoting the above concepts, except that of the nurses' intention to leave.

Almost three-quarters of the participating nurses agreed that their manager fosters trust, involvement and cooperation among team members, and encourages thinking of problems in new ways. The rating of the global statement on leadership style is in accordance with the rating of the different items of Brook's QNWL survey which address management and supervision. Most of the nurses agreed that that they are able to communicate well with their nurse manager/supervisor, their nurse manager/supervisor provides adequate supervision, they receive feedback on their performance from their nurse manager/supervisor, they are recognized for their accomplishments by their manager/supervisors, they are able to participate in decisions made by their nurse manager/supervisor, nursing policies and procedures facilitate their

work and upper-level management has respect for nursing. The strong positive correlation between quality of nursing work life and leadership style which was identified in the present study is consistent with the result of the study conducted in France, whereby a significant relationship was identified between transformational leadership and quality of nursing work life (Gillet et al., 2013). Furthermore, the integrative literature review by Vagharseyyedin et al. (2011) also identified management practices and leadership issues as major predictors of quality of nursing work life, after having 16 out of the 23 reviewed studies support this correlation.

Organizational culture was highly rated by the nurses who indicated that their organization fosters a positive culture in the workplace. The rating is supported by the rating of Brook's QNWL survey specific items which reflect a positive work culture. The majority of the nurses stated that in their work settings, they have the autonomy to make patient care decisions, there is teamwork, they feel respected by physicians, they communicate well with physicians and other therapists and friendships with co-workers are important. The strong positive correlation between quality of nursing work life strongly and organizational culture is in accordance with previous studies which indicated that group culture which focuses on human relations, teamwork, communication and participation in decision making enhances quality of work life (Gifford et al., 2002; Goodman et al., 2001).

The greater part of the nurses expressed that they are passionate about their jobs and committed to their organizations, and that they put the extra effort into their work.

Almost the same number of nurses stated that they feel a sense of belonging to their workplace, which explains the strong job engagement and commitment. A strong positive correlation existed between the quality of nursing work life and job

engagement and commitment. This is supported by many research studies undertaken in China, Malaysia, Spain and Turkey which concluded a significant and positive relationship between quality of nursing work life and job engagement and commitment (Kanten & Sadullah, 2012; Normala, 2012; Royuela, López-Tamayo & Suriñach, 2009; Zhao et al., 2013).

As for job performance, most of the nurses indicated that they are capable of completing all their expected job related tasks accurately and timely. This is well-matched with their answer to the item about being able to provide good quality patient care, but not to that about having enough time to do their job well. The correlation between the quality of nursing work life and job performance in the current study is in concurrence with the findings from two studies undertaken in Iran and Spain. The study in Iran deduced a direct and significant relationship between quality of nursing work life and job performance, while the study in Spain further explained that quality of nursing work life is related to productivity for both the individual employee and the organization (Rastegari, Khani, Ghalriz & Eslamian, 2010; Royuela et al., 2009). Likewise, the review of the literature on the quality of work life revealed higher performance, in terms of growth and profitability, in organizations where employees reported good quality of work life (Gayathiri et al., 2013).

The majority of the nurses agreed to Brook's QNWL survey item "I am satisfied in my job". Additionally, more than three-quarters of the participating nurses expressed that their work gives them a feeling of contentment and a sense of accomplishment, thus indicating high levels of satisfaction. Not unexpected, quality of nursing work life strongly and positively correlated with job satisfaction. This result is consistent with the result of the study on quality of work life, job satisfaction and their related factors

among nurses working in King Abdulaziz University Hospital in Saudi Arabia by Gayathiri et al. (2013). The study revealed the presence of positive correlations between nurses' quality of work life domains and most of job satisfaction sub-scales. As discussed in Chapter II, high quality of work life increases satisfaction, while this is not true vice versa since employees may be satisfied with a low quality work life (Gayathiri et al., 2013).

The reported perceived general health status by most of the nurses was rated as good and very good. The strong positive correlation recognized between the quality of nursing work life and the nurses' perceived general health status is in agreement with previous research studies which showed that quality of nursing work life and nurses' well-being are strongly correlated (Blumberga & Olava, 2016; Horrigan et al., 2013).

Less than half of the nurses expressed their intention to quit their job and/or withdraw from the organization within the coming year. While more than half of these nurses believed that their job is secure, so they do not expect to lose it unexpectedly, they reported that they would be able to find the same job with about the same salary and benefits in another organization. This is unsurprising with the continuously increasing demand for nurses (Hofler & Thomas, 2016). No statistically significant correlation had been identified between the quality of nursing work life and the nurses' intention to leave in the present study. Alternatively, results of previous research studies in China, Iran and Saudi Arabia demonstrated a negative correlation between the quality of nursing work life and the nurses' intention to quit their job or withdraw from their organization (Almalki et al., 2012; Hesam, Asayesh, Roohi, Shariati & Nasiry, 2012; Lee, Dai & McCreary, 2015; Mosadeghrad, Ferlie & Rosenberg, 2011; Zhao et al., 2013).

B. Relationship to Theoretical Framework

According to the sociotechnical systems theory, the social and technical interdependent subsystems feature any profession, and the needs these subsystems must be met for employees' contentment and organizational goals to be achieved (Mumford, 1985). The participating registered nurses filled Brook's QNWL survey. Some of the survey items tackled the technical aspect of the nursing profession such as nursing policies and procedures, assistance from unlicensed support personnel and adequate supplies and equipment for patient care. The social aspect was also addressed through other items in the survey such as friendships with co-workers, secure environment and communication with other healthcare team members. Satisfying the needs that fall under the social and technical subsystems was reflected in higher mean Brook's QNWL scores. Nurses also rated global statements on leadership style, organizational culture, job engagement and commitment, job performance, job satisfaction, nurses' intent to leave and perceived health status. The findings revealed a strong positive correlation between quality of nursing work life and job engagement and commitment as well as job performance; the latter are the main goals of any healthcare organization. Likewise, quality of nursing work life was strongly and positively correlated with job satisfaction and perceived health status which shows employees' contentment.

As for O'Brien-Pallas and Baumann, quality of nursing work life encompasses four different dimensions within a unifying framework: work life/home life, work design, work context, and work world (O'Brien-Pallas & Baumann, 1991). All the survey items that the nurses rated fell under one of the four dimensions identified by O'Brien-Pallas & Baumann. Some items reflected the nurses' experiences between

home and work such as the organization's policy for family-leave time. The nurses' perception of the way the actual nursing tasks are designed was also analyzed through items such as the autonomy to make patient care decisions. The work context dimension included items that addressed the work setting and environment such as the designated private break area. Finally, items describing the influence of society on the profession such as the image of nurses were also rated by the nurse participants. Brook's QNWL total score and scores of the four sub-scales were computed and evaluated in relation to sociodemographic and work-related variables.

C. Limitations of the Study

There are some limitations to the present study that need to be acknowledged. Two private hospitals were randomly selected from each geographic area, matched with the identified governmental hospital from the same area based on size and services. This selection excluded hospitals whose nurses' perspectives may have affected the results. In addition, the study sample was formed of nurses who were willing to participate in this research study. Nurses who did not volunteer to fill the questionnaire could have had different views. These two factors limit the generalizability of the study results to all the nurses in the country. Besides, while the majority of hospitals in Lebanon are geographically located in Beirut and Mount Lebanon areas, two private hospitals and one governmental hospital from each geographic area were included in the study. This limits the representativeness of the sample as nurses working in hospitals located in Beirut and Mount Lebanon were under-represented, while nurses working in hospitals located in North Lebanon, South Lebanon and Beqaa were over-represented. Also, the use of the cross-sectional survey design limited the analysis of nurses' quality of

nursing work life to one point of time. One more limitation was the use of a self-reporting questionnaire for data collection, which leaves the interpretation of the items to the individual participants, thus increasing the chances of respondent errors. Lastly, the questionnaires were distributed to the nurses through the hospitals' administrative staff, which may have unintentionally coerced them to fill the questionnaires. This presents the limitation of answer bias. Nevertheless, the present study offered important findings and contributed to the body of knowledge on quality of nursing work life, particularly being the first study to assess quality of nursing work life in Lebanon.

D. Implications for Nursing Administration

Nursing administrators need to consider nurses' quality of nursing work life, and strive to support the work life balance among these nurses. Evidently, sociodemographic factors, work-related factors, leadership style and organizational culture all relate to the nurses' quality of nursing work life, which in turn relates to nurses' engagement and commitment, performance and satisfaction, thus affecting nurses' turnover and shortage. In an attempt to face the continuous nursing shortage and to mitigate the nursing turnover, directors of health care organizations and nursing leaders and administrators should target the factors which are commonly reported by nurses, strongly associated with quality of nursing work life and generally controllable.

Healthcare organizations should foster the sense of belonging and promote the values of respect, teamwork, communication and good interpersonal relationships among nurses as well as other health care team members. A positive culture and a friendly work environment not only impact the quality of nursing work life positively,

but also improve the outcomes of individual nurses and the organization as a whole since everyone shares the same goals and works hard to fulfill them.

In conjunction with such interventions to improve organizational culture, administrators and managers should give more attention to the family aspect of the nurses. For nurses to be able to balance their work life and family life, convenient working hours, adequate vacations, childcare services and care facilities for nurses who have elderly parents should be made available. On another note, a sufficient number of qualified registered nurses and a sufficient number of trained support personnel are needed in each healthcare organization in order to reduce the workload by reducing the number of working hours and the number of assigned patients to the care of each nurse. During working hours, comfort of nurses should be ensured by providing private break areas in each of the hospital units/departments for nurses to rest. It is also important to note that nurses' salaries should match the efforts they exert and the responsibilities they hold. Administrators should work on employing fair financial incentives for nurses who work in high risk and high acuity areas, and those who work irregular hours and shifts. Allowances for housing and commuting from remote areas, and tickets for meals are among the financial benefits that may be considered as well. Additionally, organizations should offer new and experienced nurses with continuing education opportunities, encourage them to continually refresh their knowledge and develop their skills and support them to seek career advancements. Such measures enhance quality of nursing work life, and also quality of patient care.

Moreover, health care organizations and administrators should work hand in hand with the Ministry of Public Health and the Order of Nurses on improving the public image of nurses, in order for nursing shortage and turnover problems to be

resolved. In addition, media and public education can be utilized to reinforce the value of the nursing profession and the importance of the nurses' role in the healthcare field. Furthermore, the Ministry of Public Health and the Order of Nurses should set standards and monitor for compliance with fair nurses' working hours, salaries and nurse-to-patient ratios. Last but not least, efforts should be employed to ensure an equitable distribution of the current nursing workforce among the different geographic areas of Lebanon and between private and governmental health care organizations. Aside from enhancing nurses' quality of nursing work life, this ensures adequate nursing services and better quality of care for patients, families and the community.

E. Recommendations for Future Research

Based on the present study, future research is recommended. Replicating the study in Lebanon with a larger sample size by involving more health care organizations can confirm the results of the study. Additionally, the cross-sectional survey design used in the study limits the analysis of nurses' quality of nursing work life to one point of time, while a longitudinal design can help observe the change of nurses' quality of nursing work life over time and gain a better understanding of how it's related to different other factors. Using the relationship findings of the present study to carry out an interventional study is also recommended. Also, a comparative study of quality of nursing work life among nurses in different healthcare settings (hospitals, primary health care centers, etc.) is also needed to identify the strengths and the weaknesses in the whole healthcare system, and to plan interventions based on the nurses' specific needs which may vary from one environment to another. A further comparative study of quality of work life among diverse groups of health care professionals should also be

considered. The results of such studies can guide policy makers and administrators to develop strategies that enhance the quality of work life for the whole health care team which reflects on the quality of patient care and both individuals' and organizations' outcomes.

F. Conclusion

Quality of nursing work life has become the center of attention for researchers, administrators and unions. The study assessed the quality of nursing work life among Lebanese nurses for the first time, and evaluated it in relation to different sociodemographic and work-related variables, as well as in relation to job engagement and commitment, performance, satisfaction and intention to leave, all of which are of great interest and importance to nursing policy and decision makers. The findings of the study reflect a generally moderate quality of work life among the nursing workforce in Lebanon, but also highlights pay, workload, public image of nursing, and other factors as areas that require planned reform. Then again, Lebanese nurses demonstrated positive attitudes towards the nursing profession, their career, their sense of belonging and the quality of care they provide in the present study. Accordingly, addressing other factors which negatively affect nurses' quality of work life will ensure an outstanding nursing workforce in Lebanon which will guarantee incomparable outcomes for patients and healthcare organizations.

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Appendix A

Institutional Review Board (IRB) Approval



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APPROVAL OF RESEARCH

April 3, 2019

Nuhad Dumit, PhD American University of Beirut 01-350000 ext.: 1309 ny00@aub.edu.lb

Dear Dr. Dumit,

On April 3, 2019, the IRB reviewed the following protocol:

Type of Review:	Initial, Expedited		
Project Title:	Quality of Nursing Work Life among Lebanese Nurses		
Investigator:	Nuhad Dumit		
IRB ID:	SBS-2019-0030		
Funding Agency:	None		
Documents reviewed:	Received January 11,2019:		
	Questionnaire (English and Arabic versions) Received March 20,2019: IRB application Proposal Nurse participant communication script (English and Arabic versions) Nurse participant Reminder communication script (English and Arabic versions) Consent document (English and Arabic versions) Received April 3,2019: Advertisement for pilot study (English version)		

The IRB granted you approval from April 3, 2019 to April 2, 2020 inclusive. Before February 2, 2020 or within 30 days of study close, whichever is earlier, you are to submit a completed "FORM: Continuing Review Progress Report" and required attachments to request continuing approval or study closure.

If continuing review approval is not granted before the expiration date of April 3, 2020 approval of this research expires on that date.

Please find attached the stamped approved documents:

- Proposal (received March 20,2019),
- · Questionnaire (English and Arabic versions, received January 11,2019),
- Nurse participant communication script (English and Arabic versions, received March 20,2019),
- Nurse participant Reminder communication script (English and Arabic versions, received March 20,2019),
- · Advertisement for pilot study (English version, received April 3,2019),
- · Consent document (English and Arabic versions, received March 20, 2019).

Only these IRB approved consent forms and documents can be used for this research study.

Page 1 of 2

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Thank you.

The American University of Beirut and its Institutional Review Board, under the Institution's Federal Wide Assurance with OHRP, comply with the Department of Health and Human Services (DHHS) Code of Federal Regulations for the Protection of Human Subjects ("The Common Rule") 45CFR46, subparts A, B, C, and D, with 21CFR56; and operate in a manner consistent with the Belmont report, FDA guidance, Good Clinical Practices under the ICH guidelines, and applicable national/local regulations.

Sincerely,

Lina El-Onsi Daouk, MSc

Senior Regulatory Analyst/ IRB Co-administrator

Social & Behavioral Sciences

Cc: Michael Clinton, PhD

Co-Chairperson IRB Social & Behavioral Sciences

Fuad Ziyadeh, MD, FACP, FRCP Professor of Medicine and Biochemistry

Chairperson of the IRB

Ali K. Abu-Alfa, MD, FASN, FAHA

Professor of Medicine

Director, Human Research Protection Program

Director for Research Affairs (AUBMC)

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Appendix B

Permission to use Brook's Quality of Nursing Work Life Survey



November 28, 2018

Yara Hazouri, RN, BSN MSN Student School of Nursing American University of Beirut

Dear Yara:

You have permission to use my instrument, Brooks' Quality of Nursing Worklife Survey© (BQNW) in your Master's Thesis research entitled "Quality of Nursing Work Life among Lebanese Nurses" working in hospital settings.

In return, I require that you:

- · Report summary findings to me from the survey, including reliability analysis
- · Credit the use and my authorship of the survey in any publication of your research

Keep in mind that the survey was originally designed to assess the nursing worklife of staff nurses working in hospitals. Using the survey with other groups of nurses (e.g. charge nurses, nurse managers, nurse midwives etc.) is not appropriate. Making significant changes to the intent of the items and/or adding items is prohibited. Some minor changes to account for cultural differences are acceptable.

Please do not hesitate to call upon me to discuss your research. I am also available for onsite speaking or consultation.

Good luck with your research.

Sincerely,

Beth A. Brooks, PhD, RN, FACHE

Beth A BLOOKS

President

Appendix C

Invitation Letter to Participate in the Research Study

This is not an official message from AUB

This notice is for an AUB-IRB approved research study for Dr. Nuhad Dumit

Invitation to Participate in a Research Study

Quality of Nursing Work Life among Lebanese Nurses

Dear	,

You are invited to participate in a research study entitled "Quality of Nursing Work Life among Lebanese Nurses" conducted by the Hariri School of Nursing at the American University of Beirut, in collaboration with the Order of Nurses in Lebanon.

The purpose of this study is to assess the quality of nursing work life among Lebanese nurses working in hospital settings and evaluate it in relation to leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intent to leave and general health status.

In order to assess the quality of nursing work life, a survey will be distributed to nurses through the Hospital Administration after having communicated the study through the hospital's internl communication system. Nurses will voluntarily choose to participate in the study by filling the survey, putting it in an envelope, sealing the envelope, and dropping it in a closed box located in a junior administrator's office. Two weeks after first approaching the nurses, a reminder will be sent through the hospital's internal communication system. The boxes of the questionnaires will be collected in a month time.

This survey is completely voluntary and confidential; the participant's identity will remain anonymous throughout the whole study.

There are no expected direct personal benefits from participating in this study. There are, however, potential benefits for your institution. The information collected from this research is useful to better understand the quality of nursing work life among Lebanese nurses in relation to many personal, institutional, social and cultural factors.

Assessing quality of nursing work life allows health care organizations to understand the way the interaction between work environment and design, and home and personal life issues affect nurses' work life. This in turn helps organizations target specific areas that enhance the work environment for nurses, and thus achieve two of the main goals: retention of nurses and high performance.

Your cooperation is greatly appreciated. Thank you for your time.

Should you have any concerns about this message, you can contact the AUB Institutional Review Board at: Telephone number: 01 350000 ext. 5454 or Email irb@aub.edu.lb

Nuhad Yazbik Dumit, RN, MA, PhD, Principal Investigator Associate professor, Hariri School of Nursing, American University of Beirut Telephone number: 01 374374 ext. 5950/5 Email address: ny00@aub.edu.lb

Appendix D-1

Consent Form (English Version)

American University of Beirut

Hariri School of Nursing

Nuhad Yazbik Dumit

Consent Form

Dear Colleagues,

Having obtained approval from the American University of Beirut Institutional Review Board and the hospital's administration, we are asking you to participate in a research study. The purpose of this study is to assess the quality of nursing work life among Lebanese nurses working in hospital settings and evaluate it in relation to leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intent to leave and general health status.

You are one of more than 1000 Lebanese Registered Nurses who have been working in direct patient care for at least one year in any of the 14 hospitals across the five areas of Lebanon (Beirut; Mount Lebanon; North; South; Beqaa) and who were invited to participate.

Please read the information below and feel free to ask any questions that you may have. Filling and returning the survey means you have consented to participate in the study. Please keep this copy of the consent form for your records.

A. Project Description

- 1. In this study, you will answer few global questions on leadership style, organizational culture, job engagement, job performance, job satisfaction, nurses' intent to leave and general health status, and rate 42 items distributed over four subscales (Home/Work Life, Work Organization/Design, Work Conditions/Contention and Work World) on a six-point Likert scale, along with filling demographic information.
- 2. The estimated time to complete this questionnaire is approximately 10 20 minutes.
- 3. If you agree to fill the questionnaire, please do so in a private setting, and put it in the accompanying envelope once you are done, then seal it and return it to the closed box in the allocated administration office.
- 4. The research is being conducted for a "Masters of Science in Nursing" thesis and possible publication in academic journals and presentation at academic conferences.

B. Voluntary Participation

Participation in this study is voluntary. You can choose to answer any or all the questions of the survey. Your decision of whether to participate or not in this study does not influence your relationship with the American University of Beirut.

C. Privacy and Confidentiality

I would like to assure you that all the information you provide will be used for research purposes and that format of the study results will not allow the identification of any study participants. To secure the confidentiality of your responses, no name or other identifying information will be attached to your answers. Data will be kept in a locked drawer in a locked room or in a password protected computer that is kept secure. Data access is limited to the Principal Investigator and researchers working directly on this project. However, data will be monitored and may be audited by the IRB while assuring confidentiality. All the surveys will be pooled once all the boxes from the various hospitals are collected to protect the anonymity of participating nurses. All data will be destroyed responsibly after the required retention period (three years). Data will be published in aggregates with no reference to participants/hospitals names, which ensures your privacy will be maintained in all published and written data resulting from this study.

D. Risks and Benefits

Your participation in this study does not involve any physical risk or emotional risk to you beyond the risks of daily life. You have the right to withdraw your consent or discontinue participation at any time for any reason. Your decision to withdraw will not involve any penalty or loss of benefits to which you are entitled. Discontinuing participation does not affect your relationship with the American University of Beirut.

You receive no direct benefits from participating in this research; however your participation will help researchers better understand the quality of nursing work life among Lebanese nurses in relation to many personal, institutional, social and cultural factors.

E. Contact Information

1- If you have any questions or concerns about the research you may contact:

Dr. Nuhad Yazbik Dumit, Principal Investigator American University of Beirut, Riad El Solh 1107 2020 PO Box: 11 0236

PO Box: 11 0236 Beirut, Lebanon

Telephone number: 01 374374, ext. 5950/5

Email address: ny00@aub.edu.lb

Yara Hazouri, Co-Investigator American University of Beirut, Riad El Solh 1107 2020 PO Box: 11 0236

PO Box: 11 0236 Beirut, Lebanon

Telephone number: 01 374374, ext. 8243

Email address: yh24@aub.edu.lb

2- If you have any questions, concerns, or complaints about your rights as a participant in this research, you can contact the following office at AUB:

Social & Behavioral Sciences Institutional Review Board, American University of Beirut.

Telephone number: (961)1350000, ext. 5454

Email address: irb@aub.edu.lb

Appendix D-2

Consent Form (Arabic Version)

الجامعة الأميركية في بيروت مدرسة التمريض نهاد يزبك ضوميط و ثيقة الموافقة

حضرة الزملاء الكرام،

بعد الحصول على الموافقة من مجلس المراجعة في الجامعة الأمريكية في بيروت ومن إدارة المستشفى، اننا ندعوكم للمشاركة في هذه الدراسة البحثية. تهدف هذه الدراسة، بمساعدتكم، الى تقدير جودة حياة العمل التمريضية لدى الممرضين اللبنانيين العاملين في المستشفيات، وتقييمها فيما يتعلق بأسلوب القيادة، ثقافة المنظمة، نسبة المشاركة والأداء والرضى في العمل وعزم الممرضين والممرضات على مغادرة المهنة والحالة الصحية العامة.

انك تشكل(ين) واحدرة) من أكثر من 1000 ممرض(ة) مجاز (ة) الذين يعملون في رعاية المرضى المباشرة منذ عام على الأقل في أي من المستشفيات ال14 في المناطق الخمس اللبنانية (بيروت؛ جبل لبنان؛ الشمال؛ الجنوب؛ البقاع) والذين تمت دعوتهم للمشاركة.

الرجاء قراءة المعلومات التالية بعناية، وعدم التردد في طرح أية أسئلة تراودك. ملء الاستمارة وإعادتها يعني أنك قد وافقت على المشاركة في الدراسة. يرجى الاحتفاظ بهذه النسخة من وثيقة الموافقة لسجلاتك.

أ- توصيف المشروع

1- في هذه الدراسة، سوف تجيب عن بعض الأسئلة العامة المتعلقة بأسلوب القيادة، ثقافة المنظمة، نسبة المشاركة والأداء والرضى في العمل وعزم الممرضين على مغادرة المهنة، وتقيم 42 بند موز عين على أربعة أجزاء (البيت / حياة العمل ، تنظيم العمل / التصميم، ظروف العمل / التناقض، عالم العمل) بحسب مقياس ليكارت، بالاضافة الى ملء المعلومات الديموغرافية.

2- الوقت المقدر لملء هذه الاستمارة هو حوالي 10 - 20 دقيقة.

3- إذا وافقت على ملء الاستمارة، الرجاء القيام بذلك في مكان خاص، ووضعه في الظرف المرفق بمجرد الانتهاء منه، ومن ثم إغلاقه وإعادته إلى الصندوق المغلق الموجود في المكتب الإداري الخاص.

4- يجري البحث لأطروحة "ماجستير في العلوم التمريضية"، كما ويحتمل نشره في المجلات الأكاديمية وعرضه في المؤتمر ات الأكاديمية.

ب- المشاركة الطوعية

ان المشاركة في هذا البحث طوعية. يمكنك الامتناع عن المشاركة أو الاجابة على جميع الأسئلة في الاستبيان. ان عدم المشاركة أو اعادة الاستمارة لا يؤثر على علاقتك مع الجامعة الاميركية في بيروت.

ت- الخصوصية والسرية

يهمني ان أؤكد لك ان كل المعلومات التي تقدمها سوف تستخدم لأغراض البحث، وان شكل وأسلوب عرض نتائج الدراسة لا تسمح بالتعرف الى أي من المشاركين فيها. لتأمين سرية اجابتك، لن يرفق اسمك أو أي معلومات شخصية أو تمييزية أخرى بالاستبيان. ستُحفظ البيانات في درج مقفل في غرفة مقفلة أو في كمبيوتر محمي بكلمة

سر ومحفوظ بشكل آمن. يقتصر الوصول إلى البيانات على الباحث الرئيسي والباحثين الذين يعملون مباشرة على هذا المشروع. ولكن، ستتم مراقبة البيانات ويمكن مراجعتها من قبل مجلس المراجعة لمعهد العلوم الاجتماعية والعلوم السلوكية مع ضمان السرية. ستُجمع كل الاستمارات بعد اعادة الصناديق من المستشفيات المختلفة، وذلك لحماية هوية الممرضات والممرضين المشاركين. سيتم تدمير جميع البيانات بشكل مسؤول بعد فترة الاحتفاظ المطلوبة (ثلاث سنوات). ستُنشر البيانات ضمن مجموعات دون الإشارة إلى أسماء المشاركين/المستشفيات ما يضمن الحفاظ على خصوصيتك في جميع البيانات المنشورة و المكتوبة الناتجة عن هذه الدراسة.

ث- المخاطر و الفوئد

لا ينتج عن مشاركتك في هذه الدراسة أي خطر جسدي أو عاطفي أبعد من مخاطر الحياة اليومية. لديك الحق في سحب موافقتك أو التوقف عن المشاركة في أي وقت و لأي سبب. لا يترتب على قرارك بالانسحاب أي عقوبة أو فقدان لمنافع تمتلكها والتي هي من حقوقك، كما وأنه لا يؤثر على علاقتك مع الجامعة الاميركية في بيروت.

لن تتلقى أي فوائد مباشرة من المشاركة في هذه الدراسة؛ لكن مشاركتك تساعد على فهم نوعية حياة العمل التمريضي لدى الممرضين اللبنانيين فيما يتعلق بالعديد من العوامل الشخصية والمؤسسية والاجتماعية والثقافية.

ج- معلومات للاتصال

1- اذا كان لديك اسئلة أو استفسارات حول البحث يمكنك الاتصال ب:

الدكتورة نهاد يزبك ضوميط، الباحثة الرئيسية

الجامعة الأميركية في بيروت،

رياض الصلح 2020 1107

ص ب: 0236 11

بيروت، لبنان

رقم الهاتف: 374374 01 مقسم: 5/5950

عنوان البريد الالكتروني: ny00@aub.edu.lb

يارا حزوري، الباحثة المشاركة

الجامعة الأميركية في بيروت،

رياض الصلح 2020 1107

ص ب: 0236 11

بيروت، لبنان

رقم الهاتف: 374374 01 مقسم: 8243

عنوان البريد الالكتروني: yh24@aub.edu.lb

2- اذا كان لديك اي أسئلة مخاوف او شكاوى حول حقوقك كمشارك في هذا البحث، يمكنك الاتصال بالمكتب التالي في الجامعة الأميركية في بيروت:

مجلس المراجعة لمعهد العلوم الاجتماعية والعلوم السلوكية، لجنة الأخلاقيات، الجامعة الأمريكية في بيروت.

رقم الهاتف: 350000 (961) مقسم: 5454

irb@aub.edu.lb :البريد الالكتروني

Appendix E-1

Questionnaire (English Version)

Questionnaire

Demo	graphics:
Demo	graphics:
1.	Age: ☐ Less than 20 years ☐ 20 - 29 years ☐ 30 - 39 years ☐ 40 - 49 years ☐ 50 and above
2.	Gender : □ Female □ Male
3.	My Marital Status is: Single Married Divorced Widowed Others, specify
4.	Number of dependents: (Children, parents, sisters and brothers) ☐ None ☐ 1 ☐ 2 - 3 ☐ 4 - 6 ☐ More than 6
5.	My monthly income is: Less than 500\$ 501\$ -750\$ 751\$ - 1000\$ 1001\$-1250\$ 1251\$- 1500\$ More than 1500\$
6.	My highest Nursing educational credential is: □ Baccalaureate Technical (BT) in Nursing □ Technique Superior (TS) in Nursing

	☐ License Technique (LT) in Nursing
	☐ Bachelor of Sciences in Nursing
	☐ Masters Degree in Nursing
	□ Others:
7.	Other non-nursing credentials/degrees:
8.	Number of years I have worked as a nurse after my graduation:
	☐ Less than 2 years
	□ 3-5 years
	☐ 6-10 years
	☐ 11-15 years
	□16-20 years
	☐ More than 20 years
9.	The unit/service I usually spend the majority of my working hours is:
•	☐ Medical-surgical area
	☐ Intensive care unit
	□ Pediatrics
	□ Obstetrics/Gynecology
	□ Renal dialysis unit
	□ Operating room
	LLL Outpatient clinics
	□ Emergency
	□ Post anesthesia/ recovery
	□ Oncology
	□ Others, specify:
10	. The number of patients per shift usually assigned to me is: $\Box 1-2$
	\Box 3 - 4
	$\Box 5-7$
	\Box 7 - 9
	☐ More than 9
11	. The number of hours I work per week are
12	. I work:
	□ 7:00 am - 3:00 pm
	□ 7:00 am - 7:00 pm
	□ 3:00 pm - 11:00 pm
	□ 11:00pm - 7:00 am
	□ 7:00 pm - 7:00 am
	☐ Rotation: Day, Evening, Night or/ Day, Night
	☐ Others, specify:

13. The geographic area I wor	k in is:	
☐ Beirut	☐ Mount Lebanon	
North	☐ South ☐ Békaa	
14. The geographic area I live	in currently is:	
☐ Beirut	☐ Mount Lebanon	
North	□ South □ Békaa	
15. The Hospital I work in is:		
☐ Private Hospital	☐ Public Hospital	

Brooks' Quality of Nursing Work Life Survey

For each of the items below, rate your level of agreement on a scale of 1 to 6, where 1 means "Strongly Disagree" and 6 means "Strongly Agree".

		Strong	gly Disa	igree	Stro	ngly A	gree
1	I receive a sufficient amount of assistance from unlicensed support personnel (the dietary aides, housekeeping, patient care technicians, and nursing Assistants).	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 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 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 hospital to offer employees on-site 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 with my co-workers are important to me.	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	Rotating schedules negatively affect my life.	1	2	3	4	5	6
21	I am able to communicate with the other therapists (physical, respiratory, 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 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 organization's policy for family-leave time is adequate.	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 hospital to offer employees on-site day care for elderly parents	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 me to have nursing degree-granting programs available at my hospital.	1	2	3	4	5	6
31	I receive support to attend in services and continuing education 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 environment.	1	2	3	4	5	6
36	It is important for a hospital to offer employees on-site ill child care services.	1	2	3	4	5	6
		·	·	l	l	l	ı

37	I would be able to find my same job in another organization 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.	1	2	3	4	5	6
42	I receive quality assistance from unlicensed support personnel (the dietary aides, housekeeping, patient care technicians, and nursing assistants).	1	2	3	4	5	6

Additional Questions based on Literature

For each of the items below, rate your level of agreement on a scale of 1 to 6, where 1 means "Strongly Disagree" and 6 means "Strongly Agree".

		Strongly Disagree		Strongly Agre			
1	My manager fosters trust, involvement and cooperation among	1	2	3	4	5	6
	team members, and encourages thinking of problems in new ways.						
2	My organization fosters a positive culture in the workplace.	1	2	3	4	5	6
3	I am passionate about my job, and committed to the organization; I	1	2	3	4	5	6
	put extra effort into my work.						
4	I am capable of completing all my expected job related tasks	1	2	3	4	5	6
	accurately and timely.						
5	My work gives me a feeling of contentment and a sense of	1	2	3	4	5	6
	accomplishment.						
6	I intend to quit my job and/or withdraw from the organization	1	2	3	4	5	6
	within the coming year.						

In general, rate your current health status on a scale of 1 to 5, where 1	Very Bad		Very Good				
means "Very Bad Health" and 5 means "Very Good Health".	1	2	3	4	5		

Appendix E-2

Questionnaire (Arabic Version)

الاستمارة

افية:	المعلومات الديموغر
لعمر:	.1
اً أقّل من 20 سنة $ o$]
⊃ 20 - 29 سنة]
⊃ 30 - 39 سنة]
□ 40 - 49 سنة]
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لوضع العائلي:	.3
□ أعزب \عزباء]
⊃ متزوج ∖ة]
_ منفصل ∖ة]
□ أرمل \ة	
□ غيره، حدد:	
عدد الأشخاص اللذين أعيلهم هو: (الأطفال، الوالدين، الأخوة والأخوات)	.4
∠ لا أحد	
1 🗆]
3-2 □]
6 - 4]
$_{ m \Box}$ أكثر من $_{ m 6}$]
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\$750 - \$501 □	
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\$1250 -\$1001 \[\text{\$1500} \text{\$1251} \]	
\$1500 - \$1251 \(\text{\$1500} \) :	
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□ امتياز فني في التمريض (TS)	
□ اجازة فنية في التمريض (LT)	
كالوريوس في علوم التمريض (BS) بكالوريوس في علوم التمريض \Box	
□ ماجستير في علوم التمريض (MS)	
🗌 غيره، حدد:	
درجات \ شهادات أخرى في غير العلوم التمريضية:	.7
عدد سنوات الخبرة في التمريض بعد التخرج هي:	.8
🗆 أقل من سنتين	
3 - 3 سنوات	
ا سنوات $10-6$ سنوات	
□ 11 – 15 سنة	
سنة $20-16$ \Box	
ا أكثر من 20 سنة \Box	
القسم الذي أمضي فيه معظم ساعات عملي هو:	.9
□ الطبابة و الجراحة	
□ العناية الفائقة	
🗆 الأطفال	
□ النسائي والتوليد	
🗆 غسيل الكلى	
🗆 غرف العمليات	
□ العيادات الخارجية	
🗆 الطوارئ	
🗆 الانعاش	
□ الأورام	
□ غيره، حدد:	
, عدد المرضىي الذين أهتم بهم خلال دوام عملي هو:	.10
$2-1$ \square	
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انني أعمل الدوام التالي:	.12
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	7:00 am - 7	7:00 pm	🗆 7:00 ق.ظ - 7:00ب.ظ
	3:00 pm - 1	1:00 pm	□3:00 ب.ظ - 11:00 ب.ظ
	11:00pm -	7:00 am	🗆 11:00 اب.ظ - 7:00 ق.ظ
	7:00 pm -	7:00 am	🗆 7:00ب.ظ - 7:00ق.ظ
	_		🗌 دوام نهاري \ مسائي \ ليلي
			🗌 غيره، حدد:
			13. المنطقة الجغرافية التي أع
ال 🛮 الجنوب	ن 🗆 الشم	🗆 جبل لبنا	□ بيروت
			🗆 البقاع
		ال. أ.	14. المنطقة التي أقطن فيها حـ
· ti = ti	eti =		•
ال 🗆 الجنوب	ن 🗆 الشم	🗆 جبل لبنا	□ بيروت
			🗆 البقاع
			15. اننى أعمل فى:
		🗌 مستشفی	ر 1. سي مستشفي خاص □ مستشفي خاص

استبيان بروك لتقدير جودة حياة العمل التمريضية لكل نقطة أدناه، قم بمقارنة مستوى موافقتك على مقياس من 1 إلى 6، حيث 1 يعني اأعارض بشدة" و 6 يعني اأوافق بشدة".

بشدة	او افق ب			بشدة	اعارض		
6	5	4	3	2	1	أتلقى المساعدة الكافية من الموظفين المساعدين غير المجازين (التدبير المنزلي،	1
						المعاون الصحي، مساعد الممرض).	
6	5	4	3	2	1	أنا راض عن وظيفتي.	2
6	5	4	3	2	1	عبء العمل ثقيل جدا.	3
6	5	4	3	2	1	بشكل عام ، لدى المجتمع صورة دقيقة عن الممرضين والممرضات.	4
6	5	4	3	2	1	أنا قادر على تحقيق التوازن بين العمل واحتياجات عائلتي.	5
6	5	4	3	2	1	لدي استقلالية لاتخاذ قرارات تتعلق برعاية المرضى.	6
6	5	4	3	2	1	أنا قادر على التواصل بشكل جيد مع مدير/ة / مشرف التمريض.	7
						(Nurse Manager / Supervisor)	
6	5	4	3	2	1	لدي معدات ولوازم طبية ملائمة لرعاية المرضى.	8
6	5	4	3	2	1	يوفر مدير/ة / مشرف التمريض لي الإشراف الكافي.	9
						(Nurse Manager / Supervisor)	
6	5	4	3	2	1	من المهم أن يوفر المستشفى للموظفين خدمات رعاية الأطفال ضمن موقعه.	10
6	5	4	3	2	1	أقوم بالعديد من المهام غير التمريضية.	11
6	5	4	3	2	1	لدي طاقة متبقية بعد العمل.	12
6	5	4	3	2	1	الصداقات مع زملائي في العمل مهمة بالنسبة لي.	13
6	5	4	3	2	1	يوفر عملي فرص للتقدم المهني.	14
6	5	4	3	2	1	هناك عمل جماعي / فريق في مكان عملي.	15
						(Teamwork)	
6	5	4	3	2	1	أواجه الكثير من المقاطعة اثناء قيامي بعملي اليومي.	16
6	5	4	3	2	1	لدي ما يكفي من الوقت لأقوم بعملي بشكل جيد.	17

6	5	4	3	2	1	يوجد عدد كاف من الممرضين في مكان عملي.	18
6	5	4	3	2	1	أشعر بالانتماء لمكان عملي.	19
6	5	4	3	2	1	جدول المناوبة الدوري يؤثر سلبا على حياتي.	20
						(Rotating Shifts Schedule)	
6	5	4	3	2	1	أنا قادر على التواصل مع المعالجين الآخرين (المعالج الفيزيائي، معالج الجهاز	21
						التنفسي، وما إلى ذلك)	
6	5	4	3	2	1	أتلقى ملاحظات حول أدائي من مدير/ة / مشرف التمريض.	22
						(Feedback) (Nurse Manager / Supervisor)	
6	5	4	3	2	1	أنا قادر على تقديم رعاية ذات نوعية جيدة للمرضى.	23
6	5	4	3	2	1	راتبي مناسب لعملي بالنظر إلى ظروف سوق العمل الحالية.	24
6	5	4	3	2	1	سِياسة المؤسسة المتعلقة بوقت الإجازة العائلية ملائمة.	25
6	5	4	3	2	1	أنا قادر على المشاركة في القرارات التي يتخذها مدير/ة / مشرف التمريض.	26
						(Nurse Manager / Supervisor)	
6	5	4	3	2	1	من المهم أن يقدم المستشفى للموظفين خدمات رعاية الأهالي المسنين ضمن موقعه	27
						خلال النهار.	
6	5	4	3	2	1	أشعر باحترام من قبل الأطباء في مكان عملي.	28
6	5	4	3	2	1	من المهم أن يُخصصِ مكان استراحة خاص لموظفي التمريض.	29
6	5	4	3	2	1	من المهم بالنسبة لي أن تتوفر ضمن المستشفى برامج لمنح شهادات في التمريض.	30
6	5	4	3	2	1	أتلقى الدعم لحضور دورات وبرامج التعليم المستمر.	31
6	5	4	3	2	1	أتواصل بشكل جيد مع الأطباء في مكان عملي.	32
6	5	4	3	2	1	يقدر مدير/ مشرف التمريض إنجازاتي.	33
6	5	4	3	2	1	سياسات وإجراءات التمريض تسهل عملي.	34
						(Nursing Policies and Procedures)	
6	5	4	3	2	1	يوفر قسم الأمن بيئة آمنة.	35
6	5	4	3	2	1	من المهم أن يوفر المستشفى للموظفين خدمات رعاية الأطفال المرضى ضمن موقعه.	36
6	5	4	3	2	1	سأكون قادر على العثور على وظيفتي عينها في مؤسسة أخرى بنفس الراتب والحوافز.	37
6	5	4	3	2	1	أشعر بالأمان من الأذى الشخصي (الجسدي ، العاطفي ، أو اللفظي) في العمل.	38
6	5	4	3	2	1	أعتقد أن وظيفتي آمنة.	39
6	5	4	3	2	1	الإدارة العليا تحترم التمريض.	40
6	5	4	3	2	1	يؤثر عملى على حياة المرضى/ العائلات	41
6	5	4	3	2	1	أتلقى المساعدة النوعية من الموظفين المساعدين غير المجازين (التدبير المنزلي،	42
						المعاون الصحي، مساعد الممرض).	

أسئلة اضافية مبنية على مراجعة الأدب

لكل نقطة أدناه ، قم بمقارنة مستوى موافقتك على مقياس من 1 إلى 6، حيث 1 يعني "أعارض بشدة" و 6 يعني "أوافق بشدة".

شدة	او افق ب			بشدة	اعارض		
6	5	4	3	2	1	يعزز مديري الثقة والمشاركة والتعاون بين أعضاء الفريق ، ويشجع على التفكير في	1
						المشاكل بطرق جديدة.	
6	5	4	3	2	1	تعزز المؤسسة الثقافة الإيجابية في مكان العمل.	2
6	5	4	3	2	1	أنا متحمس لعملي وملتزم تجاه المؤسسة ؛ أضع جهداً إضافياً في عملي.	3
6	5	4	3	2	1	أنا قادر على إكمال جميع المهام المتوقعة مني بالوظيفة وفي الوقت المناسب.	4
6	5	4	3	2	1	يمنحني عملي شعور بالرضى وإحساس بالإنجاز.	5

6	5	4	3	2	1	أعتزم ترك وظيفتي و/ أو الاستقالة من المؤسسة خلال العام المقبل.	6
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						بشكل عام، قم بتقييم حالتك الصحية الحالية على مقياس من 1 إلى 5، حيث 1 تعني "صحة سيئة
	5	4	3	2	1	للغاية" و 5 تعني "صحة جيدة جدًا".