

**An- Najah National University**

**Faculty of Graduated Studies**

**Burnout and Psychological Distress Among Primary  
Health Care Nurses and Midwives in North West Bank**

**By**

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**Supervised**

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Care Nurses and Midwives in North West Bank**

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## الإهداء

الى من ربياني صغيرا .

الى زوجتي الغالية التي شجعتني في رحلتي الى التميز والنجاح.

الى ابنائي الذين كان لوجودهم في حياتي حافزا للكفاح والعطاء.

الى اخي واخواتي اللذين ساندوني ووقفوا الى جانبي .

الى كل من علمني واخذ بيدي، وانا لي طريق المعرفة.

الى زملائي و زميلاتي المرضيين والمرضات والعاملين في مراكز الرعاية الصحية الاولى خاصة زملائي في مديرية صحة جنين الذين كانت ثقتهم منارة لي تضيئ الطريق.

الى كل من ساندني، ووقف بجانبي.

الى كل من كان النجاح طريقه، والتميز سبيله.

الى كل من كان العطاء والتضحية طريقه لخدمت ابناء شعبه.

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## الإقرار

أنا الموقع أدناه، مقدم الرسالة التي تحمل العنوان:

### **Development of an Advertising Media Optimization Model by Employing the Analytic Hierarchy Process**

أقر بأن ما شملت عليه هذه الرسالة إنّما هو نتاج جهدي الخاص، باستثناء ما تمّت الإشارة إليه  
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### **Declaration**

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

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## List Of Abbreviations

|         |                                                                          |
|---------|--------------------------------------------------------------------------|
| ANOVA   | Analysis of variance                                                     |
| APA     | American Psychiatric Association                                         |
| BM      | The Pines Burnout Measure                                                |
| BSI     | Brief Symptom Inventory                                                  |
| BSI-18  | Brief Symptom Inventory-18                                               |
| CBI     | The Copenhagen Burnout Inventory                                         |
| CD      | Chronic Diseases                                                         |
| COPD    | Chronic Obstructive Pulmonary Disease                                    |
| DP      | Depersonalization                                                        |
| DSM-V   | The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition |
| EE      | Emotional Exhaustion                                                     |
| GHQ     | The General Health Questionnaire                                         |
| GHQ-28  | General Health Questionnaire-28                                          |
| HSCL-58 | The Hopkins Symptoms Checklist-58 items                                  |
| ICD-10  | The 10th revision of the International Classification of Diseases        |
| IRB     | Institutional Review Board                                               |
| JD-R    | The Job Demands-Resources model                                          |
| K10     | Kessler Psychological Distress Scale (K10)                               |
| MBI     | The Maslach Burnout Inventory                                            |
| MBI-HSS | Maslach's Burnout inventory Human Services Survey                        |
| MDE     | Major Depressive Episode                                                 |
| MOH     | Ministry of Health                                                       |
| NGOs    | Non-governmental organizations                                           |
| PA      | Personal Accomplishment                                                  |
| PHC     | Primary Health Care                                                      |
| PHCs    | Primary Health Care Centers                                              |
| PMOH    | Palestinian Ministry of Health                                           |
| S-MBM   | Shirom-Melamed Burnout Model                                             |
| SCL-5   | Symptom checklists-5 Items                                               |
| SCL-25  | Symptom checklists-25 Items                                              |
| SMBQ    | The Shirom-Melamed Burnout Questionnaire                                 |
| SPSS    | Statistical Package for Social Science                                   |
| STD     | Sexually Transmitted Diseases                                            |
| TB      | Tuberculosis                                                             |
| UNRWA   | United Nations Relief and Works Agency                                   |
| USAID   | United States Agency for International Development                       |
| WB      | West Bank                                                                |
| WHO     | World Health Organization                                                |

**Burnout and Psychological Distress Among Primary Health Care  
Nurses and Midwives in North West Bank**

**By**

**Ehab Naerat**

**Supervised**

**Dr.Eman Alshawish**

**Abstract**

**Background:** Nurses and midwives in the health care system play an important role that cannot be overemphasized. Nurses work at varying levels of the healthcare system and the nursing profession demands a substantial amount of energy, time and dedication spent in both performing nursing medical tasks, as well as managing patients. This dedication and investment of time can lead to psychological distress and burnout among those who practice the nursing profession.

**Purpose:** This study assesses the prevalence of burnout and psychological distress among primary health care nurses and midwives working in the Northern West Bank (WB).

**Methods:** The method for data collection was a quantitative survey through a self-administered questionnaire. The Maslach Burnout Inventory (MBI) and the General Health Questionnaire (GHQ-28) were used to assess burnout and psychological distress among 295 nurses and midwives working in the Palestinian governmental primary health care centers in the

Northern West Bank. Data analysis was conducted using a variety of inferential and descriptive using the SPSS system version 20.

**Results:** The prevalence of burnout was 10.6% among 207 nurses and midwives who participated in this study. High levels of burnout were identified in 36.7% of the respondents in the area of emotional exhaustion, 14% in the area of depersonalization and 17.9% in the area of reduced personal accomplishment. Meanwhile, 22.6% scored positive in the GHQ-28 indicating presence of psychological distress.

**Conclusion:** Findings from this study contribute to the understanding of the relationship between nurses' burnout syndrome and the level of psychological distress. Results also point out that burnout and psychological distress is not uncommon among nurses and midwives working in primary health care in the Northern West Bank. Nurses' burnout and psychological distress levels seem to have special characteristics relating to the unique composition of health care in the Palestine.

**Recommendation:** Encourage the Palestinian Ministry of Health to communicate with the relevant health professionals to establish regular stress management programs for nurses and other health personnel in the West Bank.

**Keywords:** Burnout, Psychological Distress, Primary Health Care, Nurses, Midwives, West Bank, Palestine, Emotional Exhaustion, Depersonalization, Personal accomplishment, Anxiety, Insomnia, Depression, Somatization.





# **Chapter One**

## **Introduction**

This chapter will discuss the background, study justification, problem statement, research questions, aims of the study, operational definitions, and theoretical framework.

### **1. Background**

In general, nurses are considered one of the most important technical groups working in primary health care centers, and the backbone of the health system (Naylor & Kurtzman, 2010). Baba and Jamal stated that nurses face a high risk for developing burnout due to the nature of their occupation (Jamal & Baba, 2000). Evidence has emerged showing that nursing has become an occupation that is more and more stressful, which, in turn, places nurses at a higher risk of illness (Lunney, 2006).

To provide high quality service and to improve and promote health care that directly affects and enhances patient satisfaction, nurses need to possess certain qualities. They need to be humane, compassionate, culturally sensitive, efficient, and able to work in environments with limited resources and multiple responsibilities. The imbalance in the ability to provide high quality service while simultaneously coping with stressful work environments can lead to burnout and job dissatisfaction (Khamisa et al, 2015).

Yunus and her colleagues emphasized that nursing burnout is related to both nurses being absent from work, and to nurses abandoning their careers. Additionally, they found that burnout results in poor patient care (Yunus et al, 2009). Burnout develops when an individual no longer finds any meaning in his or her work (Malach-Pines, 2000).

Primary Health Care (PHC) is necessary and important health care that is based on practical, scientific, and socially acceptable methods and technology, making healthcare accessible to individuals and families within communities. PHC is the main aspect of the health care system and its first contact point, bringing health care as close as possible to people's homes and work places (De Rivero, 2003). PHC addresses multiple factors which contribute to health, such as access to health services, environment, and lifestyle (Cueto, 2004).

Primary health care centers in Palestine offer primary and secondary health services. In addition, these centers encourage workers to perform many important tasks, such as educating the community on health matters, family health, prenatal, natal, and postnatal care, taking care of children below the age of six and children at school age (usually above six), family planning services, immunizations, home visits for follow-up of drop-out cases, and discovering and referring cases of Tuberculosis (TB), respiratory infections, hepatitis, Sexually Transmitted Diseases (STD), and diarrheal disease. They additionally perform environmental health activities such as inspection of prepared and stored food, sanitation, disposal of solid waste,

and chlorination of drinking waters. Other services include collecting and recording information, mental health services, and dealing with non-communicable disease patients (WHO, 2006).

The West Bank is a landlocked area close to the Mediterranean shoreline of Western Asia, making up the greater part of areas under the Palestinian Authority. It has an area of 5,655 km<sup>2</sup>. In mid-2015, the population of the West Bank was 2,862,485 persons, mainly concentrated in cities, small villages, and nineteen refugee camps. About 939,964 of the population lives in the Northern West Bank, which contains four districts (Jenin, Tulkarem, Tubas, and Nablus), constituting 32.8% of the total West Bank population, and about 20% of the total Palestinian population (Palestinian Central Bureau of Statistics, 2015).

The West Bank was under the British mandate until 1948, then under Jordanian rule until 1967 when it was occupied by Israeli forces, which remained in control until the arrival of the Palestinian Authority (PA) in 1994. In 2000, during the second Intifada (Al-Aqsa), Israel reinstated its military presence in the West Bank and imposed many sanctions on Palestinians. This included distributing checkpoints between cities and villages, preventing employees from reaching their work, and preventing patients from easily accessing hospitals and health care centers. Repeated military invasions of Palestinian areas led to many martyrs and injuries. This military control eventually resulted in the construction of the apartheid

wall, which has caused many Palestinians to become isolated from service centers (Akasaga, 2008, p 7-27).

To deal with the political situation, the Palestinian Authority has prioritized and pushed forward primary health care services. It has done so through health care services provision, facilitating access to different public sectors, as well as guaranteeing equal distribution of services among a multitude of population groups in various areas. Primary health care in Palestine is delivered by a variety of health service providers including the Palestinian Ministry of Health (PMOH), non-governmental organizations (NGOs), the United Nations Relief and Works Agency (UNRWA), the military health service, and the Palestinian Red Crescent. The network of health care centers has been extended throughout Palestine's governorates, from 175 centers in 1994 to 604 in 2014, most of them (418 centers) are part of the governmental sector, and 136 centers are in the Northern West Bank (PMOH, 2015).

### **1.1 Study Justification and problem statement**

Nurses and midwives who work in primary health care centers face a high-risk for developing burnout and psychological distress. Many factors influence the performance of primary health care nurses, and could lead to burnout. These factors include shortages in employment of nurses and midwives, frequent and unforeseeable changes in the type of services provided, instability in defining the target population and the recipients of the services, often due to new programs and instructions which are sent

daily from the higher centers and authorities. Additional factors are the overwhelming requirements of an increased workload, lack of sufficient human resources, dissatisfaction with work environments, lack of opportunity for independent decision-making, and a sense of frustration in duties and unfinished services (Keshvari et al, 2012). In the West Bank, the history of occupation and political conflict, particularly since the construction of the separation wall between Israel and the West Bank, and the tightening restrictions on people's movement, trade and health care access, have all resulted in ever-worsening poverty. These issues have created challenges for nurses and have an adverse effect on physical and mental health (Taha & Westlake, 2016).

In general, there are two central factors have been identified as contributors to burnout in nurses: a lack of supervision and organizational support (Pisanti et al, 2011; Bobbio, Bellan & Manganelli, 2012; Lu, 2008), and work overload (Fichter & Cipolla, 2010; Girgis, Hansen & Goldstein, 2009). Studies revealed that there are other factors that may lead to burnout such as: unsatisfactory relationships with physicians (Malliarou, Moustaka & Konstantinidis, 2008; Kiekkas et al, 2010), fatigue in relation to compassion (Elkonin & Van der Vyver, 2011), certain personality traits and level of empathy (Brouwers & Tomic, 2000; Zellars, Perrewe & Hochwaiter, 2000), low levels of recognition professionally (Lee & Akhtar, 2007), an imbalance between effort and rewards (Pratt, Kerr & Wong, 2009), insecurity in job position (Taylor & Barling, 2004), and losing interest in work (Silvia, et al., 2005).

Burnout has negative consequences on the nursing profession. Researchers have pointed at burnout as a cause for decreasing efficiency, dwindling motivation, dysfunctional behavior, and inappropriate attitudes at work. It has also been associated with higher rates of substance abuse, insomnia, and feelings of physical exhaustion (Naude & Rothmann, 2004). These conditions and consequences of burnout could lead to jeopardizing the social situation and interactions of professionals, both at the workplace as well as in their community, which may negatively affect their social and family lives.

There is an abundance of literature in relation to nursing burnout in primary health centers but nothing has been undertaken in the West Bank. It is especially important to look at the West Bank, because there are many factors which may lead to stress and burnout among Palestinian primary health care nurses including traumatic wounds, psychological trauma sustained by patients under their care after the military invasion in 2000, difficult economic conditions as a result of higher commodity prices due to the economic crisis, irregular payment of salaries from time to time and lack of salary increases, shortage in employees, lack of medical supplies (especially drugs), and political insecurity especially near the apartheid wall and Israeli settlements.

There are many studies about the prevalence of burnout and psychological distress among nurses and midwives working in PHC in different countries, none were done in the West Bank. While there are many studies that focus

on burnout and psychological distress among nurses working in Palestinian hospitals, none of these studies have been conducted in primary health care centers.

Therefore, this study was conducted to reveal the prevalence of burnout and psychological distress among nurses and midwives working in Palestinian governmental primary health care centers in the Northern West Bank (WB).

## **1.2 The aim of the study:**

The aim of this study is to investigate the prevalence of burnout and the level of psychological distress among nurses and midwives working in Palestinian governmental primary health care centers in the Northern WB.

- **The specific objectives of this study are:**

1- **To** identify the prevalence of burnout and psychological distress amongst nurses and midwives working in the PHC centers.

2- **To** investigate the contributions of personal factors to burnout and psychological distress (sex, age, location of residence, marital status, number of children, level of education, monthly income, working hours, experience, and general health status (i.e. suffering from a chronic disease (CD))).

3- To access the relationship between burnout and the level of psychological distress among nurses and midwives working in primary health care centers.

### **1.3 Research Questions:**

1- What is the prevalence of burnout among nurses and midwives working in Palestinian governmental primary health care centers?

2- What is the prevalence of psychological distress among nurses and midwives working in Palestinian governmental primary health care centers?

3- Are there any relationships between burnout and pertinent variables (sex, age, location of residence, marital status, number of children, level of education, monthly income, working hours, experience, and general health status (i.e. suffering from a chronic disease (CD))).?

4- Are there any relationships between the level of psychological distress and pertinent variables (sex, age, location of residence, marital status, number of children, level of education, monthly income, working hours, experience, and general health status (i.e. suffering from a chronic disease (CD))).?

5- Is there a relationship between burnout and the level of psychological distress among nurses and midwives working in Palestinian primary health centers?



## **1.4 Operational and Theoretical Definitions:**

- **Burnout:**

Burnout is a state of psycho-disturbance which primary health care nurses and midwives experience as a result of work pressure and extra burden that usually include stress, apathy, and feeling a lack of achievement. It produces three important outcomes:

“First, Emotional exhaustion – a lack of emotional energy to use and invest in others;

Second, Depersonalization – a tendency to respond to others in callous, detached, emotionally hardened, uncaring, and dehumanizing ways; Third, a reduced sense of personal accomplishment and a sense of inadequacy in relating to clients” (Maslach & Jackson, 1981, P. 99).

In this study, burnout is measured and evaluated through the total score on Maslach Burnout Inventory Human Services Survey (MBI-HSS 22 items).

- **Palestinian Ministry of Health (PMOH):**

The Palestinian Ministry of Health is one of the independent institutions of the State of Palestine, which is working together with all partners to developing the performance in the health sector in order to ensure the professional administration of the health sector and to developing health policies to maintaining a comprehensive and good health services in all public and private health sectors.

- **Primary health care (PHC)**

Primary health care (PHC) is the first level of care provided by health services and systems. It is accessible to all and evidence-based with an appropriately trained workforce made up of teams from a multitude of fields and disciplines, supported by integrated referral systems. The goal of PHC is to prioritize those most in need and acknowledge and handle health inequalities, maximize community and individual independence, participation and control, encourage cooperation and partnering with other fields to enhance public health. A full functioning primary health care system requires promotion of healthy lifestyles, prevention awareness, care and treatment of the ill, development of the community, rehabilitation and advocacy (Cueto, 2004).

- **Psychological distress**

Psychological distress is the emotional condition one experiences when forced to cope with disconcerting, difficult, frustrating or harmful situations (Lerutla, 2000). The symptoms of psychological distress are similar to those of depression, such as feelings of sadness, hopelessness, and loss of interest, as well as anxiety such as feelings of uneasiness, and feeling tense (Mirowsky and Ross, 2002). These symptoms may be associated with somatic symptoms such as insomnia, headaches, and lack of energy, which often differ depending on the cultural context (Kleinman, 1991; Kirmayer, 1989).

In this study, psychological distress is measured and evaluated through the total score on General Health Questionnaire-28 (GHQ-28) for psychological distress.

### **1.5 Theoretical Framework**

Initially, burnout was discussed as a social problem, not as a theoretical concept. Thus, the first conception of burnout came about as a practical rather than academic concern. In this early phase of conceptual development, clinical descriptions of burnout were prioritized. In the later empirical phase, the focus changed to research on burnout that was more systematic in order to assessing the phenomenon .Over the course of these phases, theoretical development has increasingly occurred, which aimed to integrate the growing notion of burnout with other conceptual frameworks (Schaufeli W, Leiter M & Maslach C, 2009).

There are many theories and models that studied the development of burnout amongst professionals, the relationship between burnout dimensions, and the relationship between burnout and other factors affecting it. **In this study, the researcher will mention the models which proposed** by Golembiewski and colleagues, Pines and her colleagues, Leiter and Maslach, Shirom and Melamed, Lee and Ashforth and finally the Job-Demand Resources Model.

### **1.5.1 Golembiewski and colleagues model**

This model states that burnout progresses from depersonalization through lack of personal accomplishment to emotional exhaustion (Golembiewski, Munzernrider & Carter, 1983; Golembiewski , Munzernrider & Stevenson, 1986; Golembiewski & Munzernrider, 1988). This model divided each three dimension of burnout into low and high level. The model established eight phases in the progressive burnout when the workers were crossing these phases. The empirical support of the phase structure is based on a series of pair-wise comparisons contrasting scores of burnout correlation in the eight phases. The empirical support of the phase structure is based on a series of pair-wise comparisons contrasting scores of burnout correlation in the eight phases. The regularity and robustness of the phase model has been tested in different studies (Burke & Deszca, 1986; Golembiewski et al, 1986; Golembiewski & Munzernrider, 1988; Golembiewski, Scherb & Boudreau, 1993). Nevertheless, Leiter mentioned serious limitations in relation to this approach, mainly because it reduces burnout to a single dimension of emotional exhaustion (Leiter, 1993).

### **1.5.2 Pines burnout model**

The Pines burnout model defines burnout as “the state of physical, emotional and mental exhaustion caused by long-term involvement in emotionally demanding situations” (Pines ,& Aronson, 1988, p. 9). This model is not limited delineating burnout only for service-providing professions, but has also been applied to careers in organizations,

employment relationships, marital relationships and even in regards to post-conflict areas and populations (Shirom & Melamed, 2005). Shirom (2010) emphasized that burnout in Pines' model can be considered as an occurrence of symptoms emerging simultaneously, including hopelessness, helplessness, decreased enthusiasm, feelings of entrapment, low self-esteem, and irritability. The Pines' Burnout Measure (BM) is a one-dimensional measure that produces single composite burnouts score (Schaufeli & Enzmann, 1998). Additionally, the BM is described by researchers as an index of psychological strain that includes emotional exhaustion, physical fatigue, depression, anxiety, and reduced self-esteem (Shirom & Ezrachi, 2003).

### **1.5.3 The Leiter & Maslach Model**

Leiter and Maslach developed this model in 1988 (Leiter & Maslach, 1988). This model explains that burnout starts at emotional exhaustion through depersonalization, and progresses to lack of personal accomplishment. Based on a longitudinal study, with a sample of service supervisors and managers, Lee and Ashforth assert that the Leiter and Maslach model is somewhat more accurate than Golembiewski's model (Lee and Ashforth, 1993b). However, in other studies, the Leiter and Maslach model presented some problems when explaining the depersonalization – lack of personal accomplishment link (Leiter, 1988; Holgate & Clegg, 1991; Leiter, 1991; lee& Ashforth, 1993b).

#### **1.5.4 Shirom-Melamed Burnout Model (S-MBM)**

This model was developed by Shirom (1989) and is based on Hobfoll's (1998) Conservation of Resources (COR) theory. Burnout is considered an affective state characterized by feeling depleted of cognitive, emotional and physical energies. The groundwork of the COR theory is based on the following tenets: that people have a basic motivation to retain, protect and obtain what they value. Another way to think of these values is as resources, including energetic, material and social resources. However, this model only refers to energetic resources, including cognitive, emotional and physical energies. In this theory, burnout is a combination of physical fatigue, emotional exhaustion, and cognitive weariness (Hobfoll & Shirom, 2000). When workers do not get a return on invested resources, lose resources, or face the threat of resource loss, stress occurs (Hobfoll, 2001). Rather than occurring as a single-event, stress is instead an unfolding process. Those without a sufficiently strong resource pool end up experiencing cycles of resource loss. The psychological phenomenon of burnout can be found among individuals who go through these cycles of resource loss at work (Shirom & Ezrachi 2003).

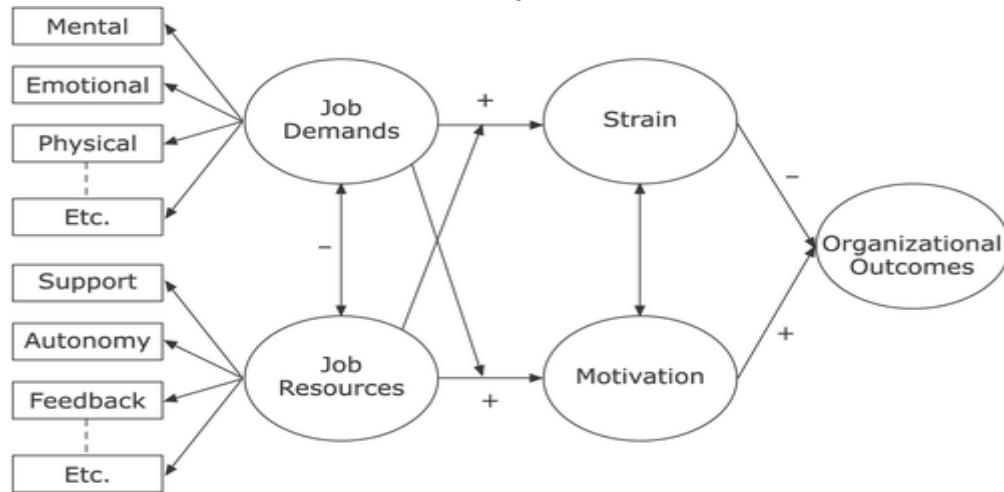
#### **1.5.5 Lee and Ashforth Model**

This model was developed by Lee and Ashforth in 1993. They stated that burnout is the progression from emotional exhaustion to depersonalization and from emotional exhaustion to the feeling of a lack of personal accomplishment. Lee and Ashforth examined a model of management

burnout among 148 supervisors and managers. They found that social support from the organization and supervisors and autonomy over various aspects of work were each inversely related to role stress (role conflict and ambiguity), and that role stress was positively related to exhaustion which was positively associated with turnover intentions. In turn, exhaustion was related to commitment, professional commitment, depersonalization, and turnover intentions. An expected reciprocal relation between exhaustion and helplessness was not found (Lee and Ashforth, 1993a; Lee and Ashforth, 1993b). This model was proposed on the basis of post hoc analysis, and it had no theoretical soundness to release the emotional exhaustion-lack of personal accomplishment link (Lee and Ashforth, 1993b). Some problems come up when explaining this link (lee and Ashforth, 1993a).

### **1.5.6 The Job Demands-Resources Model**

The Job Demands-Resources (JD-R) model was designed by Demerouti et al in 2001. The JD-R model, as shown in Figure (1) below aimed to identify what combination of job resources and demands affect job-related well-being. A combination example would be work engagement and burnout (Bakker & Demerouti, 2007). The main assumption this model makes points to is the effect of limited job resources and high job demands on job strain. Meanwhile, when resources are high, work engagement can be expected to occur (Bakker & Demerouti, 2007).



**Figure (1):** The Job Demands-Resources Model (Bakker & Demerouti, 2007) .

The Job Demand –Resources (JD-R) model suggests that there are two processes involved in the development of burnout. The first process leads to exhaustion through constant overtaxing, as a result of increasingly extreme job demands. The second process leads to further withdrawal behavior as resource scarcity makes meeting job demands even more challenging. Disengagement from work occurs as a long-term consequence of this withdrawal (Demerouti et al, 2001). The model includes three propositions:

#### 1.5.6.1 First proposition

The first proposition considers job resources and job demands as risk factors contributing to burnout and psychological distress, particularly as it relates to job stress (Bakker & Demerouti, 2007). Job demands are defined as social, organizational, psychological, or physical facets of the job demanding physical and/or cognitive and emotional skills, which may have psychological and/or physiological consequences. Meanwhile, job



resources are the physical, social, organizational, or psychological aspects of the job. They are necessary to help handle the demands of the job; however, they are also essential by themselves (Bakker & Demerouti, 2007).

#### **1.5.6.2 Second proposition**

The second proposition of the JD-R model identifies two underlying psychological processes which contribute to job strain and motivation problems (Bakker & Demerouti, 2007). In the first process, the mental and physical resources of workers get depleted due to factors such as health impairment processes, bad job design, and chronic job demands (e.g. work overload, emotional demands). This eventually leads to energy drain and health problems among employees.

The second process focuses on the ways that job resources could contribute to motivating employees, as seen by improved performance, high engagement with the job, and low or reduced cynicism. This motivational role could be inherent, encouraging the growth, learning, and development of employees, or it could be more extrinsic, as the goals of the work cannot be achieved without these resources (Bakker & Demerouti, 2007). In either case, accomplishing work goals leads to satisfying and fulfilling the basic needs of employees. Therefore, it can be said that when job resources are available, work engagement increases. Meanwhile, the lack of job resources is likely to create critical and negative feelings towards the job (Bakker & Demerouti, 2007).

The JD-R model stresses the importance of the relationship between job demands and job resources, and how this relationship contributes to creating job strain and motivation. It is possible to anticipate job strain by considering the different job demands and resources, and how they interact. For example, a variety of job resources contribute to accomplishing goals. On the other hand, what these goals are is often impacted by the available resources (Bakker & Demerouti, 2007).

#### **1.5.6.3 Third proposition**

The last proposition of the JD-R model suggests that job resources become more motivational when employees are faced with higher job demands (Bakker & Demerouti, 2007).

The JD-R model was chosen as the most appropriate for this study, as it is a broader, more inclusive model, that takes into consideration all job demands and resources. It is also a less rigid model that can be customized to become suitable for a variety of settings (Schaufli and Taris, 2014). Additionally, this study takes into account the imbalance between job demands and job resources, and the impact of this imbalance on the levels of strain or motivation among PHC nurses. The JD-R models points out the consequences of burnout and psychological distress on organizational outcomes. This specifically pertains to the impact on quality of PHC service and patient care. For this reason, the researcher aims to determine what the prevalence of burnout and psychological distress is amongst PHC nurses.

## **1.7 Summary**

This chapter has recognized the work related burnout and psychological distress among nurses and midwives and its effect on people and institutions. Many theoretical models of burnout were displayed to elucidate the occurrence of burnout and the factors that may lead to. Pieces of information about the primary health care and about the nursing duties in primary health centers were presented. Data about West Bank, region of study, were given including population of West bank, primary health care systems, and the current political situations. Chapter 2 exhibits the literature review, which will provide a more focused consideration of the prevalence of the burnout and psychological distress regionally and internationally. These data will help to make the best comparison between the results of this study and other studies.

## **Chapter Two**

### **Literature Review**

Nurses make up the largest segment of employees in the global healthcare sector. It is considered a high-risk job for developing burnout because of the stress, danger, exhaustion and frustration that are associated with daily routine nurses constitute (Jennings, 2008).

In this chapter, I will explain the following: the definition of burnout and the factors that associated with it, the definition of psychological distress, and finally, review the studies that explain the prevalence of burnout and psychological distress among nurses, focusing on nurses who work in PHC centers.

#### **2.1 Burnout: Definition, History and Measurements**

##### **2.1.1 Definition:**

Notwithstanding the fact substantial efforts have been made in recent years to clarify the concept of burnout, a unified definition still has not been agreed upon (Shukla & Trivedi, 2008). The literature review presented four main reasons that lead to difficulty in defining burnout. Firstly, there is a lack of agreement on how burnout develops and which stages should be considered in this development (Burisch, 2006), specifically considering the different definitions of burnout available in relevant literature (Zbryrad, 2009). Secondly, the term burnout can include a number of symptoms (Bakker, Demerouti & Schaufeli, 2005), which renders it complicated to

differentiate between burnout and other psychological issues such as stress, compassion fatigue, and depression. Thirdly, burnout is not an event, but rather a process (Halbesleben & Buckley, 2004). In other words, the experienced process is not identical from one person to another; also, the symptoms of burnout differ from one individual to another depending on the environment and circumstances. Lastly, the literature on burnout is lacking in empirical research that differentiates personal accomplishment from the other aspects of burnout (Schaufeli, 2003) due to the complexity of the phenomenon of personal accomplishment and the overlap with other concepts (Burisch, 2002).

Freudenberger first used burnout as a concept in the mid-1970s in the U.S.A., referring to an interaction of interpersonal stressors as reflected on the job (Schaufeli, Leiter & Maslach, 2009). He defined burnout as a condition in which an individual has failed, become worn out or has become exhausted by excessive demands on resources, strength and/or energy (Jacobs & Dodd, 2003). Later, burnout has been defined by Maslach and Jackson as including three facets: depersonalization, a sense of reduced personal accomplishment, and emotional exhaustion (Maslach, Schaufeli & Leiter, 2001).

Freudenberger defines burnout at work as a state of physical and mental exhaustion caused by the individual's professional life (Kraft, 2006). Burnout can also be defined as a psychological syndrome that results from employee exposure to stressful working environments that also are

characterized by a lack of resources and a high level of demand (Bakker & Demerouti, 2007). Burnout has also been defined as a syndrome that occurs in a care provider as a response to long-term emotional stresses that emerge from the social interactions between the recipient of care and the provider of that care (Courage & Williams, 1987).

There are many symptoms for burnout that affect nurses, patients, family as well as other people. In 2001, Bakker et al. found that burnout can be contagious, considering that cynical attitudes and negative feelings can spread from one care provider to another (Bakker et al, 2001). Kotzer et al summarized the symptoms of burnout among nurses as cynicism, frustration, bitterness, depression, negativity, irritability, compulsivity, and anger (Kotzer et al., 2006). In 2004, Taylor and her colleagues summarized other symptoms and signs of burnout as: cynicism, self-criticism, exhaustion, anger, tiredness, weight increase or decrease, symptoms of depression, a lack of sleep, doubt, negativity, breathing difficulty, and irritability, in addition to frequent headaches, feelings of being under siege, risk taking, helplessness, and/or gastrointestinal problems (Taylor & Barling, 2004).

Garrosa and Ladstatter in their book, *Prediction of Burnout: An Artificial Neural Network Approach*, classified burnout symptoms into five categories. The first category is 'affective symptoms', which includes undefined fears and nervousness, depressed mood and tearfulness, decreased emotional control, low spirit and exhausted emotional resources.

Category two is ‘cognitive symptoms’ including feelings of hopelessness and feeling helpless, being forgetful, fear of going crazy, impaired concentration, sense of failure and insufficiency, making a high number of small mistakes in files, letters, or notes, an increase in rigidity in thinking, and impotence. Category three is ‘physical symptoms’, which includes sudden loss or gain in weight, sexual problems, headaches, nausea, dizziness, indefinite physical distress, and the most common symptom of chronic fatigue. The fourth category is ‘behavioral symptoms’, which includes social isolation, withdrawal, increased cigarette and drugs consumption, increased aggression with increasing conflicts at work, perceptions of lack of satisfaction, performance, and ability. The fifth category is ‘motivational symptoms’, which includes loss of enthusiasm, interest, and idealism, lack of motivation, and lastly disappointment, resignation and disillusionment (Ladstätter & Garrosa, 2008).

### **2.1.2 Burnout Measurements:**

After the increasing agreement on the definition of burnout, and what the basis for this condition is, a questionnaire based empirical study of burnout was developed in 1980, and then many questionnaires were created by 38 scholars to estimate the levels of burnout among professionals (Maslach et al, 2001). Four of these questionnaires, the Pines Burnout Measure (BM), the Maslach Burnout Inventory (MBI), the Copenhagen Burnout Inventory (CBI), and the Shirom-Melamed Burnout Questionnaire (SMBQ) will be briefly described.

### **2.1.2.1 The Copenhagen Burnout Inventory (CBI)**

The Copenhagen Inventory (CBI) was developed by Kristensen and her colleagues to address the limitations of MBI. It was designed as part of the PUMA (the Project on Burnout, Motivation, and Job Satisfaction) study which was initiated in 1997 and spanned five years, aiming to explore the levels of burnout among human service workers in Copenhagen (Kristensen, Borritz, Villadsen & Christensen, 2005).

The Copenhagen Burnout Inventory (CBI) has 19 questions, which measures three sub-dimensions of burnout. The first subscale has six items, which is personal burnout, indicating the level of psychological and physical exhaustion and fatigue experienced by an individual independent of work. The second subscale has seven items and addresses work-related burnout and measures the level of psychological and physical fatigue related to work. The third subscale has six items, covers client-related burnout, and measures the degree of psychological and physical fatigue experienced by individuals who work with clients (Kristensen, Borritz, Villadsen & Christensen, 2005).

The Copenhagen Burnout Inventory questionnaire was translated into many languages such as Chinese (Chou & Hu, 2014) and English (Biggs & Brough, 2006). Several studies were done among nurses using this type of questionnaire such as the study by Li-Ping Chou and her colleagues in Taiwan (Chou & Hu, 2014), and by Divinakumar KJ et al. in 2014, who



assessed the level of burnout among female nurses working in Indian government hospitals (Divinakumar KJ et al., 2014).

#### **2.1.2.2 The Shirom-Melamed Burnout Questionnaire (SMBQ)**

The Shirom-Melamed Burnout Questionnaire (SMBQ) was developed as an alternative instrument to measure burnout, and to assess the depletion of individual's energetic coping resources, as it relates to chronic exposure to occupational stress (Shirom & Melamed, 2006 ).

The SMBQ has three subscales: emotional exhaustion, physical fatigue, and cognitive weariness, which add on a secondary “burnout” factor (Shirom, Nirel & Vinokur, 2006). The SMBQ includes 22 items, each item on a 7-point Likert-type scale ranging from 1 (almost never) to 7 (almost always). A mean score that exceeds 4.0 indicates significant burnout symptoms (Soares, Grossi & Sundin, 2007).

#### **2.1.2.3 The Pines' Burnout Measure (BM)**

The Pines' Burnout Measure (BM) scale was developed by Pines and Aronson and is considered the second most frequently used self-reporting instrument to measure the level of burnout among workers (Schaufeli & Enzmann, 1998; De Silva, Hewage & Fonseka, 2009). In this measure, a single score summing up the 21 items of the BM (after recording positively phrased items) is used to evaluate the level of burnout. BM considers three types of exhaustion: emotional exhaustion (Items 2, 5, 8, 12, 14, 17, 21); physical exhaustion (Items 1, 4, 7, 10, 13, 16, 20); and mental exhaustion

(Items 3, 6, 9, 11, 15, 18, 19). The BM asks participants to rate the frequency of experiencing certain work or life situations, and how they feel on the day of the survey or in general. Responses are taken on a seven level Likert scale, which ranges from 1 (never) to 7 (always). This scale is considered to have a high internal consistency, ranging from 0.91 to 0.93.

Schaufeli & Van Dierendonck (1993) described a pattern showing a high correlated between three factors which are: exhaustion (Items 1, 4, 5, 7, 8, 10), a combination of physical and emotional exhaustion, depolarization (Items 9, 11, 12, 13, 14, 16, 17, 18, 21) and loss of motive (Items 2, 3, 6, 19, 20).

#### **2.1.2.4 The Maslach Burnout Inventory (MBI)**

The Maslach Burnout Inventory (MBI) is the burnout measurement tool most in use, valid, accepted, and reliable. It consists of 22 items comprising three subscales and measuring the three different dimensions of the burnout syndrome that are represented by Maslach: emotional exhaustion, depersonalization, and personal accomplishment. Each of these three dimensions is measuring a different aspect.

The first subscale is emotional exhaustion (EE), consisting of nine items to measure feelings of emotional exhaustion due to the work. The second subscale is depersonalization (DP), which consists of five negative items, assessing an impersonal response towards patients. Finally, the third subscale is personal accomplishment (PA), which consists of eight items to

assess feelings of competency and positive accomplishment in the nurses' work with his or her patients.

Each item can be answered on 7-point Likert scale ranging from never (=0) to daily (=6). Three separate scores are calculated to come up with a final result for this inventory, each score representing one of the subscales or the factors mentioned above. A participant is considered to have a high level of burnout when getting high scores on EE and DP, and low scores on PA (Maslach et al., 1986; Qiao & Schaufeli, 2011).

#### **2.1.2.5 The Dimensions of Maslach Burnout Inventory (MBI)**

In order to identify the prevalence of burnout among PHC nurses working in the Northern West Bank, this study will incorporate an analysis of all three subscales of burnout mentioned by Maslach et al. (1996).

##### **2.1.2.5.1 Emotional Exhaustion (EE)**

Emotional exhaustion is defined as feeling overextended and worn out on an emotional level. Employees working with people experience this as feeling they can no longer deal with a client's problem on a psychological level. Another definition of emotional exhaustion is the depletion of a person's physical and emotional resources (Maslach & Leiter, 2008; Taris et al, 2005). A study done by Schaufeli et al. (2008) confirmed that exhaustion is associated with distress and high job demands. The consequences of emotional exhaustion are reflected in both the quality of work life, as well as in the optimal function of the organization (Wright &

Cropanzano, 1998). Additional research points to associations between depression and emotional exhaustion (Hart & Cooper, 2001), physical illnesses and conditions such as colds, gastrointestinal problems, headaches, and disturbed sleep (Belcastro& Hays, 1984), cardiovascular diseases (Toppinen-Tanner et al, 2005), and musculoskeletal diseases (Honkonen et al., 2006).

The implications of emotional exhaustion can be reflected from employees to their intimate partners at home, as well as indirectly impact the partner's well-being (Bakker, 2009). There are also consequences for the employers themselves, as research has shown that emotional exhaustion could result in increased absenteeism (Borritz et al, 2006).

Nurses often experience a depletion of emotional resources (or emotional exhaustion) when they also have a weak sense of coherence. In such cases they find it difficult to cope with certain circumstances and tend to perceive situations as stressful. Depleted energy levels caused by burnout may cause nurses to seek coping strategies like focusing on and venting of emotions (Van der Colff & Rothmann, 2009). Additionally, research concluded that the transfer of feelings of emotional exhaustion as mentioned above is more likely to occur when teams have high cohesiveness and social support. This could ultimately influence organizations negatively (Westman et al, 2011).

#### **2.1.2.5.2 Depersonalization (DP)**

The second aspect of burnout is seen when employees form negative feelings and cynical attitudes towards their clients and is called

depersonalization. This component showcases the interpersonal aspect of burnout, and it refers to attitudes and responses that are incredibly distant, impersonal, and detached towards different parts of the job (Maslach & Leiter, 2008; Taris et al., 2005). Maslach et al. (1996) explained that situations where the focus is on the current problems of a client (psychological, social, or physical), where there are no clear and easy answers can be particularly frustrating for workers.

#### **2.1.2.5.3 Lack of Personal Accomplishment (PA)**

Lack of or reduced personal accomplishment (inefficiency) is the impulse to give oneself a negative evaluation, particularly when it comes to one's work with clients. Employees may feel disgruntled with themselves, and may experience dissatisfaction with their personal achievements in the job (Maslach et al., 1996). Taris et al. (2005) describe this component as a lack of belief in one's own ability to accomplish tasks (lack of self-efficacy), especially when it comes to workers' performance at the job. This aspect showcases the impact that burnout has on self-evaluation (Maslach & Leiter, 2008), which is important as feelings of personal accomplishment can offer an insight on patients' satisfaction with their care (Vahey et al, 2004).

## **2.2 Psychological distress: Definition and measurements**

### **2.2.1 Definition:**

Psychological distress is defined “as continuous experience of unhappiness, nervousness, irritability and problematic interpersonal relationships” (Chalfan et al, 1990). It is often also defined as a condition of emotional suffering, the symptoms of which are similar to those of depression, such as feelings of sadness, hopelessness, and loss of interest, as well as anxiety such as feelings of uneasiness, and feeling tense (Mirowsky and Ross, 2002). These symptoms are sometimes accompanied by physical symptoms and conditions, such as insomnia, headaches, and lack of energy, which often differ depending on the cultural context (Kleinman, 1991; Kirmayer, 1989). Other criteria are sometimes used in defining and evaluating psychological distress, however, there is no consensus around this additional criterion. Proponents of the stress-distress model consider exposure to a stressful event as the most critical feature of psychological distress. They assume that this stressful event in turn destabilizes the physical or mental health of an individual, and results in hindering the ability to adequately cope with stress. The final result of this ineffective coping is further emotional disturbance (Horwitz, 2007; Ridner, 2004).

Psychiatric nosology is unclear on how to classify psychological distress, and this topic has been widely debated in the scientific literature. This is especially considering that psychological distress is a condition of

emotional disturbance, which has serious implications on the social functioning and the daily lives of individuals (Wheaton, 2007).

Psychological distress is often described as a non-specific mental health problem (Dohrenwend and Dohrenwend, 1982). However, Wheaton (2007) argues that this ambiguity in the definition of psychological distress needs to be addressed and qualified, especially since psychological distress can be seen through the symptoms of anxiety and depression. By extension, the criteria and scales used in evaluating psychological distress, depression disorders, and general anxiety disorder share multiple commonalities. Therefore, while psychological distress is a distinct phenomenon from these psychiatric disorders, they are not completely independent of each other (Payton, 2009). This association between psychological distress and depression, and to a lesser degree, anxiety, suggests the possibility that distress may pave the way to depression if untreated (Horwitz, 2007).

Finally, Kirmayer (1989) note that across the world, somatic symptoms seem to be the most shared expressions of psychological distress. However, the type of these somatic symptoms varies across cultures. For example, Chinese people often relate different emotions to specific organs, whereas each emotion can cause physical damage to a specific organ. Anger is associated with the liver, worry with the lungs, and fear with the kidneys (Leung, 1998). For Haitians, depression is seen as an implication of a medical condition, such as anemia or malnutrition, or as a result of worry. Thus, somatization is associated with mood disorders, and is often

expressed by feeling empty or heavy-headed, insomnia, fatigue or low energy, and poor appetite (Desrosiers and St Fleurose, 2002). Along these lines in Arab culture, depression and somatization are often closely related, and often symptoms of depression are experience on a physical level, especially involving the chest and abdomen (Al-Krenawi and Graham, 2000).

Many studies explored the impact of working conditions on levels of psychological distress among employees. These studies indicated a consistent association between psychological distress and increasing job demands, lack of support at work, extended working hours, low control at work, and job insecurity. Other studies found a relationship between psychological distress and issues of role ambiguity, interpersonal conflicts, low organizational justice, and bullying, threats, and violence at work (Bültman et al, 2001; Arafa et al, 2003; Elovainio et al, 2002; Ferrie et al, 2002).

### **2.2.2 Measurements:**

There are standardized scales used to characterize and assess psychological distress. These can either be self-administered, or can be done with the help of a research interviewer or a clinician. Theoretically, scales should be developed while considering a comprehensive definition of construct they are attempting to assess. This is a problem for a construct such as psychological distress, because of the diversity of its meanings for researchers. This has resulted in the development of several scales,



measuring a variety of somatic, behavioral, and psychological symptoms, without a clear conceptual basis. These scales are often used to assess “psychological distress”.

There are two important issues that one must pay attention to regarding the evaluation of psychological distress. Firstly, the window of time used to detect symptoms of distress is key. This time can range from the past 7 days to the past 30 days depending on the scale used. The second issue is the cut-off point used to differentiate between individuals with lower or higher level of distress. Most studies handle psychological distress as a continuous variable.

Several scales were used to assess the level of psychological distress among the community of nurses. In the following, three types of scales were mentioned: (a) the General Health Questionnaire; (b) the Kessler scales; and (c) the scales derived from the Hopkins Symptom Checklist. These scales share several items in common.

#### **2.2.2.1 The General Health Questionnaire (GHQ)**

Initially developed as a screening tool to detect individuals who are likely to have or are at high-risk for developing psychological disorders, the questionnaire has 28-items to measure emotional distress in medical settings. The GHQ-28 is divided into four subscales based on factor analysis. These are: somatic symptoms (items 1–7); anxiety/insomnia (items 8–14); social dysfunction (items 15–21), and severe depression

(items 22–28) (Sterling, 2011). To provide insight into each area, the next section will review the definition of these problems and their prevalence.

#### **2.2.2.1.1 Social dysfunction**

Social dysfunction is a general term that describes a variety of emotional problems that are experienced mostly in social situations. Social dysfunction is behavior that is inappropriate to the circumstances, which can be manifested as a lack of affective contact, a disturbance in participating in social life, or detachment from social life altogether (Stravnski & Shahar, 1983).

Social competence and social adjustment have been defined through various psychological models. Stranghellini and Ballerini (2002) have defined some of these models:

- Behavioral functionalism defines social competence as the capability to adapt the necessary behavior in order to satisfy a person's goals and needs.
- Structural functionalism adopts the disability model and indicates that the key aspect in social adjustment is participating in social life in ways that is expected by other people. That is, to perform one's social roles according to the expectations and rules defined by the social context.
- Cognitivism is the ability to predict, understand, and respond in the right way to behaviors, feelings, and thoughts of others in contexts that are socially diverse.

### **2.2.2.1.2 Major Depression**

Depressive disorders are common mental disorders across all world regions. They are reoccurring disorders, often associated with reduced quality of life and role functioning mortality, and medical morbidity (Knudsen et al., 2013; Greenberg et al., 2015). In the United States, depressive disorders are a main cause of disability for individuals 15–44 years of age, which translates as almost 400 million disability days taken away from work per year. This is greater than most other physical and mental conditions (WHO, 2008; Merikangas et al., 2007).

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) (American Psychiatric Association, 2013) defines major depressive illness as having five or more symptoms existing during two weeks time period. Additionally, three general criteria need to be met for this diagnosis: (a) the symptoms occur daily, (b) the symptoms constitute a change from previous condition and function, and (c) one of the symptoms needs to be depressed mood, loss of interest or loss of pleasure. This can range from mild to severe, and is often episodic. However, it can also be recurrent or chronic.

Depression can include feelings of sadness or feeling emotionally numb, reduced interest and pleasure in usual activities, insomnia or hypersomnia, psychomotor agitation or retardation, feelings of worthlessness, fatigue or loss of energy and excessive or inappropriate guilt, which may lead to the individual becoming delusional. Additional symptoms can be constantly

thinking about death, imagining suicide repeatedly without creating a specific plan, having a plan for committing suicide, or an actual suicide attempt. The symptoms of depression can cause clinically significant impairment in occupational, social or other areas of functioning, or distress. Episodes constituting these symptoms must not be attributable to another medical condition or to the physiological effects of a substance to be considered.

Moussavi et al. (2007) looked at data from ICD-10 major depressive episode (MDE) in WHO World Health Survey from 60 countries. Twelve-month prevalence averaged 3.2% in participants without comorbid physical disease and 9.3% to 23.0% in participants with chronic conditions.

In Palestine, Madianos et al. (2011) showed in their study that the lifetime and one-month prevalence of major depressive episode (MDE) among 916 adult Palestinians aged between 20-70 years selected during Al-Aqsa Intifada was 24.3% and 10.6%, respectively. They explained that about of 76% of males and 60.3% of females who were identified as having depression reported that they had recently wanted to commit suicide.

#### **2.2.2.1.3 Anxiety**

According to American Psychological Association Anxiety disorders are a category of disorders that has primary symptoms of excessive, inappropriate or abnormal worry. These disorders are characterized by symptoms such as feeling wound-up or tense, concentration problems, irritability, difficulty controlling worry, easily becoming fatigues or worn-

out, and/or significant tension in muscles. Many anxiety disorders may develop early in a person's life and can continue to be an issue if not treated. These types of disorders are more present among females than males (approximately 2:1 ratio). The DSM-V identifies various types of anxiety disorders, which include phobias, panic disorder, post-traumatic stress disorder, generalized anxiety disorder and obsessive-compulsive disorder (American Psychiatric Association (APA), 2013).

#### **2.2.2.1.4 Somatic Complaints**

The Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition (DSM-V) category of Somatic Symptom Disorders and Other Related Disorders presents a category of disorders characterized by thoughts, feelings, or behaviors related to somatic symptoms. This group includes psychiatric conditions due to the fact that the somatic symptoms are excessive for any medical disorder that may be present (American Psychiatric Association (APA), 2013).

For medical providers, somatic symptom disorders and related disorders represent a particularly difficult challenge. Clinicians are responsible for estimating the relative contribution of psychological factors to somatic symptoms. When a somatic symptom becomes the center of attention, or the symptom is causing distress or dysfunction, then there is a chance that a somatic symptom disorder is present (American Psychiatric Association (APA), 2013).

The DSM-5 includes 5 specific diagnoses in the Somatic Symptom Disorder and Other Related Disorder category. Specific somatic symptom disorders diagnoses include (1) somatic symptom disorder, (2) conversion disorder, (3) psychological factors affecting a medical condition, (4) factitious disorder, and (5) other specific and nonspecific somatic symptom disorders.

The following criteria are used to diagnose somatic symptom disorders:

- a. There are one or more somatic symptoms which are upsetting or stressful, and represent a hindrance for the performance of daily activities.
- b. The somatic symptoms stir disproportionate thoughts, feelings, and behaviors related to the symptoms or associated health concerns. This is exhibited by at least one of the following:
  - 1. Constant and excessive thoughts about the seriousness of one's symptoms.
  - 2. Persistently high level of anxiety about health or symptom
  - 3. Excessive time and energy devoted to these symptoms or health concern.
- c. While any of the somatic symptoms may be transient, the state of being symptomatic is persistent (typically more than 6 months) (American Psychiatric Association, 2013).

Somatization is conceptualized in three ways: (a) medically unexplained symptoms, (b) hypo chronic worry or somatic preoccupation, or (c) as

somatic clinical presentations of affective anxiety or other psychiatric disorder (Kirmayer & Young, 1998). These types of symptoms can be seen as a medium for expressing social discontent, an indication of disease, a cultural means of expressing distress, or an indication of intra-psychic conflict (Kirmayer & Young, 1998). Singh (1998) describes some of the main symptoms of somatization: headaches, gastrointestinal complaints, back, chest and abdominal pain, dizziness, abnormal skin sensations, sleep disturbances, painful menstruation, fatigue, palpitations, and irritability.

The prevalence of somatization disorders was 3.5% and 18.4% depending on the country and the medical setting (Boeckle et al, 2016). In a study from the Netherlands, there was a prevalence of somatoform disorders of approximately 16.1% among the PHC patients (DeWaal et al, 2004).

A study conducted in the United Arab Emirates (UAE) on a sample of primary health care patients showed that the estimated prevalence of somatization disorder was 48% of the total psychiatric patients identified and 12% in the general population (El-Rufaie & Daradkeh, 1996).

Kane (2009) found that incidence of psychosomatic disorders such as back pain, forgetfulness, acidity, stiffness in neck and shoulders, anger, and worry were significantly higher in prevalence in nurses who showed higher levels of stress. These were often associated with not finishing the work on time due to staff shortage, insufficient pay, and conflict with patients' relatives.

In Palestine, a cross-sectional study by Jaradat et al (2016) examined the associations between stressful working conditions and psychosomatic symptoms among Palestinian nurses. Jaradat et al (2016) found that 45.3% of females who reported high stressful working conditions also reported back pain, while only 31.3% males reported similarly. Additionally, 36.8% of the women who had high levels of perception of stressful working conditions also reported having tension headaches, whereas only 26.9% of the men surveyed reported similarly. On the contrary, women who had high perceived stressful working conditions were less likely than men to report sleeping problems (37.9% of the sampled men and 19.8% of the sampled women), and 23.9% of these men and 17.5% of these women reported stomach acidity.

#### **2.2.2.2 The Kessler scales**

More recently, another scale has been developed to measure psychological distress. The K10 scale (Kessler et al. 2002) is a 10-item, one-dimensional scale that was specifically developed to evaluate psychological distress in population surveys. It was designed with item response theory model in order to maximize the precision and sensitivity in the clinical range of distress, and to insure this sensitivity is consistent across gender and age groups (Kessler et al. 2002). The scale assesses the frequency with which respondents experienced anxio-depressive symptoms (e.g. sadness, hopelessness, nervousness, restlessness, and worthlessness) over the past 30 days. The items are each scaled from 0 (none of the time) to 4 (all of the



time). The total score is used as the final assessment of psychological distress. There is also a 6-item version of this scale called the K6 scale. Kessler et al, recommend this shorter version, considering it performs just as well as the K10 (Kessler et al., 2010).

### **2.2.2.3 The Symptom checklists**

Multiple symptom checklists and inventories are available and frequently used, however, they were all essentially developed from the Hopkins Symptoms Checklist-58 items (HSCL-58) (Derogatis et al., 1974). Some of these checklists include the Brief Symptom Inventory (BSI) (Derogatis, 1993; Derogatis and Melisaratos, 1983), the Symptoms Checklists-25 (SCL-25) (Derogatis et al, 1974), the Symptoms Checklists-5 (SCL-5) (Tambs and Moum, 1993) and the updated Brief Symptom Inventory-18 (BSI-18) (Derogatis, 2001). While the BSI, SCL-25 and the SCL-5 focus on anxiety-depressive symptoms, the HSCL-58 covers a wider array of symptoms. The BSI includes 18 items that were rated on a 5-point scale (0 to 4). This scale has a specific time factor, as it includes symptoms experienced during the previous seven days. The three-factor characteristic of the BSI-18 is sometimes supported, but one-factor and four-factor structures have also been identified (Andreu et al, 2008; Prelow et al, 2005). This instability in the structure of factors poses a challenge, as it suggests issues of measurement invariance. The SCL-25 emphasizes the symptoms experienced during the previous 14 days and it has been used in various

research (Mollica et al., 1987; Hoffmann et al., 2006; Thapa and Hauff, 2005; Rousseau and Drapeau, 2004).

## **2.3 Burnout, Psychological Distress and Related Factors among Nurses**

According to different studies, many factors lead to developing burnout among the nurses. These factors were categorized as the following: personal characteristics of the workers, job setting, supervision, peer support and agency policies and rules, as well as work with individual clients (Pines et al, 1981). The next section will explore in depth these categories, and explain the different reasons for developing burnout among nurses.

### **2.3.1 Workload**

One of the main factors contributing to the burnout among PHC nurses is extensive or heavy workloads. This is defined as an increase in job demands due to the integration of PHC services, and is often associated with burnout as well as job dissatisfaction (Rossouw et al., 2013; Ten Brummelhuis et al., 2011). There are three categories of job demands, which are quantitative, emotional, and cognitive (Bakker et al., 2011).

Van der Colff and Rothmann, (2009) identified other stressors that might result in burnout, such as demands from clients and patients, overwhelming and unnecessary administrative duties, and the health risks associated with being in contact with patients. In Shanghai, Xie, Wang, and Chen (2011) concluded that 74% of nurses had high levels of burnout. This was strongly

associated with stressful work environments, and work-related stress (Xie, Wang & Chen, 2011).

Maslach et al. (2001) posited that workload is the most important factor contributing to the exhaustion resulting from burnout, and one of 6 factors contributing to mismatch. A workload mismatch generally occurs when the wrong kind of work is assigned to an individual, or when the individual lacks the skillset needed to accomplish certain tasks. Many studies identified workload (or work overload) as a main source of stress and burnout among nurses (Aiken, 2003; El-Jardali et al., 2011).

There are significant associations between emotional exhaustion and workload (Cohen et al., 2004). Workload has also been proven to be a predictor for job burnout (Embriaco et al, 2007). Demerouti, Nachreiner, Bakker, & Schaufeli (2000) associated high levels of job demand to emotional exhaustion, and disengagement to a low level of resources in a study of 109 nurses in Germany. Flynn et al. (2009) posited that nurses with the largest workloads were 5 times more likely to have burnout compared to nurses with smaller workloads (Flynn et al., 2009).

Some of the administrative aspects of the nursing profession, such as paperwork, and the time-consuming process of service registration, greatly contribute to stress and burnout among PHC nurses. These administrative tasks increase the workload leading to reduced care times, decreased service quality, increased waiting times for customers, and increased likelihood of nurses making mistakes (Keshvari et al., 2012). It is therefore

crucial for organizations to protect their employees' health by avoiding excessive levels of job demands (Xanthopoulou et al., 2007).

### **2.3.2 Job Control**

This aspect of the job handles the power dynamics in work relationships, areas of responsibility and lines of authority. This is a complex aspect, as it is often informed and influenced by cultural norms, and different communication styles. For nurses, a sense of control or autonomy over how their job is performed plays a crucial role towards achieving higher job satisfaction (Wilson et al, 2008; Hoffman & Scott, 2003). Mismatches in control tend to be related to two aspects of burnout: inefficiency and reduced accomplishment. A mismatch in control arises when workers do not have adequate control over the resources needed to accomplish their tasks. It can also indicate that they do not possess the adequate authority to do their tasks in what they believe to be the most efficient way. Despite the importance of this sense of control, many nurses seem to lack this autonomy. Erickson & Grove (2007) found that 40% of nurses reported the feeling of powerlessness related to implementing changes necessary for high-quality and safe service.

Having control over the amount of workload can greatly improve employees' work life (Leiter, Gascón & Martínez-Jarreta, 2010). Van Yperen & Hagedoorn (2003) noted that a combination of high job demands and a lack of control contributed to high job strain. Additionally, Taris et al. (2005) further confirmed these results when they found that objectively

measured job control can be systematically associated with levels of burnout. This means that job control becomes even more important with increased demands, and can help in preventing over exertion (Van Yperen & Hagedoorn, 2003).

Nurses who feel they have insufficient control in their work environment are at a higher risk for burnout (Browning et al, 2007). In 2014, Portoghese et al. found that there was a positive association between workload and exhaustion among health care workers. This relation was strongest when job control is lower, leading to burnout (Portoghese et al, 2014).

### **2.3.3 Management Problems**

Managerial issues are another important factor that contributes to burnout and psychological distress. There are tangible managerial steps that organizations can take in order to reduce work-related stress, which is often caused by insufficient resources and excessive workload. These steps include establishing both organizational and interpersonal support for employees, such as having authentic leadership and psychological capital in addition to effective support and performance of managerial tasks by employers, supervisors and other professional staff (Spence Laschinger et al., 2014; Kekana et al., 2007). Here having job control becomes an important factor again, as it plays a main role in the relationship between employees and their immediate supervisors, as well as employees' experiences in accessing organizational justice/fairness (Leiter et al., 2010). Employees who are involved in the decision-making process and who have

autonomy in the workplace experience a more just work life, and build better, more satisfying relationships with their supervisors (Leiter et al., 2010).

#### **2.3.4 Instability and frequent changes**

Keshvari et al. explored another factor impacting PHC nurses, which is instability. They found that frequent and unexpected changes in the type of service to be provided, and the lack of clarity in defining the target population and service recipient, often due to new programs and instructions sent daily from higher centers and authorities, causes instability, turbulence, and exhaustion among health care providers. This can eventually lead to job dissatisfactions and burnout among PHC workers (Keshvari et al., 2012).

#### **2.3.5 Low Levels of Job Satisfaction and Deprivation of Professional Development**

The personal characteristics of workers impact how they cope with and adapt to their work environments (Xanthopoulou et al., 2007). However, there are other factors that contribute to having poor job satisfaction, including limited potential for career advancement, and safety concerns (Van der Westhuizen, 2008). A prospective cohort study found a relationship between poor job satisfaction and a higher potential for illness-related absents. The study suggested that illness-related absents among nurses can be reduced or prevented if their job satisfaction improves (Roelen et al., 2012).

Many PHC nurses, especially those working away from the main centers, feel they are deprived of professional development. This is because of the lack of opportunity for acquiring new skills, lack of appropriate conditions to update scientific knowledge, and lack of opportunity for independent decision-making. This leads to job dissatisfaction and potentially, burnout (Keshvari et al., 2012).

### **2.3.6 Lack of Motivation and Rewards**

This factor revolves around issues of recognition for contributions, security, feelings of belonging, adequate salary, and opportunities for advancement. Mismatch occurs when there is a lack of appropriate reward for the work nurses do. This lack of reward can lead to feelings of inefficacy. In a study of 204 nurses from a teaching hospital, Bakker, Killmer, Siegrist & Schaufeli (2000) showed that ERI (Effort-Reward Imbalance) was associated with depersonalization, emotional exhaustion, and reduced personal accomplishment, specifically among nurses who naturally expend extra effort and energy because of the nature of their work.

Work environments with insufficient resources and unmotivated co-workers can cause employees to experience withdrawal, and a lack of interest in their work (Van der Colff & Rothmann, 2009). This poor attitude and work spirit can lead to burnout among staff (Maslach et al., 1996). However, job strain and low morale can be avoided when both job control and job social support are available (Van Yperen & Hagedoorn,

2003). In addition, participation in the decision making makes employees feel that they are appreciated, and that their efforts are being recognized by the organization (Bakker et al., 2011).

In Palestine, nursing salaries are low, and while job descriptions exist, they are often mismatched with the actual requirements of the job, and need to be updated or revised. In addition, there is no established performance evaluation system or assessment reviews which could provide nurses with a clearer understanding of their duties. Additionally, there isn't a defined career pathway for further opportunities, monetary incentives, or promotions (USAID, 2010).

### **2.3.7 Work-home and Family-work Interference**

Work-home interference is a term used to refer to working parents who experience challenges arising from both work and family demands. This interference is usually caused by a combination of high job demands and low job resources (Bakker, Ten Brummelhuis, Prins and Van der Heijden, 2011). It also occurs when employees are overburdened by excessive workload, and have emotionally and cognitively demanding tasks. Van Der Heijden et al (2008) noted that high job demands and high work-home interference were associated with a general decline in nurses' health.

Workers family members who arrive at the work place already busy worrying and burdened about family matters are more vulnerable to burnout (Baumann, 2008). Family matters can affect the work environment, and interfere in the performance of both the individual with



family problems, as well as their co-workers. When this interference happens, workers become more likely to change their jobs or to take frequent sick leave (Ten Brummelhuis et al., 2010).

### **2.3.8 Lack of Organizational Support**

Organizational support, or lack thereof, is a crucial issue for organizations, as it plays a pivotal role in preventing the development of disengaged and depersonalized feelings towards patients (Van der Colff & Rothmann, 2009). Increasing supportive interactions among co-workers, and between workers and supervisors can greatly increase the intrinsic motivation of workers (Van Yperen & Hagedoorn, 2003). On the other hand, the lack of resources such as proper supervision and support, as well as development potential and involvement in the decision-making can exacerbate work-home interference (Bakker et al., 2011). This can increase the potential for developing burnout amongst workers. Lack of organizational support and coherence can be a predictor for elevated levels of emotional exhaustion and depersonalization (Van der Colff & Rothmann, 2009).

This type of social support within organizations enables employees to accomplish their goals, and prevents the potential pathological consequences of stressful environments and events. Receiving accurate and specific information about tasks and duties enhances the performance of both employees and their supervisors, especially when this is done constructively (Bakker & Demerouti, 2007).

According to a 2010 USAID report, nurses in Palestine working in governmental sectors have no equitable position of authority in the Ministry of Health structure. Nurses overall have little to no decision-making capacity in the myriad of healthcare matters at a Ministry of Health level, including reform initiatives. This leaves nurses with little control over designing a meaningful role for their profession within the healthcare sector (USAID, 2010).

### **2.3.9 Inadequate Human Resources and Lack of Equipment**

According to interviews between a USAID team and Palestinian MOH nursing leaders, and based on published health assessments, the West Bank suffers from a shortage in nurses, particularly, a severe shortage of midwives (USAID, 2010). In 2013, Umro introduced the lack of equipment as one of the most important factors for job stress among Palestinian nurses (Umro, 2013).

The shortage of human resources and medical equipment among primary health care nurses is considered as a very important contributor to emotional and physical strain (Van der Colff & Rothmann, 2009; Mohale & Mulaudzi, 2008). Shortage of human resources and inadequate medical equipment exposes nurses to many risks, which can result in nurses considering alternative working environments or careers. This in turn intensifies the workload for the remaining personal, exposing them to even greater risks (Oosthuizen, 2009).

Shortage in human resources can also be a result of frequent absents among workers. Absence does not only refer to sick days, but also includes late arrival times, early leaving times, extended tea or lunch break, handling of private matters during business hours, long toilet breaks, feigned illness, and unexcused absences (Motsepe, 2011). This poor work habits can further exacerbate the intensity of the workload on dedicated personnel who are at risk of developing burnout.

### **2.3.10 Unproductive Co-workers**

Absenteeism is defined as a worker's purposeful or recurrent absence from work. High job demands are considered as a unique predictor of burnout (i.e., exhaustion and cynicism), indirectly of absence duration, and of loss of productivity. Meanwhile, job resources are considered as a unique predictor of organizational commitment, and indirectly of absence spells (Bakker et al, 2003; Bergh & Theron, 2003; Maslach *et al.*, 1996). The personal and managerial styles of workers, as well the organizational environment are reasons that can contribute to high levels of absenteeism (Nyathi & Jooste, 2008; Belita et al., 2013). This indicates that burnout can be exacerbated as a result of absenteeism, as it results in an increased workload on coworkers.

### **2.3.11 Communication Problems**

One of the causes of strain among primary health care nurses is complicated and unreliable communication networks and referral systems (Baloyi, 2009). A lack of quality communication between staff and their

management has a negative impact on job satisfaction in nurses. It is important for managers to enhance communication satisfaction at every level of service, in order to improve nurses' job satisfaction levels, and create a positive working environment (Wagner et al., 2015). Lapeña-Moñux et al. suggest that a mechanism for improving interpersonal skills can be to clearly define the tasks of each professional role. Additionally, it is important to develop the communication skills needed for workers to express problems to managers and colleagues, and to enable them to ask for help when needed (Lapeña-Moñux et al., 2014).

### **2.3.12 Personal Factors beyond the Workplace**

Personal factors include a person's ability to deal with home circumstances, stress, and the work and family demands (Baumann, 2008). A study by Shin Ang and his colleagues proved the importance of the role of personality traits in influencing burnout. Strong associations were found between different personality traits and all three dimensions of burnout. They concluded that high scores on openness, conscientiousness, agreeableness, and extraversion had a protective effect on burnout (Ang et al., 2016).

### **2.3.13 Financial Concerns**

The fairness of salaries (Hall, 2004; Erasmus and Brevis, 2005; Kekana et al., 2007; Lawn et al., 2008), the ability to budget properly, and other financial constraints (Baloyi, 2009) can impact levels of job satisfaction among PHC workers.

## **2.4 Prevalence of Burnout and Psychological Distress among Nurses and midwives**

Nursing can be a profession that deals with the social aspects of health and illness, and can cause stress, which can potentially lead to job dissatisfaction and burnout (Sabbah et al, 2012). Many studies explored the different stressors which could lead to burnout and distress, such as downsizing and organizational restructuring, insufficient salaries, lack of social appreciation, high work demands and workload, lack of preparation to deal with the emotional needs of patients and their families, as well as exposure to death (McVicar, 2003).

Baumann explained that the nurses working in primary health care facilities are the most at risk employees for burnout, as a result of increasing job demands. In order to fully understand burnout as a psychological phenomenon, the dimensions and predictors of burnout, as well as factors contributing to burnout need to be analyzed. For example, factors such as unpleasant work environments may aggravate the prevalence of burnout among primary health care nurses (Baumann, 2007).

Several cross-sectional studies indicate that nurses worldwide belong to a high-stress occupation (Baba et al., 2013; Bourbonnais, Comeau, Vezina, & Dion, 1998; Lam-bert & Lambert, 2001; McGrath, Reid, & Boore, 2003; Pisanti et al, 2011). Using a General Health Questionnaire, between 27% and 32% of the nurses in these studies scored a level of stress which is

markedly higher than in the general population (15%-20%) (Knudsen, Harvey, Mykletun, & Øverland, 2013).

Keshvari et al (2012) indicated in a qualitative study that all health care providers in the rural health centers in Isfahan (including a family physician, midwives, and health workers) experienced feelings of instability due to frequent changes and the lack of purpose in the organization. They also felt they were being excluded from participation in the development of programs, and they considered the laws to be rigid, inflexible, and inconsistent, which hindered the improvement of community conditions. Additionally, they felt they were pressured and stressed due to unbalanced workload and manpower, frustrated in performing tasks, and felt deprived of professional development. They also experienced a sense of identity threat and having low self-understanding. The researchers concluded that these themes represent the indicators for burnout in PHC centers (PHCs).

In a cross-sectional study to assess the occurrence of burnout among 146 PHC nurses in the Eden District of the Western Cape (South Africa), Anna Muller clarified that PHC nurses experienced high levels of burnout, and all nurses working in PHC facilities had an equal chance to develop burnout. This study indicated that work pressure, high workload, huge job demands, lack of organizational support, and management problems were rated as the main factors contributing to burnout in PHC nurses (Muller, 2014). Khamisa et al. (2015) found that staff issues that contained

(staff management, inadequate and poor equipment, stock control, poorly motivated coworkers, adhering to hospital budget and meeting deadlines) and contributed to work related stress are significantly associated with all MBI subscale, and found that emotional exhaustion were significantly associated with all GHQ-28 subscales, personal accomplishment were significantly associated with somatic symptoms and depersonalization were associated with anxiety and insomnia.

Cagan et al (2015) found that the emotional burnout score was significantly high among health workers (most of them were midwives and nurses) who (a) worked in family health centers and community health centers; or (b) perceived their economic status to be poor; or (c) those that had not personally chosen the department where they worked. They additionally found that the personal accomplishment scores of workers who are aged 40 and above were significantly higher than younger workers.

Three studies have been reviewed in Brazil. The first study was done by Silva et al (2015) in the city of Aracaju, and included 194 highly educated primary health care professionals, most of whom were female graduates or married nurses with children. The second study was done Homles et al (2014) in João Pessoa, and included 45 primary health care nurses, all female. The third study by Merces et al (2016) included 189 primary health care nursing practitioners from nine municipalities in Bahia, Brazil. The results of the first study highlighted that 43% of the participants had high

levels of emotional exhaustion, 17% experienced high depersonalization, and 32% had a low level of professional achievement (Silva et al, 2015).

The second study highlighted that 53.3% of the participants had high levels of emotional exhaustion, 40% experienced depersonalization multiple times per month, and 11.1% had a low level of professional achievement. In this study, the researchers concluded that the symptoms of burnout are present in primary health care nurses, and that emotional exhaustion represents a milestone precursor to its development. Moreover, the high levels of burnout negatively impacted nurses' quality of life (Holmes et al, 2014).

The third study found that the prevalence of burnout among subjects was 10.6%. As for the dimensions of burnout, 20.6% had high emotional exhaustion, 31.7% had high depersonalization, and 48.1% experienced low personal accomplishment. In this study, the researchers concluded that there is a positive association between burnout and abdominal adiposity in the analyzed PHC nursing professionals (Merces et al., 2016).

Four studies were reviewed about Iranian PHC workers. The first one was conducted by Malakouti et al. (2011) in Tahrán and indicated that 12.3% of 212 PHC workers reported high emotional exhaustion, 5.3% reported high depersonalization, while 43.7% experienced reduced personal accomplishment as measured by MBI. Further, results indicated that 28.4% of Iranian PHC workers (Behvarzes) were likely to have mental disorders as measured by GHQ12. This significantly correlated with burnout levels.



The second study was conducted by Bijari and Abbasi (2016) in South Khorasan in Iran, and indicated that 17.7% of 423 PHC workers had high emotional exhaustion, 6.4% had a high level of depersonalization, while 53% experienced reduced personal accomplishment as measured by MBI. The rate of mental disorders among health workers (Behvarzes) in this study was 36.8% as measured by GHQ12. Again, this significantly correlated with burnout levels.

The third study was done by Dehghankar et al (2016) who found that the prevalence of psychological distress among 123 Iranian registered nurses in five hospitals was 45.5%. They also found that on four scales of GHQ-28, the highest and lowest scales were related to social dysfunction (mean score = 8.71) and depression symptoms (mean score = 2.64) respectively.

The fourth study by Kadkhodaei and Asgari (2015) assessed the relationship between burnout and mental health. They used MBI to assess the level of burnout and GHQ-28 to assess the mental health of 500 of the medical science staff working in Kashan University. They found that 32.6% of the participants were mentally unhealthy. Additionally, based on the score of GHQ-28 subscale, 71.8% had social dysfunction, 35.6% had a symptom of depression, but only 2% had severe depression, and 35.6% had symptoms of anxiety and insomnia. In addition, based on MBI, the researchers found that none of the participants had severe emotional exhaustion, but 97% had mild emotional exhaustion, 16.9% of men and

10.5% of women had depersonalization and 5.4% had moderate to severe level of the low personal accomplishment.

Also, the last study indicates a statistically significant difference between males and females (EE more prevalent among female and the DP more prevalent among male). And showed that there was a relation between burnout and mental health problems, the burnout were elevated when the level of mental health were low.

In a study to investigate the level of psychological distress in Norwegian nurses, from the beginning to the end of their education, as well as three and six years into their careers. Nerdrum, Geirdal, and Høglend (2016) found that the prevalence of psychological distress among nursing students during the study period was 27%, that was elevated to 30% when they graduated and then decreased to 21% and 9% respectively after three and six years into their careers as young professionals.

In another study using GHQ-30, the prevalence of psychological distress among 513 female student nurses in the Nurses' Training School (NTS) Galle in Sri Lanka was 46.6% (n=239) (Ellawela and Fonseka, 2011). Liébana-Presa et al. (2014) indicated that 32.2% of 1278 nursing and physical therapy students in the public universities of Castilla and Leon in Spain complained from psychological distress and had a high positive score in GHQ-12.

Three studies were reviewed about India, the first one was conducted by Karikatti et al. (2015) who assessed the level of psychological distress

among 130 female PHC workers (Anganwadi worker) in India. They found that 6.92% of the participants had psychological distress. The level of psychological distress was significantly associated with increasing age, type of family (joint and three generation), and work experience. The second study highlighted that the prevalence of psychological distress among nurses working in a medical college affiliated general hospital in India was 10% (Solanki et al., 2015). The third study explained that the prevalence of psychological distress and burnout was 21% and 12.4% respectively among 298 of female nurses working in 30 government hospitals of central India with a minimum of one year of service (Divinakumar, K. J., Pookala, S. B., & Das, R. C., 2014).

A cross-sectional study used GHQ-28 to assess the general health level in nurses employed in educational hospitals of Shiraz University of Medical Sciences. Haseli et al. (2013) found that 75, or 59.5%, of the 126 participants were suspected of mental disorders. They also found that 12.7% had physical disorders, 8.7% had social dysfunction, 6.3% had depression, and 15.9% had anxiety and sleep disorders, . The average mental health score was 28.4. Mental health was significantly associated with economic satisfaction and job satisfaction in this study ( $P < 0.05$ ).

Olatunde & Odusanya (2015) found that 15.5% of 114 mental health nurses at the Neuropsychiatric Hospital, Aro, Abeokuta in Nigeria met the criteria for psychological distress. In another Nigerian study, Okwaraji and Aguwa (2014) used GHQ-12 and MBI-HSS to assess the prevalence of

psychological distress and burnout in 210 nurses working in a tertiary health center in Nigeria. They found that 42.9% of participants had high levels of burnout in the area of emotional exhaustion, 53.8% in the area of reduced personal accomplishment, and 47.6% in the area of depersonalization. Additionally, 44.1% of respondents scored positive in the GHQ-12, indicating the presence of psychological distress.

A small number of studies have been conducted in Arab countries about burnout in nurses working in PHCs. In their cross-sectional study among 637 Saudi nurses working in primary and secondary health care (144 nurses working in PHC and 493 working in secondary health towers), Al-Makhaita et al. (2014) found that the prevalence of work– related stress (WRS) among all studied nurses was 45.5%, and the prevalence of (WRS) among nurses working in primary health centers was 43.1%.

In a study to assess the level of burnout and job satisfaction among nurses working in Dubai’s primary health sector, Ismail et al. (2015) found that 6.4% of nurses reported a high level of burnout and reported a moderate satisfaction levels. Also, they found a significant correlation between burnout and job satisfaction.

Two Saudi Arabian studies were conducted in King Fahd University Hospital. One of these studies by Al-Turki et al. (2010) studied 198 female and male nurses from different nationalities. In the second study by Al-Turki (2010), 60 female nurses of Saudi nationality participated. There is a similarity in the results of these two studies, specifically in recorded levels

of emotional exhaustion (45.6 % and 45.9%, respectively). The studies had different results related to levels of reduced personal accomplishment. The first study showed that high levels of burnout in nurses in health care centers in Saudi Arabia have a result of negative health conditions and thus decreased efficacy and quality of patient care.

In Palestine, there has been no study on nurses and midwives who work in primary health care centers, but there are studies about nurses who work in hospitals. A study by Abushaikha & Saca-Hazboon (2009) investigated the prevalence of burnout and job satisfaction among nurses who works in five private hospitals in the West Bank. Nurses in this study reported medium levels of burnout, low levels of personal achievement (39.5%) medium levels of emotional exhaustion (38.8%) and low levels of depersonalization (72.4%). Alhajjar (2013) studied the prevalence of burnout among nurses who work in 16 hospitals in the Gaza Strip, and found that nurses reported a high prevalence of burnout (emotional exhaustion =44.9%, depersonalization =53.6%, low personal accomplishment =58.4%).

All literatures that used in this study are presented in Appendix (1).

## **2.5 Conclusion**

This literature review has presented the relevant literature on burnout in nurses in primary healthcare centers. This chapter has discussed the existing classifications and definitions based on various models and theories that provide a more in-depth understanding of the phenomenon and a more rational platform for phenotyping it. Common burnout

symptoms and signs present challenges to nurses and their managers, as well as health care systems in general, identify effective ways of optimizing well-being for nurses with burnout. This section has presented a discussion of the general problems that nurses with burnout have across the world, with a focus on the current situation in the West Bank.

The working conditions of nurses in the West Bank places nurses at greater risk for reduced psychological well-being and other complications. Providing nurses with the basics in terms of management, even with few resources and improving nurses' working conditions can enhance the functions of nurses and prevent burnout. Additionally, it is important to become familiar with the management styles of nurses in order to come to an understanding of the experiences of nurses and support them in managing the stressful conditions they face and improving their well-being. Understanding the views of nurses about specific aspects of stress and burnout, and their methods of dealing with them is also crucial. This survey of the literature on nurses reveals that although a great deal of research on burn out has been carried out internationally, with a few studies done in Arab countries, little has been written about PHC nurses in West Bank. Looking at the current situation in West Bank, an area that is still suffering from occupation and discriminatory policies, there is a need to conduct this study, as it can contribute to improving the status of PHC nurses in the West Bank.

## **Chapter Three**

### **Methodology**

#### **3.1 Introduction:**

This chapter presents the design, setting, duration, and population of the study. Additionally, it introduces the sample and sampling techniques, the inclusion and exclusion criteria, the translation of the MBI-SS questionnaire into Arabic, and the testing of the questionnaire. This section will also discuss demographic data, how burnout and the psychological distress are measured, the pilot study, data collection, management, and entry procedures as well as record keeping methods, in addition to methods of delivering and collecting questionnaires. Lastly, the section discusses ethical considerations, research constraints and difficulties, and data analysis. This section is important as it offers a greater understanding of the methodology used in studying burnout and psychological distress research. This could assist in developing a critically balanced view of the body of literature on the subject, which was discussed in the previous chapter.

#### **3.2 Research Design:**

Research design is a plan of how the researcher will apply the study, and it enables the researcher to meet the goals of the study (Varkevisser et al., 2003). This study is a non-experimental, descriptive cross – sectional survey, designed with a quantitative approach. The study was applied to assess the prevalence of burnout and psychological distress amongst primary health care (PHC) nurses and midwives in free and ordinary

conditions. This design is usually used to assess the prevalence of burnout and psychological distress among nurses and other health care workers. The procedure that was utilized in this study was the self-administered questionnaire (Appendices 3 & 4 & 5).

### **3.3 Hypothesis:**

1- H1: There is a relationship between burnout and factors such (gender, age, location of residence, marital status, number of children, level of education, monthly income, working hours, experience, and general health status (i.e. suffering from a chronic disease (CD))).

2- H2: There is a relationship between the level of psychological distress and factors such as (gender, age, location of residence, marital status, number of children, level of education, monthly income, working hours, experience, and general health status (i.e. suffering from a chronic disease (CD)))

3- H3: There is a relationship between the level of burnout and the level of psychological distress.

### **3.4 Setting of the Study**

The study was applied in four districts (Jenin, Tubas, Tulkarem and Nablus) in the Northern West Bank. These districts have (136) Governmental PHC centers (PMOH, 2015), and table (1) presented the distribution of these centers among the districts.



**Table (1): Distribution of PHCs among districts (2014).**

| Districts | Number of centers |
|-----------|-------------------|
| Jenin     | 50                |
| Tubas     | 11                |
| Tulkarem  | 31                |
| Nablus    | 44                |
| Total     | 136               |

### 3.5 Period of the Study

The fieldwork and collection of the data from the four districts in the Northern West Bank took place from August 1<sup>st</sup>, 2016 through October 30<sup>th</sup>, 2016.

### 3.6 Population and Sampling

The study population is all nurses and midwives working in the governmental primary health care centers in the Northern West Bank, which consists of four districts (Jenin, Nablus, Tulkarem, and Tubas). The target population identified for this study consists of 295 (N= 295) subjects. Table (2) below shows the number of all PHC nurses and midwives working in each Northern West Bank (WB) district in 2014 based on a Palestinian PHC annual report (PMOH, 2015).

**Table 2. The total number of Nurses and Midwives in North WB in between 2013 – 20140.**

| District | Nurses | Midwives | Total |
|----------|--------|----------|-------|
| Jenin    | 56     | 19       | 75    |
| Nablus   | 96     | 17       | 113   |
| Tubas    | 25     | 6        | 31    |
| Tulkarem | 65     | 11       | 76    |
| Total    | 242    | 53       | 295   |

Sampling is a procedure of choosing a sample from a population in order to collect information about the specific phenomenon in a way that represents the population of concern (Varkevisser, 2003). The study population is all 295 nurses and midwives working in governmental PHC centers (PMOH, 2015).

### **3.7 The Inclusion Criteria**

Identifying the inclusion criteria includes distinguishing particular qualities of subjects in the target population (Varkevisser et al, 2003). In this study, the inclusion criteria are the following:

- 1- The subject needs to be a professional nurse, clinical nurse practitioner, or midwife.
- 2- The subject needs to be working in a governmental primary health care center.
- 3- The subject needs to have been working in a governmental primary health centers for at least one year or more. This is because nurses in the first few months of working in governmental PHC centers are often mobile between clinics, and many of them have been working in hospitals for many years before coming to work in governmental PHC centers.

### **3.8 The Exclusion Criteria**

- 1- Nurses who have been working for in governmental PHC centers for less than one year.

2- Primary health care nurses on sick leave, maternity leave, and annual leave during the data collection period.

3- Primary health care nurses who did not work in the governmental sector.

### **3.9 Data Collection Procedure**

The goals and research questions decided the nature and the extent of the data to be gathered. In this study, the goals and research questions called for data to be gathered on burnout and psychological distress levels. A quantitative way to deal with the gathering and analysis of data was utilized. The researcher reached out to subjects who met the inclusion criteria in each of the four districts of the North West Bank, asking them to fill the self-reporting questionnaires.

#### **3.9.1 The advantages and disadvantages of using the self- reporting questionnaire**

The advantages of using the self- reporting questionnaire in the study are:

1- Self-reporting is the simplest method.

2- Self-reporting is quick and easy to manage, avert the using of complex methodology or equipment.

3- By using the questionnaire, many information can be gathered from a large number of subjects in a short period of time with low cost.

4- A validated self-reported questionnaire can be used in a clinical research

5- Most studies about burnout and psychological distress use this method.

6- The analyses of the self-reporting questionnaire are more scientifically and dispassionately than other types of research.

7- Many researchers believe that quantitative data can be used to create new theories and/or test existing hypotheses (Crouch et al., 2012).

The disadvantages of using the self-reporting questionnaire are:

1- Respondents may disregard certain questions.

2- Respondents may misunderstand questions because of bad design and vague language.

3- Respondents may not feel encouraged to provide accurate, honest answers (Crouch & Pearce, 2012).

### **3.10 Pilot Study**

A pilot study also called a pilot experiment is a small-scale preparatory investigation applied before the main research with a specific end goal to check the feasibility or to enhance the design of the research (Haralambos & Holborn, 2000). This pilot study tests the methods and procedures that will be used in collecting and analyzing the data in the main study (Burns & Grove, 2007). In addition, the pilot study gives a reasonable idea about the time period needed by the participant to complete the questionnaires, and whether every one of the respondents comprehend the questions similarly. It also gives the opportunity for the participants to add any

comments or changes they deem helpful or important to enhance readability or clarity of the survey.

This pilot study was conducted with eight (n=8) volunteers who met the study's inclusion criteria. The results showed similar answers and responses among the volunteers. After obtaining ethical permission from the Palestinian Ministry of Health, approval to conduct the pilot study was acquired from the Jenin District Nursing Administration of Primary Health Care Services. Those who participated in the pilot study were excluded from the final study to avoid prejudice due to repeating the same questionnaire.

### **3.11 Reliability and Validity of MBI-SS & GHQ-28**

The reliability and validity of instruments that are used in this research is a very important aspect for the credibility of the research findings. Reliability is the degree to which an instrument produces stable and consistent results if it should be utilized repeatedly over time on the same person, or when utilized by other different researchers. Validity refers to how well a test measures what it is purported to measure (Varkevisser, 2003).

To enhance the reliability and to assess the Construct Validity of the instrument, "test-re-test" was done, the same eight nurses who participated in the pilot study were answering the same questionnaire after three weeks. The result manifested the same answer and responses.

Maslach and Jackson in 1981 assessed the reliability of MBI, and found that the Cronbach's alpha for EE was 0.90 for the EE subscale, 0.79 for the DP subscale and 0.71 for the PA. Moreover, several studies applied by Iwanicki & Schwab (1981) and Gold (1984) to assess the reliability and the internal consistency of the three MBI subscales. Iwanicki & Schwab (1981) reporting that the Cronbach alpha ratings of 0.90 for emotional exhaustion, 0.76 Depersonalization, and 0.76 for Personal accomplishment were reported by Schwab. Gold's (1984) Cronbach's alpha coefficient yielded .90 for Emotional Exhaustion, .74 for Depersonalization, and .72 for Personal Accomplishment.

In this study, a Cronbach's Alpha for MBI dimensions (table 3) was: emotional exhaustion (0.876), depersonalization (0.560), and personal accomplishment (0.770), and for all MBI subscales (22 items) questionnaire (0.790). Cronbach's Alpha for all subscale of GHQ (28 items) was (0.930), and for GHQ-28 subscales: somatoform disorder (0.835), anxiety and insomnia (0.899), social disorder (0.770), and depression symptoms (0.850). There is not a commonly agreed Cronbach's Alpha cut-off, but usually 0.7 and above is statistically acceptable (DeVon H., 2007).

**Table 3. Reliability (Cronbach's Alpha) of MBI and GHQ subscales.**

| Measure           | No of items | Cronbach's $\alpha$ |
|-------------------|-------------|---------------------|
| MBI subscales     |             |                     |
| EE                | 9           | 0.876               |
| DP                | 5           | 0.560               |
| PA                | 8           | 0.770               |
| All MBI subscales | 22          | 0.790               |
| GHQ subscales     |             |                     |
| SS                | 7           | 0.835               |
| AS                | 7           | 0.899               |
| SD                | 7           | 0.770               |
| DS                | 7           | 0.850               |
| All GHQ subscales | 28          | 0.930               |

### 3.12 Demographic Data Sheet

In addition to these questionnaires, a general information questionnaire recording the demographic and professional characteristics of the participants was designed by the researcher. This questionnaire included the following variables: gender, age, qualifications, experience, specialization ( job), salary, marital status, and number of children dependent on the participant and whether or not they suffer from chronic diseases (CD) ( included physical and psychological diseases ) (Appendix 3).

### 3.13 Instruments

#### 3.13.1 The Maslach Burnout Inventory MBI (Appendix 4)

The Maslach Burnout Inventory (MBI) was chosen to measure burnout among PHC nurses in Northern West Bank because:

1- It is widely used to assess the burnout syndrome among nurses (Weckwerth & Flynn, 2006).

2- It translated into Arabic language and used among Arabic-speaking nurses by Hamaideh (2011), by Al-Turki et al. (2010) and by Abushaikha & Saca-Hazboun (2009) who administered to Palestinian nurses in the West Bank. Unfortunately, the researchers could not acquire the Arabic version from the mentioned authors; therefore the researcher translated the English version to Arabic.

3- It has an extensive empirical research supported database, and no need for special permission to use.

4- It operationally defines burnout on three separate scores (EE, DP, & PA) and is geared specifically to workers in the human service professions (Bahner & Berkel, 2007).

5- It can be completed within 10-15 minutes.

6- The researcher quickly achieves scoring of the 22-item instrument with a clear key.

According to Loera et al (2014), the psychometric properties of the Maslach Burnout Inventory (MBI) have three versions for application in specific work situations: the Human Services Survey (HSS), for evaluating professionals in human services such as doctors, nurses, psychologists, social assistance, and others; the Educators Survey (ED), for teachers and educators; and the General Survey (GS), indicated for workers in general. In this study, the burnout syndrome was assessed using the Maslach Burnout Inventory for Research in Health Services (MBI HSS).



The MBI (HSS) inventory is composed of 22 items, scored on a 7-point scale from never (0) to every day (6). It evaluates the three dimensions independently of one another, which are: emotional exhaustion (9 items), depersonalization (5 items) and professional accomplishment (8 items) (Maslach & Jackson, 1981).

The score in each subscale was obtained by means of the sum of the respective values. For this purpose, in the subscale of emotional exhaustion (EE), a score equal to or higher than 27 was considered indicative of a high level of exhaustion. The interval 19 – 27 corresponded to moderate values, and values equal to or lower than 18 indicated a low level of exhaustion. In the subscale of depersonalization (DE), a score equal to or higher than 10 was considered as an indicator of a high level of depersonalization. Scores between 6 – 9 corresponded to moderate levels, while a score equal to or lower than 5 indicated low levels of depersonalization. The subscale of professional accomplishment (PA) presented an inverse measure. That is to say, scores equal to or lower than 33 indicated a low feeling of professional achievement. Scores between 34-39 indicated a moderate level of achievement and the sum of scores equal to or higher 40, a high level of professional achievement (Qiao & Schaufeli, 2011; Alhajjar, 2013). Scores indicative of negative conditions in any two of the three categories (EE or DE high, low PA) were considered to indicate the occurrence of burnout syndrome in an individual (Cogan & Gunay, 2015; Homles et al, 2014), and a high score on the emotional exhaustion and depersonalization subscales and a low score on the personal accomplishment subscale are defined as a

high degree of burnout (Maslach C & Jackson S, 1996; Malakouti et al, 2011)

### **3.13.2 The General Health Questionnaire (GHQ-28) (Appendix 5)**

The General Health Questionnaire (GHQ) is a self-administered screening questionnaire designed to detect psychiatric disorders both in the community and among primary care patients (Goldberg, 1989). It distinguishes an individual's capacity to complete normal functions, and the appearance of the new phenomena of a troubling sort (Goldberg & Williams, 1988). The Questionnaire concentrates on breaks in normal functioning (identify disorders of less than two weeks' duration) instead of on life-long dysfunction. It is easily administered, short, and thematic in the sense that does not require the individuals administering it to make subjective evaluations about the research participants (Goldberg & Williams, 1988). The GHQ questionnaire is available in many forms ranging from 12 to 60 items in length. we used the GHQ-28 in this study. The GHQ-28 was derived from the original version of the GHQ-60 (Goldberg & Hiller, 1979).

The advantages of using the 28-item version of the GHQ include:

- 1- The questionnaire can be completed in a short period of time.
- 2- The GHQ-28 item version contains four subscales of interest: (a) anxiety and insomnia, (b) somatic symptoms, (c) social dysfunction, and (d)

depression. These categories are useful for community samples and provide additional information about them.

3- It has a similar reliability and validity compared with other long version (El-Rufai & Daradkeh, 1996; Goldberg, et al, 1997).

4- The GHQ-28 version is more valid than both the GHQ-12 and the GHQ-30 (Banks, 1983).

5- The researcher obtained permission to use the Arabic version of the GHQ-28 from Dr. Abdulrazzak Alhamad from Saudi Arabia (KSA) via email as shown in (Appendix 6). He had translated the questionnaire to Arabic language and studied the validity and reliability of questionnaire in the study published in the journal of family and community medicine in 1998 (Alhamad & Al-Faris, 1998) (Appendix 6).

The GHQ-28 contains four 7-item subscales that include: social dysfunction, depression, anxiety and insomnia, and somatic symptoms (Goldberg Hillier, 1979). Each item on the GHQ-28 asks about the recent experience of a particular symptom, and half of the items are presented positively (agreement indicates absence of symptoms). For example, “Have you recently felt capable of making decisions about things?” Half are presented negatively (agreement indicates presence of symptoms), as in: “Have you recently found that at times you couldn’t do anything because your nerves were too bad?” The scaled version of the GHQ has been developed based on the results of the principal components analysis. The four sub-scales, each containing seven items, are as follows:

- 1- Somatic symptoms (items 1-7)
- 2- Anxiety/insomnia (items 8-14)
- 3- Social dysfunction (items 15-21)
- 4- Severe depression (items 22-28)

There are diverse strategies to score the GHQ-28. It can be scored from zero to three for every reaction with an aggregate conceivable score going from 0 to 84. Utilizing this strategy, an aggregate score of 23/24 is the edge for the presence of distress. Alternatively, the GHQ-28 can be scored with a binary method prescribed by Goldberg for the need of case identification. This strategy is called "GHQ technique," and scores for the initial two sorts of answers are "0" (positive) and for the two others the score is "1" (negative) (Sterling, 2011).

In this study, the researcher used the binary method (0, 0, 1, 1) to assess the levels of psychological distress among the participants. Finally the cutoff point for this scale were between 3-8, and the most common was >5 (Aderibigbe YA, Gureje O, 1992; Goldberg DP et al, 1997). But because there is a the limited research on the prevalence rates of mental wellness among nurses working in Palestinian primary health care nurses, the authors felt that using the >5 as a cut-off point may lead to very high numbers of GHQ cases and consequently too high an estimate of psychiatric morbidity among this population and used a high cut off point

for this study that was used for this scale (total score of the GHQ-28) was: a score less than (8) indicates normal condition.

### **3.14 Translating the MBI-HSS Questionnaire Pack into Arabic**

The most popular technique in the translation of the questionnaire is the back-translation strategy. The benefit of the back-translation technique is that it gives the chance for amendments to improve the reliability and precision of the translated instrument (Van de Vijver & Leung, 2000). The researcher followed the technique of (Paunovic & Ost, 2005; Swigris, Gould & Wilson, 2005): utilizing the process of back interpretation and bilingual method. The questionnaire was converted into Arabic by two independent interpreters. The researcher disclosed to every interpreter the significance of the independent interpretation keeping in mind the end goal to judge reliability. Each interpretation was compared and twofold checked for exactness and the correspondence of the Arabic meaning for the words.

As the questionnaire interpretation was evaluated, the significance, lucidity and the propriety to the cultural values of the proposed subjects were guaranteed. The final Arabic version was then interpreted back into English by two Arabic specialists who were familiar with both the English and Arabic dialects, and checked against the original English version. Finally, when the two English forms were compared to validate the Arabic version, there was a high degree of equivalence. This Arabic translation was subsequently used for this study.

### **3.15 Data Collection Process**

The researcher collected the data from the subjects by meeting them in the main center. These meeting took place as part of a regular monthly meeting for nurses and midwives working in primary health care in each district. The meetings occurred between the 5<sup>th</sup> and 8<sup>th</sup> of September in Jenin and Tulkarem, and between the 2<sup>nd</sup> and 6<sup>th</sup> of October in Nablus and Tubas.

The process of signing consent forms (Appendix 2) and data collection process was explained to the subjects. Subjects who agreed to participate were handed a questionnaire package and signed the consent form, then proceeded to answer the questions in another room. After they completed the questionnaire, they returned it to the researcher.

### **3.16 Data Entry**

The data was entered by the researcher, In accordance with the ethical requirements of the study, no personal details that empowered identification of participants, other than respondent code numbers were entered to SPSS (20.0). The total number of responses entered to SPSS was 207. This number excluded the eight responses from the pilot study.

### **3.17 Constraints and Difficulties of the Study**

The main constraint of this study was the weak attendance to the monthly meeting in the main centers. This is because of work pressures, and the lack of an alternative to replace absent nurses. Some nurses refused to participate in the study without providing a specific explanation.

### **3.18 Ethical Considerations**

Approvals were acquired from Al-Najah University (IRB) and from the Ministry of Health (MOH) before beginning the distribution of questionnaires. Additionally, the participants signed a consent form agreeing to participate in the study after receiving an explanation about the aim of the study and about parts of the questionnaire (Appendices 7 & 8).

The consent form is an information leaflet that participants were asked to read prior to deciding whether or not to complete the questionnaire. The leaflet contained information about the researcher, including his contact details, the purpose of the study, and measures addressing anonymity and confidentiality issues. It also informed the participants that the survey is voluntary. In this study, consent was implied by the return of a signed consent form with the completed questionnaire. After the study is concluded, the questionnaires will be kept at the research supervisors' room for three years, after which they will be discarded according to Al-Najah University protocol.

### **3.19 Data Analysis Procedures**

Data was coded and analyzed using SPSS version 20 software package. To explain the study population in relation to relevant variables, descriptive statistics such as means, frequencies, and percentages were calculated.

The associations between dependent (the level of burnout sub-scales and the level of psychological distress) and independent variables (gender,

specialization, suffering from chronic diseases including, heart diseases, hypertension, cancer, bronchial asthma and COPD) were tested using independent t-test and the association between dependent variables(burnout sub-scales and psychological distress level) and independent variables ( age, experience, qualifications, marital status, the number of children they have and salary) were tested by (multi-way ANOVA) presented in tables.

In case of the presence of significant differences in the questionnaire among the groups (age, experience, qualifications, marital status, the number of children they have and salary) and the independent variable composed of more than one level, a “Bonferroni adjustment” test was used to identify the differences between more than two groups. Pearson’s correlation test was used to identify the relationship between burnout dimension and the level of psychological distress. P-values less than 0.05 were considered to be statistically significant in all cases.



## **Chapter Four**

### **The Results**

This chapter presents the results of the work carried out in Northern West Bank. The study population was 207 (70.17%) out of 295 nurses and midwives working in governmental primary health care centers in the four districts of the Northern West Bank (Jenin, Nablus, Tulkarem, and Tubas). The results were obtained from analyzing the questionnaire, which contained the Maslach Burnout Inventory (MBI) and General Health Questionnaire (GHQ-28).

This chapter has four parts. The first part provides descriptive statistic and frequency distributions about the socio-demographic characteristics among nurses and midwives working in PHC centers. The second part focuses on the differences in levels of burnout due to demographic variables. The third part focuses on the differences in levels of psychological distress due to demographic variables, and the fourth part introduces the relationship between burnout and the level of psychological distress among nurses and midwives working in governmental PHC centers.

#### **4.1 Distribution of the Study Population by Demographic Variables**

There were several socio-demographic characteristic discussed in this study: gender (male, female), age (20-30, 31-40, 41-50, >50), work experience in years (1-5, 6-10, 11-15, >15), specialization (nurses, midwives), qualifications (two-year diploma, three-year diploma, bachelor, postgraduate), marital status (single, married, divorced/widowed), the

number of children that have (0, 1-3, 4-6, >6), salary in Israeli Shekel (<3000, 3001-4000, >4000) and whether the respondent suffer from chronic diseases or not ( chronic diseases included physical and psychological diseases).

As shown in table (4), a total of 84.5% of participants were nurses and 15.5% were midwives. Out of the 207 respondents, 91.3% were women and 8.7% were men. Their ages varied between 20 (minimum) to > 50 years, and most of them (81.2%) were between 31-50 years old. About 3.9% of participants were younger than 31 years old, while 15% were older than 50. The majority (58.5%) had more than 15 years of work experience while a few had less than 5 years of experience (1.9%) which indicates that PHC nurses and midwives in the Northern West Bank are highly experienced, and advanced in their careers. Most of the participants (93%) are married with 4 to 6 children (55.6%), very few participants were single (2.4%) and (3.9%) of them were widowed or divorced. More than 40% of the participants had a bachelor degree while few had postgraduate degrees (5.8%), 33.8% had a two-year diploma and (19.8%) had a three-year diploma. More than half (55.6%) of the participants had a monthly salary of more than 4000 Shekel while few of them had a monthly salary between 2000 and 3000 Shekels (3.4%). Finally, most of the participants (82.1%) did not suffer from any chronic diseases.

**Table 4. Distribution of the study sample by socio-demographic factors.**

| Variable               | Definition          | Frequency | Valid percentage |
|------------------------|---------------------|-----------|------------------|
| Gender                 | Male                | 18        | 8.7 %            |
|                        | Female              | 189       | 91.3 %           |
| Age                    | 20-30 years         | 8         | 3.9 %            |
|                        | 31-40 years         | 84        | 40.6 %           |
|                        | 41-50 years         | 84        | 40.6 %           |
|                        | >50 years           | 31        | 15.0 %           |
| Educational Level      | 2-year Diploma      | 70        | 33.8 %           |
|                        | 3-year Diploma      | 41        | 19.8 %           |
|                        | Bachelor            | 84        | 40.6 %           |
|                        | Postgraduate        | 12        | 5.8 %            |
| Marital status         | Married             | 194       | 93.7 %           |
|                        | Single              | 5         | 2.4 %            |
|                        | Divorced or widowed | 8         | 3.9 %            |
| Number of children     | 0                   | 11        | 5.3 %            |
|                        | 1-3                 | 69        | 33.3 %           |
|                        | 4-6                 | 115       | 55.6 %           |
|                        | >6                  | 12        | 5.8 %            |
| Job                    | Nurse               | 175       | 84.5 %           |
|                        | Midwives            | 32        | 15.5 %           |
| Work experience        | 1-5 years           | 4         | 1.9 %            |
|                        | 6-10                | 25        | 12.1 %           |
|                        | 11-15               | 57        | 27.5 %           |
|                        | >15 years           | 121       | 58.5 %           |
| Salary                 | 2000-3000 NIS       | 7         | 3.4 %            |
|                        | 3001-4000 NIS       | 66        | 31.9 %           |
|                        | >4000               | 134       | 64.7 %           |
| Chronic diseases (CD)? | Yes                 | 37        | 17.9 %           |
|                        | No                  | 170       | 82.1 %           |

#### **4.2 Prevalence of Burnout in Nurses as Measured by MBI**

As shown in table (5), out of the 207 respondents who completed the MBI, 94 (45.4%) respondents scored low on emotional exhaustion, 37 (17.9%) had moderate scores, while 76 respondents (36.7%) scored high on the subscale. One hundred and thirty-five (65.2%) respondents scored low on the depersonalization subscale while 43 (20.8%) scored moderate on the subscale and 29 (14%) of the respondents scored high on the

depersonalization subscale. One hundred thirty (62.8%) respondents scored above 40 in the personal accomplishment category, forty (19.3%) respondents scored moderate while thirty-seven (17.9%) nurses scored below 34 in the category.

In general, the prevalence of burnout syndrome among nurses and midwives working in PHC centers was 10.6% (22/207) and 3.38% (7/207) had a severe level of burnout. Nurses and midwives reported mostly high levels of personal achievement (PA) (62.8%), low levels of emotional exhaustion (EE) (45.4%), and low levels of depersonalization (DP) (65.2%). All past results are presented by the bi chart figure in figures 2, 3 and 4 (Appendix 9).

**Table 5. Prevalence of burnout based on MBI subscale scores.**

| Subscale                                            | Overall Mean (SD <sup>1</sup> ) | Burnout <sup>2</sup> |                    |                |
|-----------------------------------------------------|---------------------------------|----------------------|--------------------|----------------|
|                                                     |                                 | Low<br>No. (%)       | Moderate<br>No (%) | High<br>No (%) |
| Emotional Exhaustion (EE)                           | 22.70 (13.77)                   | 94 (45.4)            | 37(17.9)           | 76(36.7)       |
| Depersonalization (DP)                              | 4.29 (5.17)                     | 135 (65.2)           | 43 (20.8)          | 29 (14.0)      |
| Personal Accomplishment (PA)                        | 39.95 (8.27)                    | 130 (62.8)           | 40 (19.3)          | 37 (17.9)      |
| Overall Burnout syndrome<br>severe level of burnout | 22 (10.6%)<br>7 (3.38%)         |                      |                    |                |

<sup>1</sup> SD = standard deviation.

<sup>2</sup> Low burnout: EE score 0-18, DP score 0-5, PA score > 40. Moderate burnout: EE score 19-26, DP score 6-9, PA score 34-39. High burnout: EE score > 27, DP score >10+, PA score 0-33.

As shown in table (6), Pearson's correlation was applied to examine the strength of the relationship between MBI-HSS sub-scale scores.

A significant moderate positive correlation was found between the emotional exhaustion scores and depersonalization scores,  $r = 0.395$ ,  $P = < 0.01$  (2-tailed). Conversely, a negative weak correlation was obtained between depersonalization scores and personal accomplishment,  $r = -0.152$ ,  $P = < 0.05$  (2-tailed).

A negative non-significant correlation between emotional exhaustion and personal accomplishment,  $r = -0.031$ ,  $P > 0.05$  (2-tailed) was found.

**Table 6. Correlations among BMI subscale scores.**

|    | DP      | PA      |
|----|---------|---------|
| EE | 0.395** | -0.031  |
| DP |         | -0.152* |

\*\* Correlation is significant at the 0.01 level.

\* Correlation is significant at the 0.05 level.

As table (7) shows, the greatest symptom of emotional exhaustion appears to be “I feel used up at the end of the workday” (mean = 3.91), followed by “I feel I'm working too hard on my job” (mean = 3.57). The least frequent symptom of emotional exhaustion is “I feel like I'm at the end of my rope” (mean = 1.21). The greatest symptom of depersonalization appears to be “I feel patients blame me for their problems” (mean = 1.64), followed by “I worry that this job is hardening emotionally” (mean = 0.94). The least frequent symptom of depersonalization is “I treat patients as impersonal ‘objects’” (mean = 0.43). The greatest symptom of low personal accomplishment appears to be “I deal with emotional problems calmly”

(mean = 4.58), followed by “I have accomplished many worthwhile things in my job” (mean = 4.66). The least frequent symptom of low personal accomplishment is “I feel I'm positively influencing other people's lives through my work” (mean = 5.18).

**Table 7. Frequency of burnout symptoms by items.**

| Item                                                                                 | Mean | SD   | Rank |
|--------------------------------------------------------------------------------------|------|------|------|
| <b>Emotional Exhaustion</b>                                                          |      |      |      |
| I feel emotionally drained from work.                                                | 2.83 | 2.25 | 3    |
| I feel used up at the end of the workday.                                            | 3.91 | 2.06 | 1    |
| I feel fatigued when I get up in the morning and have to face another day on the job | 2.50 | 2.16 | 6    |
| Working with patients is a strain.                                                   | 2.57 | 2.13 | 5    |
| I feel burned out from work.                                                         | 1.98 | 2.32 | 7    |
| I feel frustrated by job.                                                            | 1.42 | 2.00 | 8    |
| I feel I'm working too hard on my job.                                               | 3.57 | 2.23 | 2    |
| Working with people puts too much stress.                                            | 2.70 | 2.27 | 4    |
| I feel like I'm at the end of my rope                                                | 1.21 | 1.99 | 9    |
| <b>Depersonalization</b>                                                             |      |      |      |
| I treat patients as impersonal ‘objects’.                                            | 0.43 | 1.31 | 5    |
| I've become more callous toward people.                                              | 0.63 | 1.54 | 4    |
| I worry that this job is hardening emotionally.                                      | 0.94 | 1.83 | 2    |
| I don't really care what happens to patients.                                        | 0.65 | 1.57 | 3    |
| I feel patients blame me for their problems.                                         | 1.64 | 2.20 | 1    |
| <b>Personal Accomplishment</b>                                                       |      |      |      |
| I can easily understand patients' feelings.                                          | 5.42 | 1.41 | 8    |
| I deal effectively with the patients' problems.                                      | 5.10 | 1.75 | 6    |
| I feel I'm positively influencing other people's lives through my work.              | 5.18 | 1.61 | 7    |
| I feel very energetic.                                                               | 4.97 | 1.62 | 3    |
| I can easily create a relaxed atmosphere.                                            | 5.05 | 1.52 | 5    |
| I feel exhilarated after working with patients.                                      | 4.99 | 1.66 | 4    |
| I have accomplished many worthwhile things in my job.                                | 4.66 | 1.83 | 2    |
| I deal with emotional problems calmly.                                               | 4.58 | 1.91 | 1    |

#### **4.3 Differences of MBI-EE due to Demographic Variables**

The differences of burnout levels due gender, specialization, and suffering from chronic diseases were examined by independent t-test.

The independent t-test results displayed in table (8) showed no significant difference in MBI-EE level between male and female nurses ( $P = 0.124$ ), and there was also no significant difference between nurses and midwives ( $P = .760$ ). However, there was a significant difference in mean MBI-EE between nurses and midwives suffering from chronic diseases and those not suffering from chronic disease ( $F=0.969$ ,  $P = 0.01$ ). The output shows that the mean of EE scores was higher among nurses and midwives suffering from chronic diseases (28.43 vs. 21.45).

**Table (8) Differences in EE scores due to socio-demographic factors (results from independent t-test).**

| Variable          |         | Mean  | SD     | F value | P value |
|-------------------|---------|-------|--------|---------|---------|
| Gender            | Male    | 28.17 | 15.455 | 1.229   | 0.128   |
|                   | Female  | 22.17 | 13.529 |         |         |
| Job               | Nurse   | 22.58 | 13.978 | .709    | .760    |
|                   | Midwife | 23.34 | 12.757 |         |         |
| Chronic diseases? | Yes     | 28.43 | 14.594 | .969    | .010    |
|                   | No      | 21.45 | 13.303 |         |         |

The differences of burnout levels due to age, experience, qualifications, marital status, and salary, were analyzed by Analysis of Variance (multi-way ANOVA).

The multi-way ANOVA results displayed in table (9) showed no significant difference in MBI-EE level between the subjects, among qualification levels ( $F = 1.118$ ,  $P = 0.343$ ), among age groups ( $P = 0.361$ ), among experience levels ( $P = 0.472$ ), depending on marital status ( $F = 1.215$ ,  $p = 0.299$ ), the number of a children living with respondents

( $P = 0.095$ ), and depending on the salary ( $F = 1.880$ ,  $p = 0.155$ ). All past results are presented by the Box plots in figures 5, 6, 7, 8, 9, 10, 11, 12 and 13 (Appendix 9).

**Table 9. Differences in EE scores due to socio-demographic factors (results from multi-way ANOVA).**

| Variable           |                   | Mean  | SD     | F value | P value |
|--------------------|-------------------|-------|--------|---------|---------|
| Age                | 20-30 years       | 25.88 | 11.692 | 1.075   | 0.361   |
|                    | 31-40 years       | 23.17 | 14.080 |         |         |
|                    | 41-50 years       | 22.85 | 13.334 |         |         |
|                    | >50 years         | 20.19 | 14.829 |         |         |
| Qualification      | 2-year Diploma    | 19.93 | 14.528 | 1.118   | 0.343   |
|                    | 3-year Diploma    | 24.61 | 12.492 |         |         |
|                    | Bachelor          | 24.07 | 13.665 |         |         |
|                    | Postgraduate      | 22.67 | 13.179 |         |         |
| Marital status     | Married           | 22.85 | 13.852 | 1.215   | 0.299   |
|                    | Single            | 20.60 | 14.656 |         |         |
|                    | Divorced or widow | 20.25 | 12.487 |         |         |
|                    |                   |       |        |         |         |
| Number of children | 0                 | 15.55 | 13.148 | 2.154   | 0.095   |
|                    | 1-3               | 22.58 | 14.110 |         |         |
|                    | 4-6               | 24.05 | 13.347 |         |         |
|                    | >6                | 16.92 | 14.482 |         |         |
| Work experience    | ≤ 10 years        | 23.28 | 14.132 | .754    | 0.472   |
|                    | 11-15 years       | 21.42 | 14.319 |         |         |
|                    | >15 years         | 23.16 | 13.496 |         |         |
| Salary             | 2000-3000 NIS     | 19.86 | 14.815 | 1.880   | 0.155   |
|                    | 3001-4000 NIS     | 20.55 | 13.573 |         |         |
|                    | >4000             | 23.90 | 13.768 |         |         |

\* Means with different superscripts are significantly different ( $P < 0.05$ ).



#### 4.4 Differences of MBI-DP due to Demographic Variables

The independent t-test results in table (10) showed no significant difference in the MBI-DP level due to gender ( $P = 0.754$ ), due to the job (nurses and midwives) ( $P = 0.659$ ), and between nurses and midwives suffering from chronic diseases and those not suffering from chronic diseases ( $P = 0.613$ ).

**Table 10. Differences in MBI-DP due to socio-demographic factors (results from independent t-test).**

| Variable         |          | Mean | SD    | F value | P value |
|------------------|----------|------|-------|---------|---------|
| Gender           | male     | 4.72 | 4.968 | 0.381   | 0.707   |
|                  | female   | 4.25 | 5.200 |         |         |
| Job              | nurse    | 4.41 | 5.282 | 0.936   | 0.427   |
|                  | midwives | 3.69 | 4.540 |         |         |
| Chronic Disease? | Yes      | 4.46 | 4.975 | 0.016   | 0.826   |
|                  | No       | 4.26 | 5.225 |         |         |

The multi-way ANOVA results in (table 11) showed no significant difference in MBI-DP level due to age groups ( $F = 1.331$ ,  $P = 0.265$ ), qualifications ( $F = 0.090$ ,  $P = 0.965$ ) of nurses and midwives. It also showed no significant differences in MBI-DP scores due to marital status ( $F = 0.471$ ,  $P = 0.625$ ), number of children living with them ( $F = 2.036$ ,  $P = 0.110$ ), salary ( $F = 2.273$ ,  $P = 0.106$ ).

However, there was a significant difference in mean DP scores between respondents due to experience ( $F = 4.026$ ,  $P = 0.019$ ). Bonferroni adjustment output shows that the mean of DP scores is higher for nurses with ten years of experience or less (raw mean = 6). The mean of DP scores decreases gradually with increasing work experiences (experience between

11-15 years has a mean DP score of 4.09, experience of 15 years or above has a mean score of 3.98).

All past results are presented by the Box plots in figures 14, 15, 16, 17, 18, 19, 20, 21 and 22 (appendix 9).

**Table 11. Differences in DP scores due to socio-demographic factors (results from multi-way ANOVA).**

| Variable           |                   | Raw Means           | SD    | F value | P value |
|--------------------|-------------------|---------------------|-------|---------|---------|
| Age                | 20-30 years       | 4.12                | 3.834 | 1.331   | 0.265   |
|                    | 31-40 years       | 4.21                | 5.549 |         |         |
|                    | 41-50 years       | 4.67                | 5.175 |         |         |
|                    | >50 years         | 3.55                | 4.456 |         |         |
| Educational Level  | 2-year Diploma    | 4.16                | 5.576 | 0.090   | 0.965   |
|                    | 3-year Diploma    | 4.05                | 5.005 |         |         |
|                    | Bachelor          | 4.48                | 4.871 |         |         |
|                    | Postgraduate      | 4.67                | 5.898 |         |         |
| Marital status     | Married           | 4.40                | 5.289 | 0.471   | 0.625   |
|                    | Single            | 1.00                | 0.707 |         |         |
|                    | Divorced or widow | 3.88                | 2.642 |         |         |
| Number of children | 0                 | 1.00                | 1.000 | 2.036   | 0.110   |
|                    | 1-3               | 5.20                | 5.430 |         |         |
|                    | 4-6               | 4.12                | 5.247 |         |         |
|                    | >6                | 3.75                | 3.934 |         |         |
| Work experience    | ≤10 years         | 6.00 <sup>a,*</sup> | 6.814 | 4.026   | 0.019   |
|                    | 11-15 years       | 4.09 <sup>b</sup>   | 4.834 |         |         |
|                    | >15 years         | 3.98 <sup>b</sup>   | 4.830 |         |         |
| Salary             | 2000-3000 NIS     | 5.86                | 5.080 | 2.273   | 0.106   |
|                    | 3001-4000 NIS     | 3.71                | 5.502 |         |         |
|                    | >4000             | 4.50                | 5.011 |         |         |

\* Means for work experience with different superscripts are significantly different ( $P < 0.05$ ) based on Bonferroni adjustment for multiple comparisons.

#### 4.5 Differences of MBI-PA due to Demographic Variables

The independent t-test output in the table (12) shows that the means in PA were: 40.72 for male nurses and 39.89 for female nurses and midwives. In addition, it shows that there is no significant difference between means of males and females in PA ( $P = 0.670$ ). It shows no significant differences in the mean of PA due to the job (nurses and midwives) ( $P = 0.831$ ), and between nurses and midwives suffering from chronic diseases and those not suffering from chronic diseases ( $P = 0.088$ ).

**Table 12. Differences in MBI-PA due to socio-demographic factors (results from independent t-test).**

| Variable          |         | Mean  | SD    | F value | P value |
|-------------------|---------|-------|-------|---------|---------|
| Gender            | Male    | 40.72 | 7.932 | 0.789   | 0.670   |
|                   | Female  | 39.87 | 8.327 |         |         |
| Job               | Nurse   | 40.00 | 8.296 | 0.104   | 0.831   |
|                   | Midwife | 39.66 | 8.311 |         |         |
| Chronic diseases? | Yes     | 41.70 | 6.346 | 4.057   | 0.088   |
|                   | No      | 39.56 | 8.611 |         |         |

The multi-way ANOVA output table (13) showed that the means in PA were no significant differences due to age groups ( $F = .608$ ,  $p = 0.611$ ), due to qualification groups ( $F = 0.638$ ,  $P = 0.591$ ), depending on marital status ( $F = 0.707$ ,  $P = 0.495$ ), and the number of children living with the subjects ( $F = 1.634$ ,  $P = 0.183$ ). Lastly, The multi-way ANOVA results showed that there was no significant differences in mean PA scores were found among experience categories ( $F = 0.316$ ,  $P = 0.729$ ), and depending on salary ( $F = 0.677$ ,  $P = 0.509$ ).

All past results are presented by the Box plots in figures 23, 24, 25, 26, 27, 28, 29, 30 and 31(Appendix 9).

**Table 13. Differences in PA scores due to socio-demographic factors (results from multi-way ANOVA).**

| Variable           |                   | Mean  | SD     | F value | P value |
|--------------------|-------------------|-------|--------|---------|---------|
| Age                | 20-30 years       | 36.00 | 10.071 | 0.608   | 0.611   |
|                    | 31-40 years       | 39.52 | 8.466  |         |         |
|                    | 41-50 years       | 40.93 | 7.858  |         |         |
|                    | >50 years         | 39.45 | 8.378  |         |         |
| Educational Level  | 2-year Diploma    | 40.99 | 7.580  | 0.638   | 0.591   |
|                    | 3-year Diploma    | 38.93 | 10.456 |         |         |
|                    | Bachelor          | 39.74 | 7.752  |         |         |
|                    | Postgraduate      | 38.83 | 7.720  |         |         |
| Marital status     | Married           | 40.07 | 8.273  | 0.707   | 0.495   |
|                    | Single            | 39.80 | 7.259  |         |         |
|                    | Divorced or widow | 37.12 | 9.508  |         |         |
| Number of children | 0                 | 41.82 | 6.014  | 1.634   | 0.183   |
|                    | 1-3               | 38.00 | 9.159  |         |         |
|                    | 4-6               | 41.06 | 7.191  |         |         |
|                    | >6                | 38.75 | 12.425 |         |         |
| Work experience    | ≤10 years         | 38.52 | 7.434  | 0.316   | 0.729   |
|                    | 11-15             | 39.93 | 8.510  |         |         |
|                    | >15 years         | 40.30 | 8.387  |         |         |
| Salary             | 2000-3000 NIS     | 40.57 | 6.630  | 0.677   | 0.509   |
|                    | 3001-4000 NIS     | 40.18 | 8.597  |         |         |
|                    | >4000             | 39.80 | 8.245  |         |         |

#### 4.6 Summary.

The first research question of this study was to identify the prevalence rates of burnout among nurses and midwives working in governmental primary health care centers in the Northern West Bank in Palestine. In summary, the prevalence of burnout among the PHC nurses and midwives is 10.6%. The percentages of moderate to severe burnout in the specific subscales were as follows: emotional exhaustion at 54.6%, depersonalization at 34.8%, and low personal accomplishment at 17.9%.

And the second research question (first hypothesis) of this thesis was to report the relationship between socio-demographic data and the level of burnout subscales among a self-selected sample of nurses and midwives. The data shows that emotional exhaustion is more common among participants who complain from chronic diseases (mean = 7.24;  $P < 0.05$ ). Depersonalization is more common among participants who have less than ten years of experience (mean = 6;  $P < 0.05$ ), and the mean of depersonalization scores decreases gradually with increased experience (from 6 among those with less than ten years of experience to 4.38 among those with more than 15 years of experience). Meanwhile, the level of personal accomplishment is not significantly associated with any socio-demographic data.

#### **4.7 Prevalence of Psychological Distress among Nurses as Measured by GHQ-28**

Scores from the GHQ Scoring procedure for the 207 participants who completed the survey were calculated. The standard methodology for all forms of the General Health Questionnaire is to enumerate neglected clauses as low scores (GL Assessment Online, 2009). For the present study, all neglected clauses were scored zero. Utilizing a threshold cut-off score of eight (eight or more symptoms) to identify the probability of participants suffering from psychological distress.

As shown in table (14), 47 (22.7%) of the 207 participants scored 8 or above on the GHQ-28. This indicates that 22.7% of the sample presented

with symptomatology of a psychological distress. The majority of participants (77.3% or 160) had scores less than eight, which indicates that they do not meet the criteria for having a psychological disorder.

**Table 14. Prevalence of psychological distress based on GHQ subscale scores.**

| Subscale        | Overall Mean (SD <sup>1</sup> ) | psychological well being |                        |
|-----------------|---------------------------------|--------------------------|------------------------|
|                 |                                 | Normal                   | psychological distress |
|                 |                                 | No (%)                   | No (%)                 |
| Total GHQ score | 4.79 (5.67)                     | 160 (77.3)               | 47 (22.7%)             |

<sup>1</sup> SD = standard deviation.

The total score of the GHQ-28 was range from 0-28. The mean of the GHQ scores was 4.79, and the standard deviation (SD) 5.67. Generally, scores on the General Health Questionnaire (GHQ-28) were positively skewed. See figure 32 for a histogram of GHQ scores.

#### **4.7.1 GHQ-28 Subscales**

The GHQ-28 subscales illustrate the dimensions of symptomatology and are not willful for particular diagnoses. The subscales simply allow us to gather more information regarding the symptoms of psychological distress. There are no limits or cut-off scores for singular sub-scales (Goldberg, 1978).

A Pearson product-moment correlation was run to determine the relationship between GHQ-28 subscales (table 15). There was a strong statistically significant positive correlation between somatic symptoms (SS)

and anxiety (AS) ( $r = 0.691$ ,  $P = 0.01$ ), a moderate statistically significant positive correlation between somatic symptoms and social dysfunction (SD) ( $r = 0.53$ ,  $P = < 0.01$ ) and a weak statistically significant between somatic symptoms (SS) and depression (DS) scores ( $r = 0.391$ ,  $P = 0.01$ ) (2-tailed).

Also, there was a moderate positive correlation between the anxiety (AS) scores and social dysfunction (SD) scores, which was statistically significant ( $r = 0.649$ ,  $P = < 0.01$ ) (2-tailed), and a weak statistically significant positive correlation between anxiety (AS) scores and depression (DS) scores ( $r = 0.454$ ,  $P = < 0.01$ ) (2-tailed). Lastly, there was a moderate statistically significant positive correlation between social dysfunction scores (SD) and depression scores (DS) ( $r = 0.606$ ,  $P = < 0.01$ ) (2-tailed).

**Table 15. Correlations among GHQ subscale scores .**

|    | GHQ Subscale |         |         |
|----|--------------|---------|---------|
|    | AS           | SD      | DS      |
| SS | 0.691**      | 0.530** | 0.391** |
| AS |              | 0.649** | 0.454** |
| SD |              |         | 0.606** |

\*\*Correlation is significant at the 0.01 level.

#### **4.8 Differences of GHQ-28 scores due to Demographic Variables**

The independent t-test output in table (16) shows that the mean psychological distress score was 5.83 for male participants and 4.69 for female participants. However, the difference between the means for male and female respondents is not statistically significant ( $P=0.428$ ), which means that the level of psychological distress is similar among male and

female nurses. There is also no significant difference in GHQ-28 scores depending on the job description (nurses or midwives) ( $F = .992$ ,  $P = 0.127$ ).

However, there is a significant difference in mean GHQ-28 scores between participants who are suffering from chronic diseases, and those who are not ( $F = 2.491$ ,  $P = 0.009$ ). This indicated that psychological distress scores are higher among participants suffering from chronic diseases (CD).

**Table 16. Differences in GHQ total scores due to socio-demographic factors (results from independent t-test).**

| Variable          |         | Mean                | SD   | F value | P value |
|-------------------|---------|---------------------|------|---------|---------|
| Gender            | Male    | 5.83                | 5.74 | 0.045   | 0.428   |
|                   | Female  | 4.69                | 5.67 |         |         |
| Job               | Nurse   | 4.51                | 5.56 | .992    | 0.127   |
|                   | Midwife | 6.31                | 6.10 |         |         |
| Chronic diseases? | Yes     | 7.24 <sup>a,*</sup> | 6.18 | 2.491   | 0.009   |
|                   | No      | 4.25 <sup>b</sup>   | 5.43 |         |         |

The multi-way ANOVA output in table (17) shows that there is no significant difference in GHQ-28 scores due to different age groups ( $F = 0.008$ ,  $P = 0.999$ ). The scores also do not differ significantly depending on qualifications ( $F = 0.489$ ,  $P = 0.690$ ), marital status ( $F = 0.718$ ,  $P = 0.489$ ), or based on the number of children living with them ( $F = 1.604$ ,  $P = 0.190$ ).

Lastly, there also is not a significant difference in psychological distress scores due to experience ( $F = 2.688$ ,  $P = 0.071$ ), or due to different salaries ( $F = 2.562$ ,  $P = 0.080$ ).



These results are largely consistent with the picture given by the Box plots in figures 33, 34, 35, 36, 37, 38, 39, 40 and 41 (Appendix 9).

**Table 17. Differences in GHQ total scores due to socio-demographic factors (results from multi-way ANOVA).**

| Variable           |                   | Mean | SD   | F value | P value |
|--------------------|-------------------|------|------|---------|---------|
| Age                | 20-30 years       | 6.38 | 7.67 | 0.008   | 0.999   |
|                    | 31-40 years       | 4.85 | 5.99 |         |         |
|                    | 41-50 years       | 4.67 | 5.09 |         |         |
|                    | >50 years         | 4.55 | 5.96 |         |         |
| Educational Level  | 2-year Diploma    | 3.81 | 5.42 | 0.489   | 0.690   |
|                    | 3-year Diploma    | 4.80 | 5.76 |         |         |
|                    | Bachelor          | 5.63 | 5.60 |         |         |
|                    | Postgraduate      | 4.50 | 7.01 |         |         |
| Marital status     | Married           | 4.71 | 5.61 | 0.718   | 0.489   |
|                    | Single            | 5.20 | 7.56 |         |         |
|                    | Divorced or widow | 6.50 | 6.46 |         |         |
| Number of children | 0                 | 3.73 | 5.27 | 1.604   | 0.190   |
|                    | 1-3               | 5.61 | 5.79 |         |         |
|                    | 4-6               | 4.72 | 5.80 |         |         |
|                    | >6                | 1.67 | 2.50 |         |         |
| Work experience    | ≤ 10 years        | 5.03 | 6.24 | 2.688   | 0.071   |
|                    | 11-15 years       | 5.39 | 6.24 |         |         |
|                    | >15 years         | 4.45 | 5.26 |         |         |
| Salary             | 2000-3000 NIS     | 5.71 | 7.76 | 2.562   | 0.080   |
|                    | 3001-4000 NIS     | 3.83 | 5.56 |         |         |
|                    | >4000             | 5.21 | 5.60 |         |         |

\* Means with different superscripts are significantly different ( $P < 0.05$ ).

## 4.9 Summary

The second question of this study was to report the prevalence rates of psychological distress among nurses and midwives working in governmental PHC centers in Northern West Bank, Palestinian. In summary, based on the results 47 (22.6%) subjects from the selected sample appeared with psychologically distress.

The third research question (second hypothesis) of this thesis was to report the relationship between socio-demographic data and the level of psychological distress among a self-selected sample of nurses and midwives, the data shows psychological distress is most common among subjects who suffer from chronic diseases.

#### **4.10 The Relationship between the MBI-HSS Subscales and GHQ-28 Scores**

Pearson's correlation, as shown in table (18), was applied to examine the strength of the relationship between MBI-HSS sub-scale scores and the GHQ-28 scores. A significant moderate positive correlation was found between the emotional exhaustion subscale scores and the total GHQ-28 scores ( $r = 0.621$ ,  $P = < .001$ ) (2-tailed). In addition, a weak positive correlation was found between the depersonalization subscale scores and the total GHQ-28 score ( $r = 0.250$ ,  $P = < .001$ ) (2-tailed).

Conversely, there was a negative non-significant correlation between personal the accomplishment subscale scores and the total GHQ-28 score ( $r = - 0.068$ ,  $P > 0.05$ ) (2-tailed).

A significant positive correlation was found between the emotional exhaustion scale and all the GHQ-28 subscales scores ( a moderate relationship between emotional exhaustion and somatic symptoms scores:  $r = 0.569$ ,  $P = 0.01$ ; a moderate relationship between emotional exhaustion and anxiety scores:  $r = 0.584$ ,  $p = 0.01$ ; a moderate relationship between emotional exhaustion and social dysfunction scores:  $r = 0.454$ ,  $P = 0.01$ ; and

a weak relationship between emotional exhaustion and depression scores:  $r = 0.350$ ,  $P = 0.01$ )

There was also a significant positive correlation between the depersonalization (DP) subscale scores, and the scores of all the GHQ-28 subscales (a weak relationship between depersonalization (DP) and somatic symptoms scores:  $r = 0.141$ ,  $P = 0.05$ ; a weak relationship between depersonalization (DP) and anxiety scores,  $r = 0.2$ ,  $P = 0.01$ ; a weak relationship between depersonalization (DP) and social dysfunction:  $r = 0.286$ ,  $P = 0.01$ ; and a weak relationship between depersonalization (DP) and depression scores:  $r = 0.248$ ,  $P = 0.01$ ).

Finally, there is no statistically significant between (PA) and all GHQ-28 subscales.

**Table 18. Correlations between GHQ scores and MBI scores.**

|                 | BMI scores |         |         |
|-----------------|------------|---------|---------|
| GHQ score       | EE         | DP      | PA      |
| SS subscale     | 0.569**    | 0.141*  | 0.025   |
| AS subscale     | 0.584**    | 0.200** | - 0.098 |
| SD subscale     | 0.454**    | 0.286** | - 0.104 |
| DS subscale     | 0.350**    | 0.248** | - 0.062 |
| Total GHQ score | 0.621**    | 0.250** | - 0.068 |

\*\*Correlation is significant at the 0.01 level.

\*Correlation is significant at the 0.05 level.

#### **4.11 Summary**

The fourth research (third hypothesis) question of this thesis was to report the relationship between the level of burnout and the level of psychological distress, the data shows that levels of psychological distress are positively associated with emotional exhaustion levels, and the level depersonalization.

## **Chapter Five**

### **Discussion**

The first part of this study investigated the prevalence of burnout and psychological distress experienced by the primary health care nurses and midwives in the Northern West Bank. In addition, it sets out to assess the relationship between burnout, psychological distress, and socio-demographic variables among primary health care nurses and midwives. Data were obtained using two standard questionnaires: the MBI and the GHQ-28. This chapter presents a discussion of the major findings of this study, highlighting the prevalence of burnout and psychological distress among primary health nurses and midwives in North West Bank.

#### **5.1 Sample Demographics**

##### **5.1.1. Response Rate**

The study population in this research is the entire cohort of nurses and midwives working in governmental primary health care centers in the Northern West Bank (295 nurse and midwives). Of this population, a total of 207 nurses and midwives received, completed, and returned the questionnaire packs – a response rate of almost 70.16%. This satisfactory response rate was probably a result of the suitability of the study design, the nurses' interest in the topic (Coomber, Todd, Park, Baxter, Firth-Cozens & Shore, 2002), and due to distributing questionnaire packs in person (Prymachuk & Richards, 2007). A similar approach has been used in previous studies, with response rates ranging between 60% and 95%

(Abushaikha & Saca-Hazboon, 2009; Alhajjar, 2013; Cagan & Gunay, 2015, Malakouti, 2011; Bijari & Abassi, 2015).

### **5.1.2 Gender**

Of 207 respondents, 189 (91.3%) were female and 18 (8.7%) were male. These results are not surprising, as midwives constitute a fundamental element in the construction of primary health care. Additionally, female nurses are more likely to get hired than male nurses, because female nurses can work more freely with female patients, and often have more experience in the area of childcare.

This gender distribution can be seen in a number of countries and studies. For example, in a South African study about burnout among primary health care nurses, female nurses comprised more than 95% of the nurses in the study (Muller, 2014). Additionally, in two Iranian studies about burnout among primary health care workers more than 70% were female (Malakouti et al., 2011; Keshvari et al, 2012). Similarly, in two Brazilian studies, female nurses made up 80% of the studied population (Maissiat et al., 2015; Silva et al., 2014). Lastly, more than 90% of the studied population in a United Arab Emirates study about burnout and job satisfaction among nurses in Dubai were female (Ismail et al., 2015).

### **5.1.3 Age**

Age ranged between 20 to 60 years old. There were 8 (3.9%) participants in the 20-30 age group, 84 (40.6%) in the 31-40 group, 50 (40.6%) in the 41-

50 group, and 15 (15%) who were older than 50. This indicates that the nursing community in the Palestinian primary health care system is mostly young or middle aged. In comparison, an Iranian study by Abassi & Bijari (2016) had 79 (18.7%) participants younger than 30, and 344 (81.3%) older than 40. Meanwhile 58.8% of the participants in a Turkish study by Cagan & Gunay (2015) were in the 31-40 age group, 9% were younger than 30, and 31% were older than 40 years old. In other Palestinian studies investigating burnout among nurses, Abushaikha & Saca-Hazboon (2009) found that 60.4% of the nurses working in hospitals they studied were younger than 40, while in a Gaza study by Alhajjar (2013), the percentage was about 76.4%. This difference can be because most nurses who work in primary health care centers had had previous work experience in hospitals.

#### **5.1.4 Experience**

Regarding experience, only 4 (1.9%) of the participants had less than 6 years of experience, 25 (12.1%) had between 6-10 years, 57 (27.5%) had 11-15 years, and 121 (58.5%) had more than 15 years of experience. As a study in South Africa by Muller (2014) found that for nurses working in primary health care centers, the mean number of years of experience was 12, while the median was 11 years. Holmes (2014) investigated the effects of burnout syndrome (BS) on the quality of life of nurses working in primary health care in the city of João Pessoa, and found that 48, 9% of nurses had worked between 6-10 years at the Family Health Strategy. For Palestinian studies, Alhajjar (2013) found that 614 (46.2%) of nurses

working in hospitals had less than 6 years of experience, 461 (34.7%) had between 6-10 years, 119 (8.9%) had 11-15 years, and 136 (10.2%) had more than 15 years of experience.

### **5.1.5 Specialization**

Of 207 respondents to this study, 175 (84%) were nurses and 32 (15.5%) were midwives out of a total sample of 242 nurses and 53 midwives. It is very interesting that in the West Bank, nurses are more frequently employed than midwives. These results are very different from a Turkish study in the city of Malatya, which revealed that 89 midwives and 72 nurses were employed in family health and community health centers in the city center, and 64 midwives and 56 nurses were employed in the outer districts of the province (Cagan & Gunay, 2015).

### **5.1.6 Marital Status**

As for the marital status of participants, 194 (93.7%) were married, 8 (3.9%) were divorced or widowed, and 5 (2.4%) were single. Additionally, 196 (94.7%) of participants had children. In comparison, the study by Holmes (2014) had 29 (64.4%) married participants, and 35 (77.8%) participants with children. According to Abushaikha & Saca-Hazboon (2009), 94 (61.8%) of nurses working in the West Bank private hospitals were married, 56 (36.8%) were single, and 87 (57.2%) of them had children. In the Gaza study by Alhajjar (2013), about 1038 (78.0%) of nurses were married, 275 (20.7%) single, and 17 (1.3%) divorced or widowed.



## **5.2 Prevalence of Burnout among Primary Health Nurses and Midwives**

The prevalence of burnout among Palestinian primary health care nurses and midwives was 10.6% and 3.38% of them had a severe level of burnout. About 36.7% of participants reported high levels of emotional exhaustion, 14% had high levels of depersonalization, and 17.9% experienced feelings of low personal accomplishment. When looking at these levels of burnout, it is important to reconsidering the exhortation given by Maslach et al. (2001) when they admonition researchers to Take into account that remarkable national differences in levels of burnout could be related to factors such as culture, individual responses to self-reporting questionnaires and the route in which respondents are conditioned by their local culture to evaluate their personal accomplishments in different communities and Cultures..

Also, this could be related to frequent (and often unexpected) changes in kind of the services and frequent changes in identification of the target population and recipients of the services following the new programs and orders which are sent from the higher centers and authorities daily, with no clear purpose. These mixed instructions cause instability, turbulence, and tiredness among health care providers. Burnout levels can also be attributed to the imbalance between workload and manpower, which results in stress and pressure on health care providers, due to high population coverage and lack of sufficient manpower (Keshvari et al., 2012).

Al-Doski & Aziz (2010) indicated that social, economic and political circumstances in the Middle East can easily contribute to burnout among all health care professionals. Therefore, the unstable political circumstances that Palestinian nurses live in, may increase the prevalence of burnout and psychological distress among Palestinian primary health care nurses and midwives.

It is notable that these results are similar to most other findings reported by nurses in other countries. Silva et al. (2014) found that the prevalence of burnout among primary health care professionals in the city of Aracaju, in Brazil was 11%, with 43% having high levels of EE, 17% having high levels of DP, and 32% having low levels of PA. In their study, they found that this risk was higher for older nurses, and more moderate among younger workers. Holmes et al. (2014) in another Brazilian study found that 11.1% of nurses had high levels of burnout, with 53.3% of Brazilian primary health care nurses suffering from high levels of EE, 11.1% having high DP levels, and 11.1% having low PA.

Ismail et al. (2015) concluded that 44.4% of the multinational nurses working in Dubai Primary Health Care facilities in UAE recorded moderate burnout, while only 6.4% had high levels of burnout. About 16% of nurses had high levels of emotional exhaustion, 16.4% had high levels of depersonalization, and 28.0% had high levels of personal accomplishment. They also found that single nurses were at a higher risk of developing burnout. Muller (2014) indicated that the levels of burnout among PHC

nurses in the Eden District of the Western Cape in South Africa were the following: 51% had high levels of emotional exhaustion, 38% had high depersonalization levels, and 99% had low levels of personal accomplishment.

Cogan & Gunay (2015) found that most primary care health workers in Malatya in Turkey had low personal accomplishment with a median score of 23, moderate emotional exhaustion with a median score of 15, and low depersonalization with a median score of 3. In their study, they found that personal accomplishment scores were significantly higher among nurses in the 30-39 age group, and lower among nurses older than 39 years old. Emotional exhaustion scores were significantly higher among those who perceived their economic status to be poor, or those who had not personally chosen the department where they worked. Additionally, the emotional exhaustion and depersonalization scores were significantly higher among those who were not satisfied in their jobs.

In comparing the result of this study with the studies that were carried out in hospitals in Palestine and in other countries, Abushaikha & Saca-Hazboun (2009) showed that 38.8% of Palestinian nurses working in private hospitals in the West Bank reported moderate levels of emotional exhaustion, 72.4% had low levels of depersonalization, and 39.5% had low levels of personal accomplishment. In another study conducted in Gaza, Alhajjar (2013) found that 44.9% of Palestinian nurses working in Gaza's hospitals had high EE, 53.6% had high DP, and 58.4% had low PA. The

result of this study showed that EE and DP were more prevalent among male nurses and among nurses working in public hospital, while low PA was more prevalent among nurses working in private hospitals.

Al-Turki et al. (2010) showed that 45% of 198 multinational nurses working in Saudi Arabia had high EE, 42% had high DP, and 71.5% had moderate to low PA. In another study conducted in Saudi Arabia, Al-Turki (2010) found that 45.9% of 60 female Saudi nurses had high EE, and 48.6% had high DP. Poghosyan et al. (2010) found that 22.2% of nurses in New Zealand had high EE, 6.0% had DP, and 38.2% had low PA. Fallor et al. (2011) concluded that the level of burnout among nurses working in California, USA was 19.8%. Erickson & Grove (2007) indicated that levels of burnout among nurses in Midwestern City, USA were 38.4%. Poghosyan et al. (2010) found that 22.5% of nurses in Canada had high EE, 6.2% had DP, and 37.4% had low PA.

### **5.3 Prevalence of Psychological Distress among Primary Health Nurses and Midwives**

Primary health care nurses and midwives are exposed to different stressors in their work environment that affect their health status and quality of life negatively. The present study showed that 22.7% of the participants met the criteria for having psychological distress based on a self-report measure they completed.

The prevalence rates of psychological distress reported in this study (22.7%) appear slightly higher compared to the findings of other

international studies that used the General Health Questionnaire 28. For instance, Solanki et al. (2015) reported that the prevalence of psychological distress among doctors and nurses working in a Medical College affiliated with a General Hospital in India was 10.25%. They found that females were more likely to have suicidal ideas than males. In addition, the history of past or present psychiatric illness, and the presence of enduring stress other than work-related stress were significantly associated with GHQ-28 scores.

Karikatti et al. (2015) assessed the prevalence of psychological distress among female PHC workers (Anganwadi worker) in India. They found that 6.92% of participants had psychological distress, and the level of psychological distress was significantly associated with increasing age, type of family (joint and three generation), and work experience. Levels of psychological distress were higher among those suffering from hypertension.

Divinakumar *K J*, Pookala, S., & Das, R (2017) found that the prevalence of psychological distress was 21% among female nurses working in thirty government hospitals in Central India, with a minimum of one year of service. Psychological distress was more prevalent among young nurses in comparison to those older than 50 years old.

Dehghankar et al. (2016) found that the prevalence of psychological distress among Iranian registered nurses in five hospitals was 45.5%. The highest levels were scored in the social dysfunction subscale, while the

lowest levels were scored in the depression subscale. Mental disorders were more prevalent among female nurses compared to male nurses, and higher among married than single individuals.

In a Norwegian study to assess the prevalence of psychological distress among nurses at the start and the end of their studies and three and six years after graduation, Nerdrum, Geirdal, and Høglend (2016) found that the prevalence of psychological distress significantly increased during the education period, from 27% at the start to 30% at graduation. Psychological distress levels decreased to 21% after three years of work, and to 9% after six years of work as a professional nurse.

Liébana-Presa et al. (2014) studied the prevalence of psychological distress among nursing and physical therapy students in the public universities of Castilla and Leon in Spain by using GHQ-12. They found that 32.2% of the participants had psychological distress, and that the females scored higher than males on this questionnaire, implying that they had a higher level of psychological distress.

By using the (GHQ-30), Ellawela and Fonseka (2011) found that the prevalence of psychological distress among female nurses in Sri Lanka was 46.6%. The prevalence of psychological distress was significantly associated with dissatisfaction about the training environment, boredom at work, fear of failure in examinations, conflicts with colleagues, increasing arguments with family members, missing opportunities to meet loved ones, and with death of a family member or a close person.

#### **5.4 Prevalence of Burnout and Psychological Distress among Primary Health Nurses and Midwives**

The present study showed that the total score of the GHQ-28 was significantly associated with the levels of EE, and with DP scores.

Malakouti et al. (2011) found that 12.3% of Iranian PHC workers (Behvarzes) had high emotional exhaustion, 5.3% had high depersonalization, while 43.7% had low or reduced personal accomplishment, and found that 1% from the participants had a severe level of burnout. They also found that the prevalence of psychological distress among participants was 28.4%, and that work experience was one of the factors which had a significant association with burnout. Levels of psychological distress were higher among those who had high levels of burnout.

Bijari and Abbasi (2016) concluded that 17.7% of PHC workers in South Khorasan had high emotional exhaustion, 6.4% had high depersonalization levels, 53% experienced reduced personal accomplishment, and 36.8% had psychological distress. Burnout was significantly higher in the 40-50 age group, those with a diploma education, those with more than three children, and those with more than 15 years of experience. The results of this study indicate that psychological distress was more common among those who had moderate to severe burnout level.

Using MBI, Khamisa et al. (2015) found that staff issues that contained (Staff Management, Inadequate and Poor Equipment, Stock Control, Poorly

Motivated Coworkers, Adhering to Hospital Budget and Meeting Deadlines) and contributed to work related stress are significantly associated with all MBI subscale, and found that emotional exhaustion were significantly associated with all GHQ-28 subscales, personal accomplishment were significantly associated with somatic symptoms and depersonalization were associated with anxiety and insomnia. This study indicated that emotional exhaustion and depersonalization were more prevalent among those who have anxiety/insomnia.

Okwaraji and Aguwa (2014) used GHQ-12 and MBI-HSS to assess the prevalence of burnout and psychological distress among nurses working in Nigerian tertiary health institutions. High levels of burnout were found in 42.9% of the respondents in the area of emotional exhaustion, 47.6% in the area of depersonalization, and 53.8% in the area of reduced personal accomplishment. Meanwhile, 44.1% scored positive in the GHQ-12, indicating the presence of psychological distress. Burnout and psychological distress were more likely to occur in nurses younger than 35 years, females, those not married, those with nursing certificates as compared to nursing degrees, and those working as nursing officers.

## **5.5 Conclusion**

The literature review in this study examined the prevalence of burnout in nurses worldwide. However, there was limited quantitative literature on the subject in Palestine and other Arab countries, which suggests that this area requires further exploration. This study has given insight into occupational



burnout and the level of psychological distress among primary health care nurses in the Northern West Bank, and explored the factors responsible for these phenomena.

The results of this study could aid in designing more efficient burnout and psychological distress reduction programs for nurses, and to minimize the stressful work conditions. Additionally, this study can contribute to regulating the health systems expectations with regards to nurses and their capabilities. This can reduce the stress and pressure of the work, and decrease levels of exhaustion, and depression, subsequently increasing job satisfaction. These findings may go a long way in improving the mental health and burnout levels among nurses and thereby enable them to provide better patient care.

The result of this study revealed that 10.6% of PHC nurses and midwives complaining from burnout and 3.38% of them had a severe level of burnout, 36.7% having high levels of EE, 14% high levels of DP, and 17.9% with low levels of PA. About 23% had psychological distress.

From these results, one can conclude that PHC nurses in the Northern West Bank need more attention to deal with their psychological conditions. Nursing managers and others in the Palestinian Ministry of Health are in good position to support nurses, especially when nurses express different sources of stress.

### **5.6 Strengths of the study**

1. This study is the first study that assesses the prevalence of burnout and psychological distress among PHC nurses and midwives in the Northern West Bank.
2. The data collecting tools (Maslach Burnout Inventory and General Health Questionnaire (GHQ-28)) are validated and have been extensively used in previous studies.

### **5.7 Limitations of the study**

1. Burnout and psychological distress measurement were based on self-reporting tools rather than by physiological biochemical analyses or by physical assessments.
2. The most important limitation of this study is that current occasions may have improper effect on respondents' mood at the time the test was taken.

### **5.8 Recommendations**

Based on the results of the study, some recommendations were made with specific reference to nursing research, nursing education, and nursing practice.

### **5.8.1 Recommendation related to research**

This study measures the prevalence of burnout and psychological distress among nurses and midwives working in governmental primary health care centers in North West Bank. Future research should be directed to identify the factors that contributed to burnout and psychological distress among PHC nurses and midwives. Replication of the study to include comparison with other primary health care centers, as well as different locations of primary health centers such as in (South West Bank, NGOs health centers, UNRWA, the Military Health Service, and the Palestinian Red Crescent). Qualitative research could be used to explore and describe the experiences of nurses and midwives in the work environment and future research on the effects of burnout and psychological distress management.

### **5.8.2 Recommendations for health policy makers**

1. Offer continuing education and frequent training for nurses, because nurses who feel competent in their jobs are less anxious.
2. Allow nurses to choose their workplace and change each year so they do not feel bored.
3. Urge the Palestinian Ministry of Health to increase the number of staff working in primary health care facilities, especially midwives, in order to distribute and reduce work pressure.

4. Establish a system of incentives and rewards for qualified nurses and midwives working in primary health care to encourage efficient and professional work.
5. Determine the job description for nursing and midwives working in primary health care. This is because nurses and midwives perform many tasks within clinics that do not belong to the nursing profession, such as accounting, registration, statistics, dispensing medication to the patients, and cleaning the clinic.
6. Involve the nurses and midwives in administrative decision, especially with regards to the clinics in which they work.
7. Increase the salaries of nurses and midwives in proportion to the difficult economic conditions.
8. Establish recreational activities such as a leisure trips for primary health care workers and their families to increase family support, encourage psychological debriefing, and to establish good relationships among staff.

### **5.8.3 What this study added to research?**

This study highlighted that the nurses and midwives who work in the primary health care center were not isolated from developing burnout and psychological distress. Also it attracts the eyes of attention of health policy maker in our country to develop primary health care system and developing health professionals especially nurses to help him to overcome the

obstacles that gained due to stressful situations that nurses face it in their work.

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## **APPENDICES**

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## Appendix 1

### Table of literatures

| Title & years                                                                          | Authors                                                                  | Location                       | Sample                                                                       | Tools                                                                                                                                                                                                                         | Prevalence of burnout and psychological distress                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Work Related Stress, Burnout, Job Satisfaction and General Health of Nurses (2015)     | Natasha Khamisa, Brian Oldenburg, Karl Peltzer, and Dragan Ilic          | four hospitals in South Africa | 895 nurses                                                                   | 1 -socio demographic questionnaire (SDQ)<br>2- Nursing Stress Inventory (NSI)<br>3- Maslach Burnout Inventory—Human Services Survey (MBI-HSS)<br>4- Job Satisfaction Survey (JSS)<br>5- General Health Questionnaire (GHQ-28) | 1- Emotional exhaustion and personal accomplishment are associated with somatic symptoms explaining 21% variance. Emotional exhaustion and depersonalization are associated with anxiety/insomnia as well as social dysfunction explaining 31% and 14% variance, respectively. Emotional exhaustion is associated with severe depressive symptoms explaining 4% variance |
| Burnout syndrome in professionals of the primary healthcare network in Aracaju, Brazil | Salvyana Silva, Nunes, Vanessa Prado Reis, José Machado Neto, Sonia Lima | Aracaju in Brazil              | 194 higher education professionals working in primary health care centers in | MBI-HSS                                                                                                                                                                                                                       | 1- 43% of the participants had high levels of emotional exhaustion, 17% had high depersonalization, and 32% had a low level of professional achievement                                                                                                                                                                                                                  |
| Burnout syndrome in nurses acting in primary care: an impact on quality of life (2014) | Ericka Holmes, Sérgio Santos, Jamilton Farias, Maria de Sousa Costa      | João Pessoa in Brazil          | 45 female nurses working in primary health care centers                      | MBI-HSS                                                                                                                                                                                                                       | 1- 53.3% of the participants had high levels of emotional exhaustion, 40% had high level of depersonalization multiple times per month, and 11.1% had a low level of professional achievement                                                                                                                                                                            |
| Burnout syndrome and abdominal adiposity among Primary Health Care                     | Magno das Mercês, Douglas e Silva, Iracema Lua,                          | Bahia in Brazil.               | 189 nurses working in the family healthy units in a primary                  | MBI-HSS                                                                                                                                                                                                                       | 1- The prevalence of burnout among subjects was 10.6%.<br>2- 20.6% had high emotional exhaustion, 31.7% had high                                                                                                                                                                                                                                                         |

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| nursing professionals (2016)                                                                                   | Daniela Oliveira, Marcio de Souza, and Argemiro Júnior               |                                               | health care                                                                           |                                                       | depersonalization, and 48.1% had low personal accomplishment. 3- In this study, the researchers concluded that there is a positive association between burnout and abdominal adiposity in the analyzed PHC nursing professionals                                                                                                                                                                                                                            |
| Job Stress and Burnout Syndrome in a Sample of Rural Health Workers, Behvarzes, in Tehran, Iran (2011)         | Seyed Malakouti, Marzieh Nojomi, Maryam Salehi, and Bita Bijari,     | Tehran in Iran                                | 212 registered Behvarzes (Rural Health Workers in Primary Health Care (PHC) network ) | 1-MBI- HSS<br>2-GHQ-12<br>3- Stainmentz questionnaire | 1- 12.3% had high emotional exhaustion, 5.3% had high depersonalization, while 43.7% had reduced personal accomplishment. 2- 28.4% had psychological distress .                                                                                                                                                                                                                                                                                             |
| General Health of Iranian Registered Nurses: A Cross Sectional Study (2016)                                    | Leila Dehghankar, Saeedeh Omran, Fateme Hasandoost, & Hossein Rafiei | Qazvin in North of Iran                       | 123 nurses work in five hospitals                                                     | (GHQ-28)                                              | 1- The prevalence of psychological was 45.5%.<br>2- 1.6% had somatic symptoms, 4.1% had anxiety and insomnia, 4.1% had social dysfunction and 1.6% had depression.                                                                                                                                                                                                                                                                                          |
| The Relationship between Burnout and Mental Health in Kashan University of Medical Sciences Staff, Iran (2015) | Manijeh Kadkhodaei, Mohammad Asgari                                  | Kashan university of Medical Sciences in Iran | 500 staffs of hospitals and health centers in Kashan university of Medical Sciences   | 1-GHQ-28<br>2-MBI                                     | 1- 32.6% of the participants had psychological distress, 71.8% had social dysfunction, , 35.6% had a symptom of depression, but only 2% had severe depression, and 35.6% had symptoms of anxiety and insomnia.<br>2- Based on MBI, the researchers found that none of the participants had severe emotional exhaustion, but 97% had mild emotional exhaustion, and 16.9% of men and 10.5% of women had depersonalization.<br>3- 5.4% had moderate to severe |

|                                                                                                                                          |                                                                                                                                                                                                               |                                                                                                                                                                |                                                                                                                                                             |                                                                        |                                                                                                                                                                                                                                                                  |
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|                                                                                                                                          |                                                                                                                                                                                                               |                                                                                                                                                                |                                                                                                                                                             |                                                                        | level of the low personal accomplishment.<br>4- There was a relation between burnout and mental health problems, the burnout were elevated when the level of mental health were low.                                                                             |
| Psychological Distress in Norwegian Nurses and Teachers over Nine Years (2016)                                                           | Per Nerdrum, Amy Østertun Geirdal and Per Andreas Høglend                                                                                                                                                     | entry-level nursing and teaching students from two cities in Norway were asked to participate in a longitudinal study of student and post-graduate functioning | Out of the 1,467 participants, 115 were defined as completers because they participated at each of the four measurement times, (33 nurses and 82 teachers). | GHQ-12                                                                 | The prevalence of psychological distress among nursing students during the study period was 27%, that was elevated to 30% when they graduated and then decreased to 21% and 9% respectively after three and six years into their careers as young professionals. |
| Psychological distress, associated factors and coping strategies among female student nurses in the Nurses' Training School Galle (2011) | YG Ellawela, P Fonseka                                                                                                                                                                                        | The Nursing Training School (NTS) Galle in Sri Lanka                                                                                                           | 525 female student nurses                                                                                                                                   | GHQ-30                                                                 | The prevalence of psychological distress was 46.6%.                                                                                                                                                                                                              |
| Psychological distress in health sciences college students and its relationship with academic engagement (2014)                          | cristina Liébana-Presa<br>‘M <sup>a</sup> Elena Fernández-martínez<br>‘África Ruiz Gándara<br>‘M <sup>a</sup> carmen muñoz-Villanueva<br>‘Ana maría Vázquez-casares, ‘M <sup>a</sup> Aurora Rodríguez-borrego |                                                                                                                                                                | 1840 nursing and physical therapy students                                                                                                                  | 1-GHQ-12<br>2- The Utrecht Work Engagement Scale for Students (UWES-S) | 1- The prevalence of psychological distress in the participants was 32.2%<br>2- The statistically significant correlations in all participants (overall) were negative and very weak with regard to the relationship between vigor and psychological distress    |

|                                                                                                                                                                       |                                                                                       |                                                                                                                        |                                                                                                                 |                                                                              |                                                                                                                                                                                                                                                                                                                                                            |
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| Psychosocial Determinants of Health in Grass Root Level Workers of Rural Community (2015)                                                                             | Shobha S Karikatti, Varsha M Bhamaikar, Pavithra R, Fawwad M Shaikh, A B Halappanavar | study was conducted in 3 PHCs (Mutaga, Sulebavi, Uchagaon) under rural field practice area of Medical college in India | 130 Anganwadi workers (the grass root level workers of the Integrated Child Development Services (ICDS) Scheme) | GHQ 12                                                                       | 1- 6.92% of the participants had psychological distress.<br>2- The level of psychological distress was significantly associated with increasing age, type of family (joint and three generation), and work experience                                                                                                                                      |
| Gender differences in work stressors and psychiatric morbidity at workplace in doctors and nurses (2015)                                                              | Chintan K. Solanki, Keyur N. Parmar, Minakshi N. Parikh, Ganpat K. Vankar             | Medical College affiliated General Hospital in India                                                                   | 400 Subjects (200 doctors & 200 nurses)                                                                         | 1- DASS (depression, anxiety and stress scale)<br>2-GHQ-28                   | 1- 9.45% reported Depression, 29.2% Anxiety and Stress as per DASS results<br>2- 10.25% had psychological distress.                                                                                                                                                                                                                                        |
| Perceived stress, psychological Well-being and burnout among female nurses working in government hospitals (2014)                                                     | Divinakar KJ, Pookala SB, Das RC                                                      | Thirty government hospitals of central in India                                                                        | 298 nurses                                                                                                      | 1-Copenhagen Burnout Inventory (CBI) 2-General Health Questionnaire (GHQ-28) | 1- That the prevalence of psychological distress 21%.<br>2- The prevalence of burnout was 12.4%                                                                                                                                                                                                                                                            |
| General Health Status and Its Related Factors in the Nurses Working in the Educational Hospitals of Shiraz University of Medical Sciences, Shiraz, Iran (2011) (2013) | Najmeh Haseli, Leila Ghahramani, Mahin Nazari                                         | Shiraz University of Medical Sciences, Shiraz, Iran                                                                    | 126 nurses and practical nurses                                                                                 | GHQ-28                                                                       | 1- The prevalence of psychological distress was 59.5%<br>2- the prevalence of psychological disorders was 63.2%, 48.4%, 52%, and 64.5% among female, male, single, and married participants, respectively.<br>3- About 12.7% of nurses had somatic symptoms, 15.9% had anxiety and insomnia disorders, 8.9% had social dysfunction and 6.3% had depression |
| Job Satisfaction and Psychological wellbeing among mental Health Nurses (2015)                                                                                        | Babalola Emmanuel Olatunde, Olumuyiwa Odusanya                                        | The Neuropsychiatric Hospital, Aro Abeokuta, Ogun State Nigeria.                                                       | 114 mental health nurses                                                                                        | 1-GHQ-12<br>2-Minnesota Satisfaction Questionnaire (MSQ)                     | 1- The prevalence of psychological distress was 15.5%<br>2- 5.5% from the participants feeling with low job satisfaction<br>3- The result of                                                                                                                                                                                                               |

|                                                                                                                                           |                                                                                |                                                                                                                                                                                  |                                         |                                                    |                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                           |                                                                                |                                                                                                                                                                                  |                                         |                                                    | logistic regression analysis showed that only psychological wellbeing (GHQ Score) made unique contribution to job satisfaction.                                                                                                                                                                                                                                                    |
| Burnout and psychological distress among nurses in a Nigerian tertiary health institution (2014)                                          | FE Okwaraji, and EN Aguwa                                                      | The University of Nigeria Teaching Hospital (UNTH) Ituku Ozalla, in Enugu State of Nigeria. Enugu State is a mainland state in South East Nigeria                                | 210 nurses                              | 1-MBI<br>2- GHQ-12                                 | 1- 42.9% of participants had high levels of burnout in the area of emotional exhaustion, 53.8% in the area of reduced personal accomplishment, and 47.6% in the area of depersonalization<br>2- The prevalence of psychological distress was 44.1%                                                                                                                                 |
| Predictors of work-related stress among nurses working in primary and secondary health care levels in Dammam, Eastern Saudi Arabia (2014) | Al-Makhaita HM, Sabra AA, Hafez AS                                             | 17 primary health care centers (PHCCs) representing the primary level of health care and Medical Tower Complex (MTC) representing the secondary health care level in Dammam city | 637 nurses (144 in PHCCs) and (493 MTC) | occupational stress scale developed by Al-Hawajreh | The prevalence of work– related stress (WRS) among all studied nurses was 45.5%, and the prevalence of (WRS) among nurses working in primary health centers was 43.1%.                                                                                                                                                                                                             |
| Job Satisfaction, Burnout and Associated Factors Among Nurses in Health Facilities, Dubai, United Arab Emirates, 2013 (2015)              | Ismail L. S., Al Faisal W., Hussein H., *, Wasfy A., Al Shaali M., El Sawaf E. | Dubai health Authority primary health care centers                                                                                                                               | 400 nurses                              | 1-MBI<br>2-MSQ                                     | 1- 16% had high level of EE, 16.4% had high depersonalization and 44.8% had low-level personal of accomplishment.<br>2- 6.4%. Of participants reported a high level of burnout.<br>3- The correlation between burnout and satisfaction illustrates that there is a significant inverse intermediate correlation between emotional exhaustion of the nurses and their satisfaction. |

|                                                                              |                                                                                                                                 |                                                                                                                                                                                                                                                                                                    |                        |                                                        |                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Burnout syndrome among multinational nurses working in Saudi Arabia (2010)   | Haifa A Al-Turki, Rasha A Al-Turki, Hiba A Al-Dardas, Manal R Al-Gazal, Ghada H Al-Maghrabi, Nawal H Al-Enizi, Basema A Ghareeb | University of Dammam and King Fahd University Hospital in Saudi Arabia                                                                                                                                                                                                                             | 198 nurses             | MBI                                                    | 45.6% of nurses had a high level of Emotional Exhaustion , 42% had high level of depersonalization, and 40.5% had low level of personal accomplishment.                                                                                                                                                       |
| Saudi Arabian nurses: are they prone to burnout syndrome (2010)              | Haifa A Al-Turki                                                                                                                | King Fahd University Hospital, Al-Khobar,                                                                                                                                                                                                                                                          | 60 female Saudi nurses | MBI                                                    | 1- 45.9% had high Emotional Exhaustion, 48.6% had high level of depersonalization, and 45.9% had low level of personal accomplishment.                                                                                                                                                                        |
| Job satisfaction and burnout among Palestinian nurses (2009)                 | Lubna Abushaikh a, Hanan Saca-Hazboun                                                                                           | 5 private hospitals in private hospitals in the Palestinian Territories (Al-Muhtasseb hospital in Hebron, Caritas hospital in Bethlehem, Augusta Victoria hospital in Jerusalem, Al-Itihad hospital in Nablus and United Nations Relief and Works Agency (UNRWA)-affiliated hospital in Qalqilia ) | 255 nurses             | 1-MBI<br>2- Minnesota satisfaction questionnaire (MSQ) | 1- Most nurses in this study (84.2%) reported moderate job satisfaction<br>2- In general, nurses in this study reported moderate levels of burnout. They reported mostly low levels of personal achievement, (39%) moderate level of emotional exhaustion (38.8%)and low levels of depersonalization (72.4%). |
| A programme to reduce burnout among hospital nurses in Gaza-Palestine (2014) | Alhajjar, Bashir Ibrahim                                                                                                        | 16 Hospital in the Gaza Strip-Palestine.                                                                                                                                                                                                                                                           | 1330 nurses            | MBI                                                    | 1- The results of this study revealed a high prevalence of burnout (EE=44.9%, DP=53.6%, Low PA=58.4%). Emotional exhaustion (EE) was significantly                                                                                                                                                            |

|  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|  |  |  |  |  | <p>associated with gender, hospital type, night shifts, and specialisation. Depersonalisation (DP) was significantly associated with hospital type extra time, night shifts, experience and specialisation. Low personal accomplishment (LPA) was significantly associated with hospital type, night shifts, and experience.</p> <p>2- The burnout reduction programme was effective with moderate and severe burnout but not with low levels of burnout</p> |
|--|--|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## Appendix 2

الزملاء الكرام

اسمي ايهاب نعييرات، انا طالب ماجستير في قسم التمريض بجامعة النجاح الوطنية. نابلس.

اقوم بعمل بحث عن الاحتراق النفسي والاضطرابات النفسية لدى الممرضين/ الممرضات والقابلات العاملين في مراكز الرعاية الصحية الاولى التابعة لوزارة الصحة الفلسطينية. والهدف من هذه الدراسة هو الكشف عن مدى انتشار و طبيعة الاحتراق و الاضطرابات النفسية لدى كادر التمريض والقباله العاملين في مراكز الرعاية الصحية الاولى . ومن اجل الحصول على صورته واضح فانه ارجو من الجميع المشاركة في هذه الدراسة و تعبئة الاستمارة المرفقه و التي لا تحتاج لكثر من 20 دقيقه من وقتك.

ان المعلومات المرفقه مقدمه لتساعدك في اتخاذ قرار المشاركة من عدمه. واذا كان لديك اي اسئله فلا تتردد في السؤال. علما ان المشاركة طوعيه، وان المعلومات التي ستقدمها سيتم التعامل معها بسريه تامه.

راجيا منكم التوقيع على هذه الصفحة في المكان المخصص كدليل على موافقتكم .

ولكم جزيل الشكر

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التوقيع

## نموذج معلومات للمشاركة

هذه دعوته للمشاركة في هذه الدراسة البحثية. وقبل ان تقرر المشاركة، ارجو منك قراءة المعلومات التالية بعناية حيث انها ستخبرك باهداف الدراسة وماذا سيحدث لو انك شاركة فيها.

- ما الهدف من الدراسة؟

من المعروف عالميا ان مجتمع التمريض يعاني من ضغوط في العمل مما يؤدي الى شعورة بالاحتراق و الاضطرابات النفسية. ويوجد العديد من الدراسات الاجنبية و العربية المتعلقة بالاحتراق والاضطرابات النفسية لدى العاملين في الرعاية الصحية الاولى ولكن لا توجد دراسات مماثلة في الضفة الغربية. من المهم النظر الى الظروف التي يحياها الممرضين / الممرضات و القابلات العاملين في مراكز الرعاية الصحية الاولى الحكومية في شمال الضفة الغربية حيث عليهم العمل في ظروف: صعوبة الوصول الى مكان العمل بسبب الحواجز الاحتلالية وانعدام الامان على الطرقات ، قلة الرواتب و يذبذبها و نقص اللوازم الطبية و الادوية .

- لماذا انت مدعو للمشاركة ؟

لأنك تعمل كممرض /ة اوقايلة في مراكز الرعاية الصحية الاولى التابعة لوزارة الصحة الفلسطينية.

- هل يجب علي المشاركة؟

لا. المشاركة طوعية بالكامل. و اذا قررت المشاركة ارجو منك توقيع نموذج الموافقة و تعبئة الاستبانة ومن ثم اعادتها أي او من ينوب عني..

- ما الفائدة من مشاركتي في الدراسة، و ما الضرر الذي من الممكن ان يلحق بي ؟

لا توجد فائدة مباشرة من المشاركة ولكن مشاركتك ستساعدنا في اكتشاف مدى وقوع الممرضين / الممرضات و القابلات العاملين في مراكز الرعاية الصحية الاولى تحت الضغوط و الاحتراق و

ستساعدنا على اكتشاف مدى انتشار الاضرار النفسية لديهم. اما الضرر الوحيد يتمثل في ان المشاركة تتطلب الالتزام لمدة نصف ساعة لتعبئة الاستمارة.

• هل المعلومات التي سادلي بها ستبقى سرية؟

نعم. وسيتم التعامل معها ضمن الضوابط الاخلاقية و القانونيه المتبعة في البحث العلمي.

• هل اجابتي مجهوله ؟ و هل يمكن التعرف علي؟

على الرغم من ان اسمك غير مطلوب، كما ترى في الاستبانة رقم (1) ، الا ان لك هوية تعريفية مكونه من 4 ارقام . و اني امالك قائمه تمكنني من التعرف عليك من خلال هذه الارقام اذا كان هناك حاجة لذلك ، و انني الشخص الوحيد المسموح له الوصول الى هذه القائمه. و كشرط لتطبيق الدراسه فانه علي الاحتفاظ بهذه القائمه منفصله عن الاستبانة و مخزنة في مكان مغلق.

• ماذا سيحدث للاستبانة المعبئه عند ارجاعها؟

سيتم وضع رموز للاجابات ومن ثم سيتم ادخالها الى جهاز الحاسوب لتحليلها ، و لا يسمح بادخال اسمك الى الحاسوب. و في نهاية الدراسه كافة الاستمارات و القائمه التعريفية سيتم اتلافها و ابادتها.

• ماذا سيحدث لنتائج الدراسه؟

ستساعد النتائج في التخطيط لدراسات اخرى في هذا المجال . وستكتب ايضا على شكل تقارير، ابحاث في مجلات علمية وعالمية. ولا توجد خطه لتوزيع النتائج على المشاركين علما بان نسخة مختصرة من النتائج ستكون متوفرة عند الطلب.

علما بانه لن يتم التعريف بك في الرسالة الاصلية او الابحاث المنشوره .

- من يقوم بتنفيذ الدراسة؟

ايهاب نعيّرات ، طالب ماجستير في جامعة النجاح الوطنية تحت اشراف الدكتورة ايمان شاويش .  
 وحصلت هذه الدراسة على موافقة لجنة الاخلاق في جامعة النجاح الوطنية و موافقة وزارة الصحة الفلسطينية.

- ملاحظه : اذا كانت لديك شكوى يمكنك الاتصال مع مشرفي الدكتورة ايمان شاويش في كلية العلوم الطبية - قسم التمريض بجامعة النجاح الوطنية على البريد الالكتروني  
[alshawish@najah.edu](mailto:alshawish@najah.edu)

واذا كان لديك أي استله اضافية يمكنك التواصل مع الباحث الرئيسي : ايهاب نعيّرات بشكل مباشر  
 او على الرقم 0599872365 او على البريد الالكتروني ( ehab308@YAHOO.COM ) .

## Appendix 3

## الجزء الاول

- 1- الجنس : ذكر ☐ انثى ☐
- 2- العمر : 30-20 ☐ ، 40-31 ☐ ، 50-41 ☐ ، أكثر من 50 ☐
- 3- أعلى درجة علمية حصلت عليها: دبلوم سنتين ☐ ، دبلوم 3 سنوات ☐ ، بكالوريوس ☐ ،  
دبلوم عالي ☐ ، ماجستير فما فوق ☐
- 4- الحالة الاجتماعية: متزوج/متزوجة ☐ ، أعزب/عزباء ☐ ، مطلق/مطلقة ☐ ، ارملة/ارمله ☐
- 5- عدد الابناء اذا كان/متزوج/ة : 1-3 ☐ ، 4-6 ☐ ، أكثر من 6 ☐
- 6- الوظيفة : ممرض/ممرضة ☐ قابلة ☐
- 7- عدد سنوات الخبرة كممرض/ة او قابلة : 1-5 سنوات ☐ 6-10 سنوات ☐ 11-15 سنة ☐  
سنة أكثر من 15 ☐
- 8- عدد سنوات الخبرة في الرعاية الصحية الاولى : أقل من سنة ☐ 1-5 سنوات ☐ ، 6-10 سنوات ☐  
، 11-15 سنة ☐ ، أكثر من 15 سنة ☐
- 9- الراتب الشهري : 2000-3000 شيكل ☐ ، 3001-4000 شيكل ☐ أكثر من 4001 ☐
- 10- هل تعاني من أي امراض مزمنة او نفسيه : نعم ☐ ، لا ☐

## Appendix 4

الجزء الثاني

| كل يوم | مرات<br>قليله<br>بالاسبوع | مره<br>بالاسبوع | مرات<br>قليله<br>بالشهر | مره<br>بالشهر | مرات<br>قليله<br>بالسنة | ابدا | كم غالبا تشعر بهذا الشكل                                    |     |
|--------|---------------------------|-----------------|-------------------------|---------------|-------------------------|------|-------------------------------------------------------------|-----|
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | أشعر باستنزاف انفعالي بسبب عملي في مجال التمريض             | 1.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | أشعر مع نهاية الدوام باستنزاف طاقتي في العمل                | 2.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | أضايق بكل صباح عندما أرى لزاما علي الذهاب للعمل             | 3.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | أفهم مشاعر المرضى نحو كثير من الأمور بسهولة                 | 4.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | أشعر بأنني أتعامل مع المرضى على أنهم أشياء لا مرضى          | 5.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | حقا إن التعامل مع المرضى طوال اليوم يسبب لي الاجهاد و التعب | 6.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | أعمل بفاعليه فيما يتعلق بمشاكل المرضى                       | 7.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | أشعر أنني احترق نفسي بسبب ممارستي للعمل في مجال التمريض     | 8.  |
| 6      | 4                         | 4               | 3                       | 2             | 1                       | 0    | أرى لي حضوري وتأثيري في الآخرين بسبب عملي في مجال التمريض   | 9.  |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | ازداد احساسني بالقسوه تجاه الناس بعد ممرضه/ان اصبحت ممرضا   | 10. |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | اشعر ان لعملي في مجال التمريض اثرا بارزا في قسوة عواطفني    | 11. |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | اشعر بدرجة عاليه من النشاط والحيويه اثناء عملي              | 12. |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | يلازمني شعور بالاحباط بسبب عملي ممرضه/كممرض                 | 13. |
| 6      | 5                         | 4               | 3                       | 2             | 1                       | 0    | ادرك مستوي الاجهاد الذي اعانيه بسبب عملي في مجال التمريض    | 14. |

|   |   |   |   |   |   |   |                                                                         |
|---|---|---|---|---|---|---|-------------------------------------------------------------------------|
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 15. لا اكثر لما يتعرض له المرضى من مشاكل                                |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 16. اعرض لضغوط حادة بسبب عملي في مجال التمريض                           |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 17. أملك القدرة على خلق أجواء نفسية مريحة وسهلة مع الآخرين              |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 18. سعادتي تتجلى في عملي عن قرب مع المرضى                               |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 19. أعتقد انني استطع تحقيق أشياء هامة في مجال عملي في التمريض           |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 20. هناك إحساس برؤودني أنني على شفا الهاوية بسبب العملي في مجال التمريض |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 21. أواجه بهدوء المشاكل الانفعالية والعاطفية أثناء العمل                |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 22. يؤجبه المرضى لي اللوم فيما يختص بمشاكلهم                            |

Maslach Burnout Inventory (MBI)

## Appendix 5

## الجزء الثالث

## استبيان عن الصحة العامة

الرجاء قراءة ما يلي بعناية:

نود ان نعرف اذا كانت لديك أي شكاوى مرضيه و كيف كانت حالتك الصحية العامة خلال الاسابيع القليلة الماضية.

نرجو الإجابة على جميع الأسئلة و ذلك بوضع الإجابة المناسبة التي هي اقرب و تتطابق مع حالتك الصحية.

نرجوان نتذكر اننا نود معرفة الشكاوى المرضية والصحية التي تعاني منها الان و التي عانيت منها خلال الاسابيع

القليلة الماضية فقط وليست التي عانيت منها في الماضي البعيد.

من المهم الإجابة على كل الأسئلة، و شكرا على حسن تعاونكم.

| السؤال                                          | 1               | 2                   | 3               | 4                     |
|-------------------------------------------------|-----------------|---------------------|-----------------|-----------------------|
| 1A- هل كنت تتمتع بصحة تامه وجيده                | احسن من المعتاد | لا فرق كالمعتاد     | اسوء من المعتاد | اسوء بكثير من المعتاد |
| 2A- هل تشعر انك بحاجة لبعض المنشطات؟            | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 3A- هل شعرت انك منهك (متعب) و ليس بحاله طبيعيه؟ | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر كثير من المعتاد  |
| 4A- هل شعرت (احسست) بانك مريض؟                  | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 5A- هل شعرت مؤخرا بصداغ في الراس؟               | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 6A- هل شعرت بالضيق او بالضغط في راسك؟           | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 7A- هل شعرت بنوبات سخونه (حراره) او بروده؟      | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 8B- هل قل نومك بسبب القلق؟                      | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 9B- هل تجد صعوبه في مواصلة النوم؟               | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 10B- هل شعرت بانك تحت ضغط باستمرار؟             | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 11B- هل اصبحت حاد الطبع و سريع الانفعال؟        | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 12B- هل ينتابك خوف او رعب بدون سبب مقنع؟        | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |
| 13B- هل تشعر ان كل ما حولك اصبح عبئا عليك؟      | لا ابدأ         | ليس اكثر من المعتاد | اكثر من المعتاد | اكثر بكثير من المعتاد |



|                                                                     |                     |                     |                    |                              |
|---------------------------------------------------------------------|---------------------|---------------------|--------------------|------------------------------|
| 14B-هل تشعر انك متوتر الاعصاب و متحفز كل الاوقات؟                   | لا بالتأكيد         | ليس اكثر من المعتاد | اكثر من المعتاد    | اكثر بكثير من المعتاد        |
| 15D-هل كان باستطاعتك الاستفاة من وقتك وملئ فراغك بالصورة المطلوبه؟  | اكثر من المعتاد     | كالعادة             | اقل من المعتاد     | اقل بكثير من المعتاد         |
| 16D-هل استغرقت مؤخرا وقتا طويلا بخصوص الاعمال التي كنت تقوم بها؟    | اسرع من المعتاد     | كالمعتاد            | اطول من المعتاد    | اطول بكثير من المعتاد        |
| 17D-هل احسست مؤخرا بانك كنت تؤدي اعمالك بصورة جيدة؟                 | احسن من المعتاد     | كالمعتاد            | اقل من المعتاد     | اقل بكثير من المعتاد         |
| 18D-هل انت راض عن الطريقة التي انجزت بها مهامك و اعمالك ؟           | اكثر رضا من المعتاد | راضي كالمعتاد       | اقل رضا من المعتاد | اقل رضا بكثير جدا من المعتاد |
| 19D-هل شعرت بانك تقوم بدور مفيد في الامور حولك؟                     | اكثر من المعتاد     | كالمعتاد            | اقل من المعتاد     | اقل بكثير من المعتاد         |
| 20D-هل كان باستطاعتك اتخاذ القرارات في الامور؟                      | اكثر من المعتاد     | كالمعتاد            | اقل من المعتاد     | اقل بكثير من المعتاد         |
| 21D-هل كنت تجد متعة في اداء نشاطك؟                                  | لا مطلقا            | ليس اكثر من المعتاد | اكثر من المعتاد    | اكثر بكثير من المعتاد        |
| 22C-هل كنت تتظر لنفسك كشخص عديم الفائدة؟                            | لا ايدا             | ليس اكثر من المعتاد | اكثر من المعتاد    | اكثر بكثير من المعتاد        |
| 23C-هل شعرت مؤخرا بانه لا امل في الحياة بناتا؟                      | لا ايدا             | ليس اكثر من المعتاد | اكثر من المعتاد    | اكثر بكثير من المعتاد        |
| 24C-هل شعرت ان الحياه لا قيمة لها و لا تستحق العيش؟                 | لا ايدا             | ليس اكثر من المعتاد | اكثر من المعتاد    | اكثر بكثير من المعتاد        |
| 25C-هل فكرت ان تنهي حياتك؟                                          | لا قطعيا            | لا اعتقد ذلك        | لقد راودتني الفكرة | نعم بالتأكيد                 |
| 26C-هل وجدت نفسك في بعض الاوقات لا تستطيع عمل شي لان اعصابك متوتره؟ | لا مطلقا            | ليس اكثر من المعتاد | اكثر من المعتاد    | اكثر بكثير من المعتاد        |
| 27C-هل تمنيت لو كنت ميتا و بعيدا عن كل شئ كليا؟                     | لا مطلقا            | ليس اكثر من المعتاد | اكثر من المعتاد    | اكثر بكثير من المعتاد        |
| 28C-هل تراودك فكرت الانتحار باستمرار؟                               | لا قطعيا            | لا اعتقد ذلك        | خطرت ببالي الفكرة  | نعم بالتأكيد                 |

## Appendix 6

### (5) GHQ-28 استخدام الاستبيان

People

الاستاذ الدكتور الفاضل : تحيه طيبه وبعد انا طالب ماجستير في تخصص <ehab308@yahoo.com> ehab naerat  
تمريض الصحه النفسيه في جامعة النجاح الوطنيه ف

To

[alhamad@ksu.edu.sa](mailto:alhamad@ksu.edu.sa)

11/01/15 at 9:38 PM

الاستاذ الدكتور الفاضل :

تحيه طيبه وبعد

انا طالب ماجستير في تخصص تمريض الصحه النفسيه في جامعة النجاح الوطنيه في فلسطين. واحضر رساله تخرج بعنوان

Burnout and psychological distress among primary health care nurses

بإشراف الدكتور ايمان شوايش.

لارجو من حضرتكم السماح لي باستخدام الاستبيان باللغة العربيه و الذي قمت بترجمته و تحليله في الدراسه GHQ-28  
المنشوره بعنوان

THE VALIDATION OF THE GENERAL HEALTH QUESTIONNAIRE (GHQ-28) IN A  
PRIMARY CARE SETTING IN SAUDI ARABIA

ولكم جزيل الشكر والعرفان وبارك الله فيكم

ايهاب نعييرات

الأخ العزيز إيهاب نعييرات المحترم

السلام عليكم وبعد

لامانع لدي من استخدام

في بحث الماجستير الذي تقوم بإعداده بالضوابط الاخلاقيه للبحث العلمي بذكر المراجع وحفظ الحقوق GHQ-28 the  
الخاصة للجميع . راجيا لكم التوفيق والنجاح في مسيرتكم العلميه .

وشكرا

Professor AbdulrazzakAlhamad

Show original message

On 2 Nov 2015, at 19:17, ehabnaerat<[ehab308@yahoo.com](mailto:ehab308@yahoo.com)> wrote:

On Sunday, November 1, 2015 9:38 PM, ehabnaerat<[ehab308@yahoo.com](mailto:ehab308@yahoo.com)> wrote:

## Appendix 7

An-Najah National University

Faculty of Medicine &amp; Health Sciences

Department Of Graduate Studies



جامعة النجاح الوطنية

كلية الطب وعلوم الصحة

دائرة الدراسات العليا

## IRB Approval letter

**Study title:**

Burnout and Psychological Distress among Primary Health care Nurses in North West Bank.

**Submitted by:**

Ehab Omar Nairat.

**Date Reviewed:**

June 16, 2016

**Date approved:**

July 19, 2016

Your study titled: Burnout and Psychological Distress among Primary Health care Nurses in North West Bank with archived number 14/ June/2016 was reviewed by An-Najah National University IRB committee and was approved on July 19, 2016.

Hasan Fitian, MD

*Aida Athanas*  
IRB Committee Chairman,  
An-Najah National University

## Appendix 8

State of Palestine  
Ministry of Health - Nablus  
General Directorate of Education in  
Health



دولة فلسطين  
وزارة الصحة - نابلس  
الإدارة العامة للتعليم الصحي

Ref.: .....  
Date: .....

رقم: ٢٠١٦/٤٤٤/٢٠١٦  
تاريخ: ٢٠١٦/٨/٢٠

الأخ مدير علم الإدارة العامة للرعاية الصحية الأولية المحترم،،،

تحية واحترام،،،

الموضوع: تسهيل مهمة طلاب ماجستير - جامعة النجاح

تماشياً مع سياسة وزارة الصحة المتعلقة بتعزيز التعاون مع الجامعات والمؤسسات الأكاديمية  
بإتاحة فرص التدريب أمام الطلبة والخريجين والباحثين في المؤسسات الوطنية وإسهاماً في تنمية  
قدراتهم.

يرجى تسهيل مهمة الطالب: ايهاب عمر احمد نعرات- ماجستير تمريض الصحة النفسية  
والمجتمعية/ جامعة النجاح، في عمل بحث بعنوان "الاحتراق النفسي والتوترات النفسية لدى  
التمريض العاملين في الرعاية الصحية الأولية"، من خلال السماح للطلاب بالحصول على معلومات  
من خلال استبانة من التمرريض العاملين في: مراكز الرعاية الصحية الأولية في مديريات الصحة  
في (جنين، طولكرم، نابلس، طولكرم). وذلك في الفترة الواقعة بين 2016/8/9 - 2016/10/9.  
معظم ان مشرفة للبحث : د. ايمان شلوش.

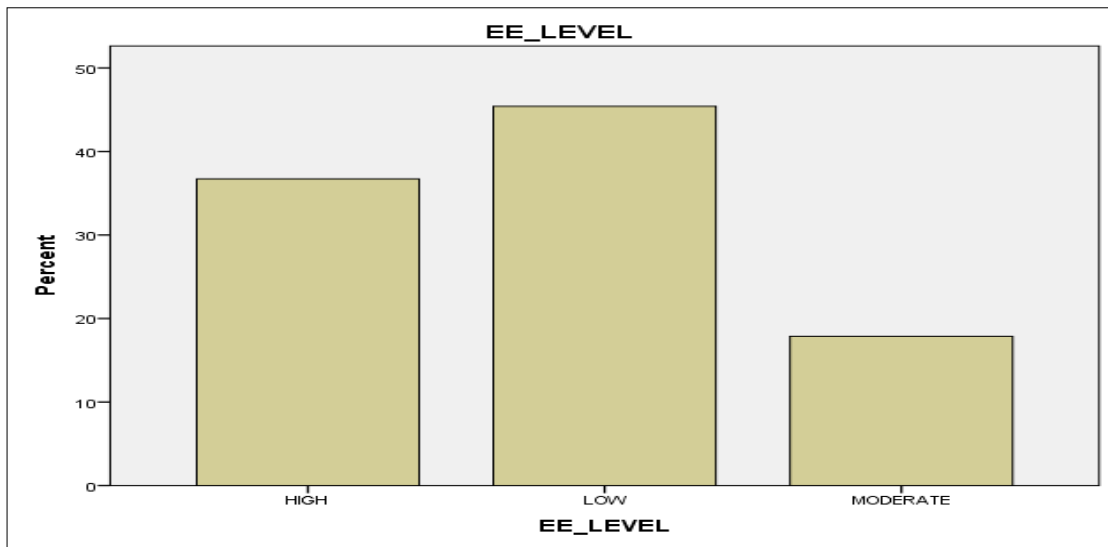
علما انه سيتم الالتزام بمعايير البحث العلمي والحفاظ على سرية المعلومات.

مع الاحترام،،،

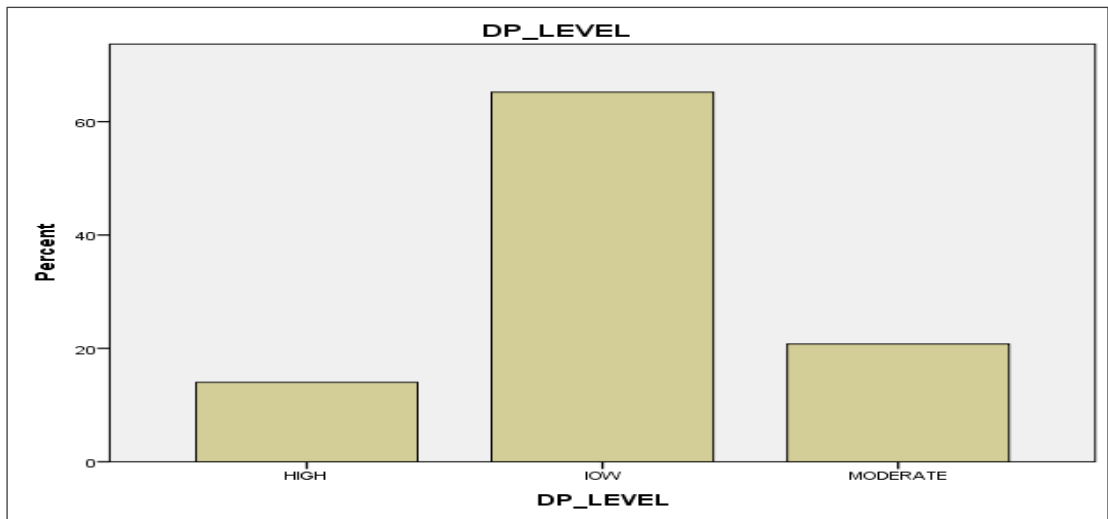


1475 - 22/500  
14.8.2016

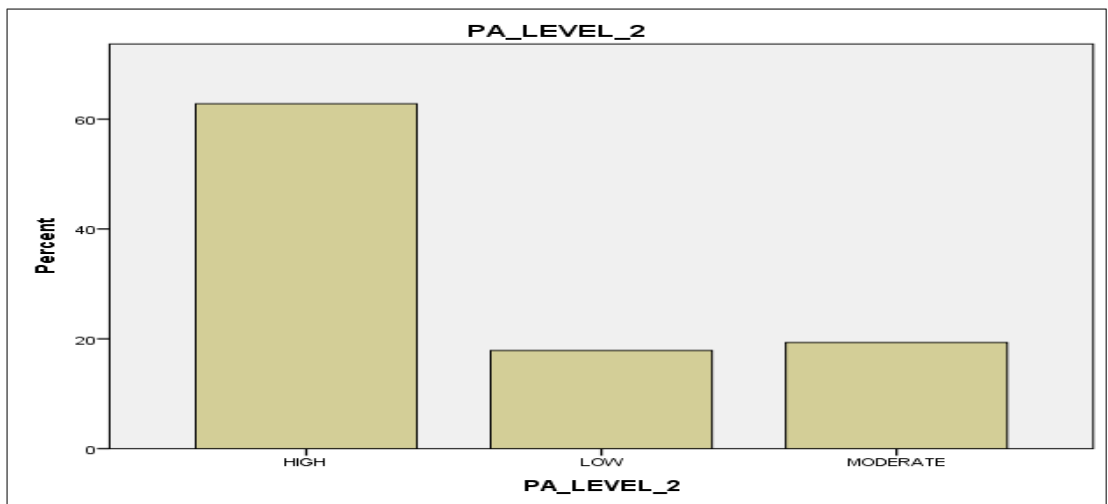
نسخة: منفصلة برنامج ماجستير تمريض الصحة النفسية المحترمة/ جامعة النجاح



**Figure 2:** the level of EE (Emotional Exhaustion).



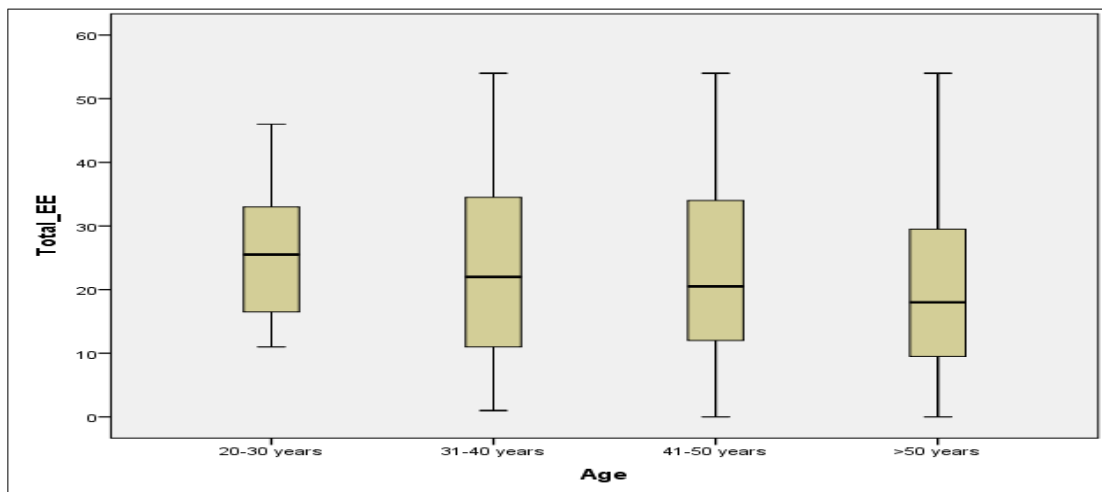
**Figure 3:** the level of DP (Depersonalization).



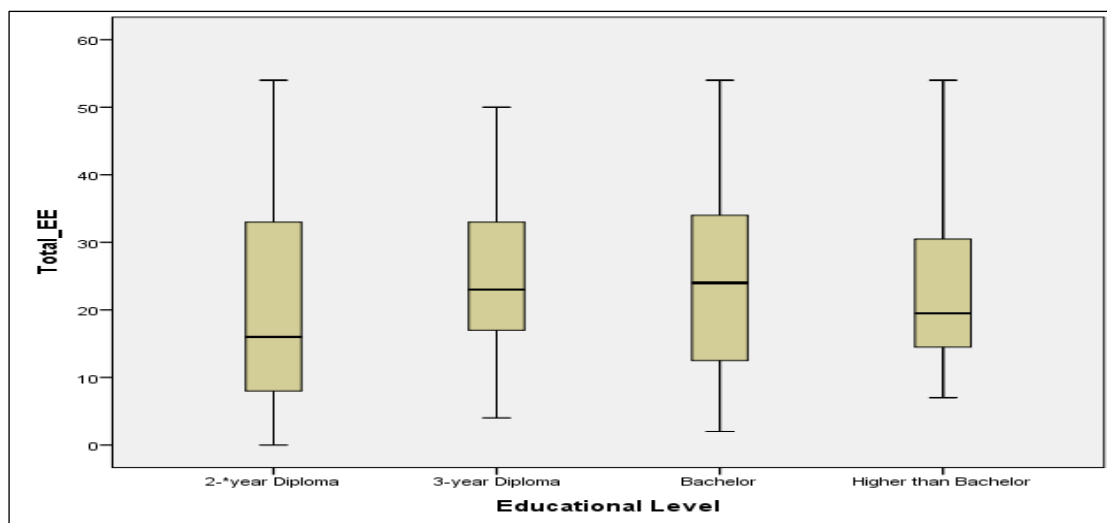
**Figure 4:** the level of personal accomplishment (PA).



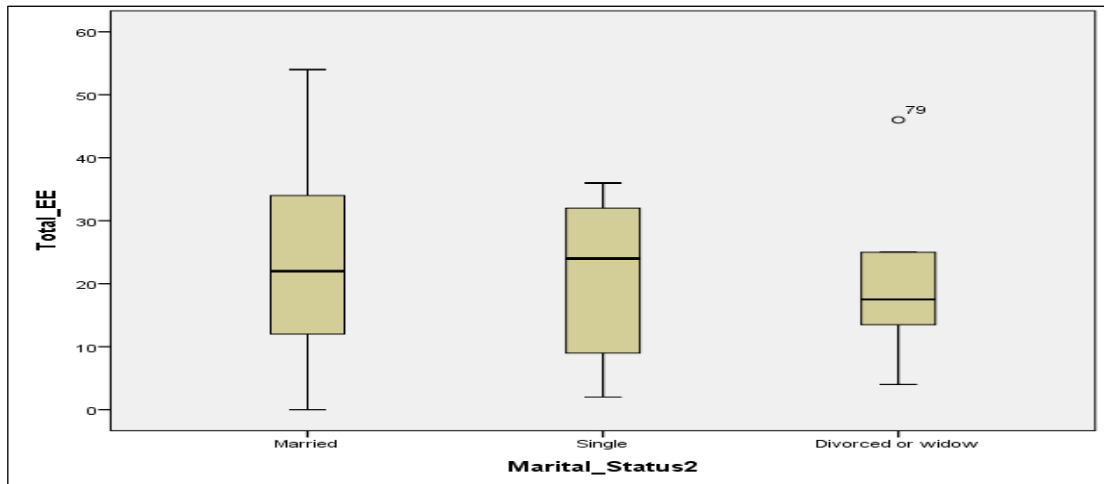
**Figure 5:** Gender: Box plot (with 95% CIs) for MBI-EE.



**Figure 6:** Age: Box plots (95with % CIs) for MBI-EE.



**Figure 7:** Qualification: Box plots (with 95% CIs) for MBI-EE.



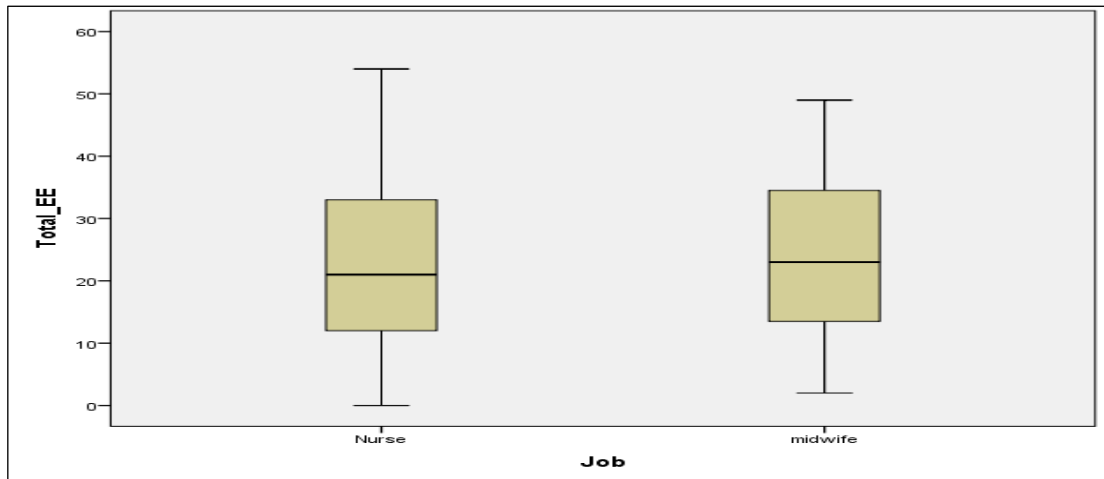
**Figure 8:** Marital status: Box plots (with 95% CIs) for MBI-EE



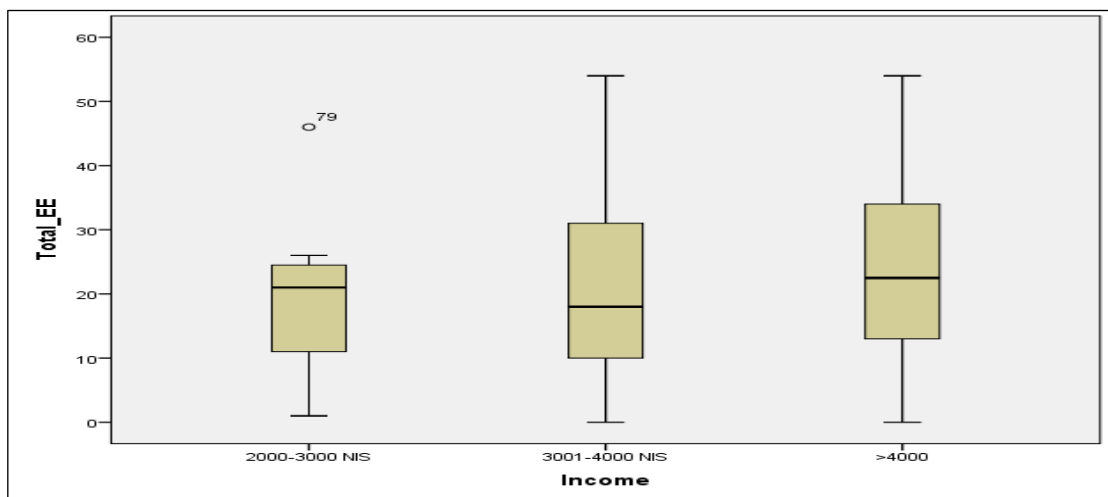
**Figure 9:** Number of children: Box plots (with 95% CIs) for MBI-EE



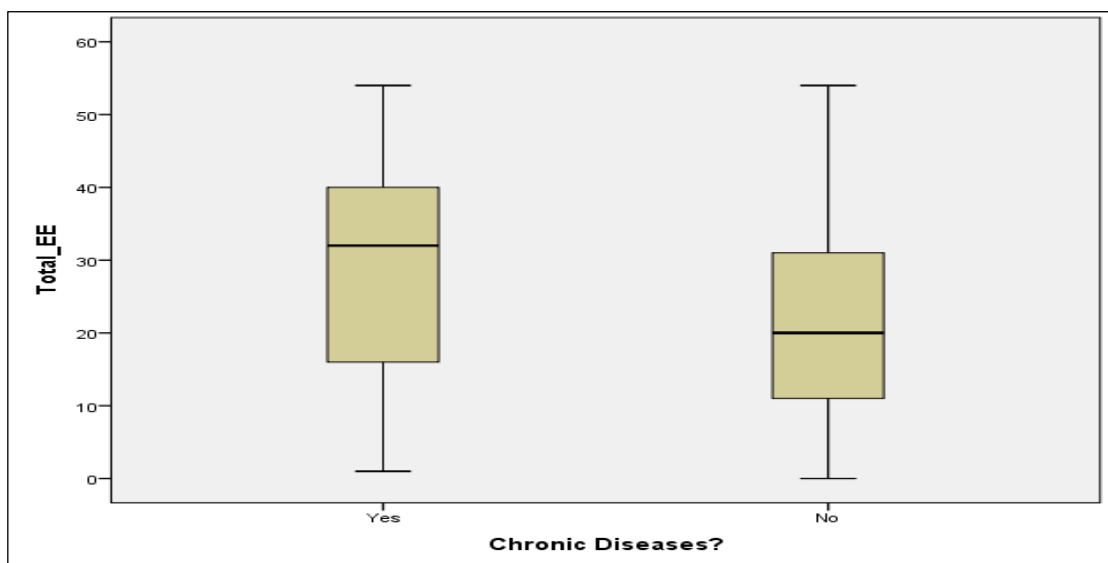
**Figure 10:** Experience: Box plots (with 95% CIs) for MBI-EE



**Figure 11:** Specialization: Box plots (with 95% CIs) for MBI-EE

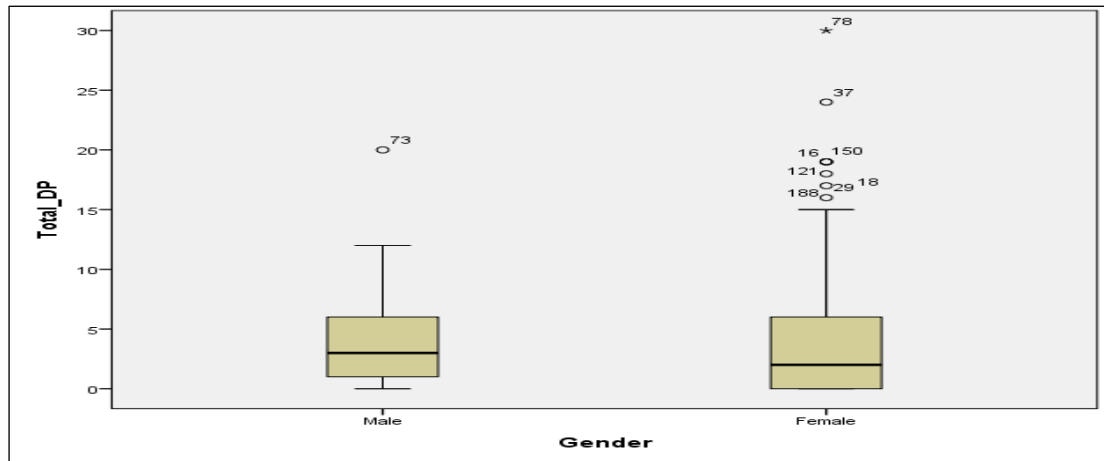


**Figure 12:** Income: Box plots (with 95% CIs) for MBI-EE

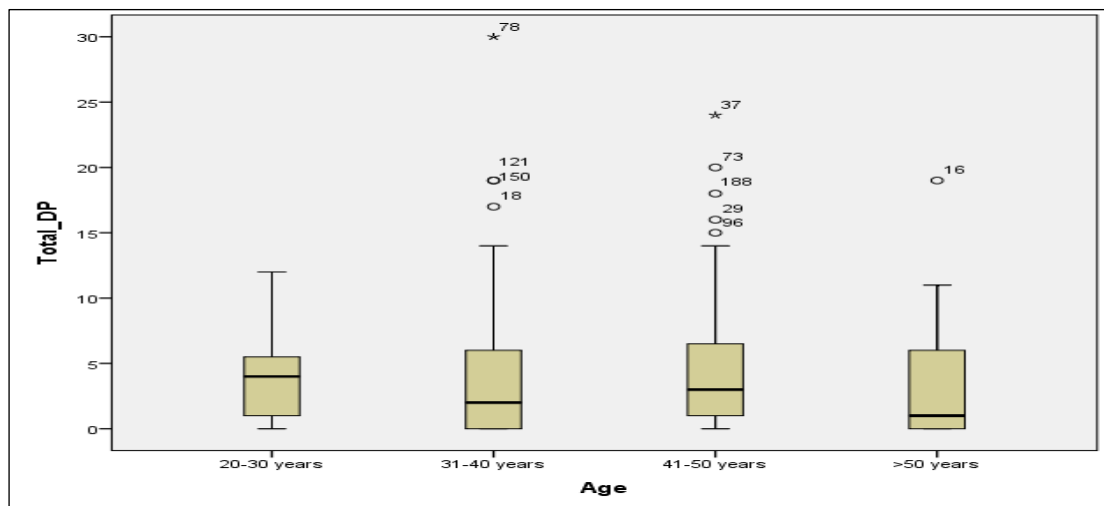


**Figure 13:** Suffering from chronic diseases: Box plots (with 95% CIs) for MBI-EE

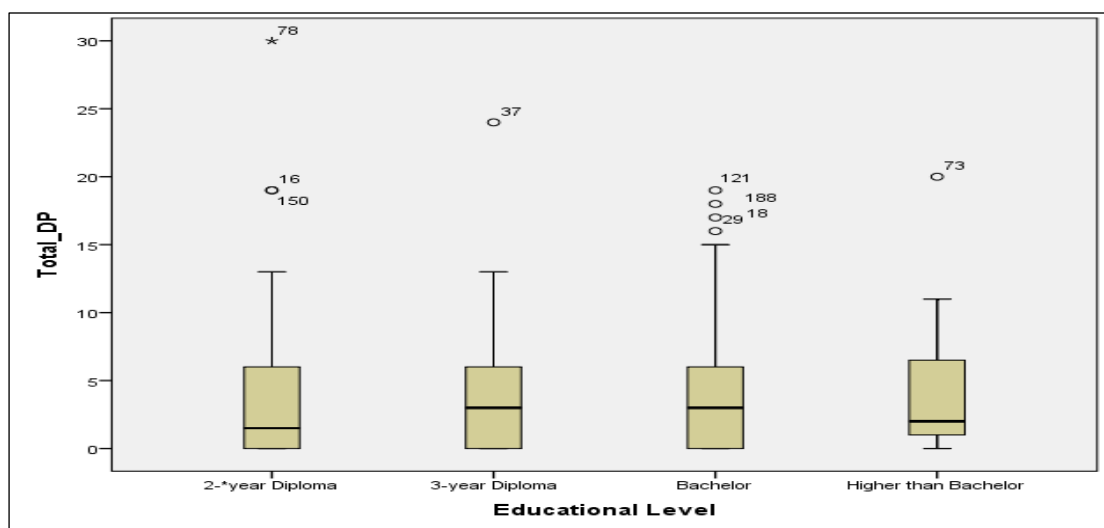




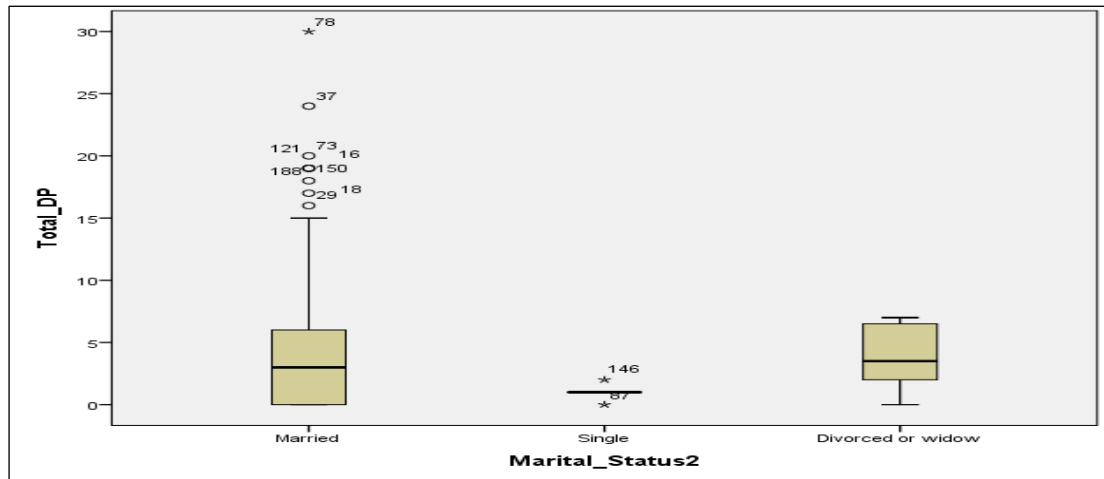
**Figure 14:** Gender: Box plots (with 95% CIs) for MBI-DP



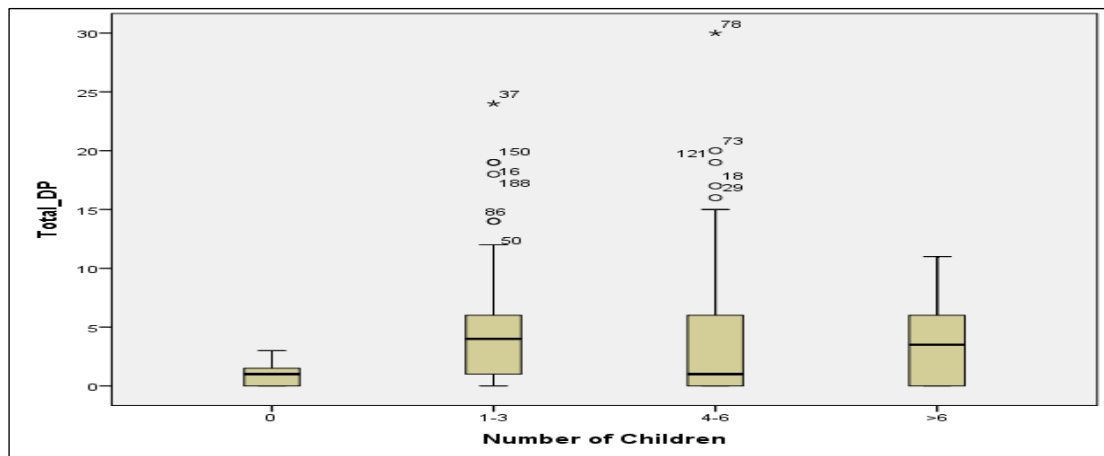
**Figure 15:** Age: Box plots (with 95% CIs) for MBI-DP



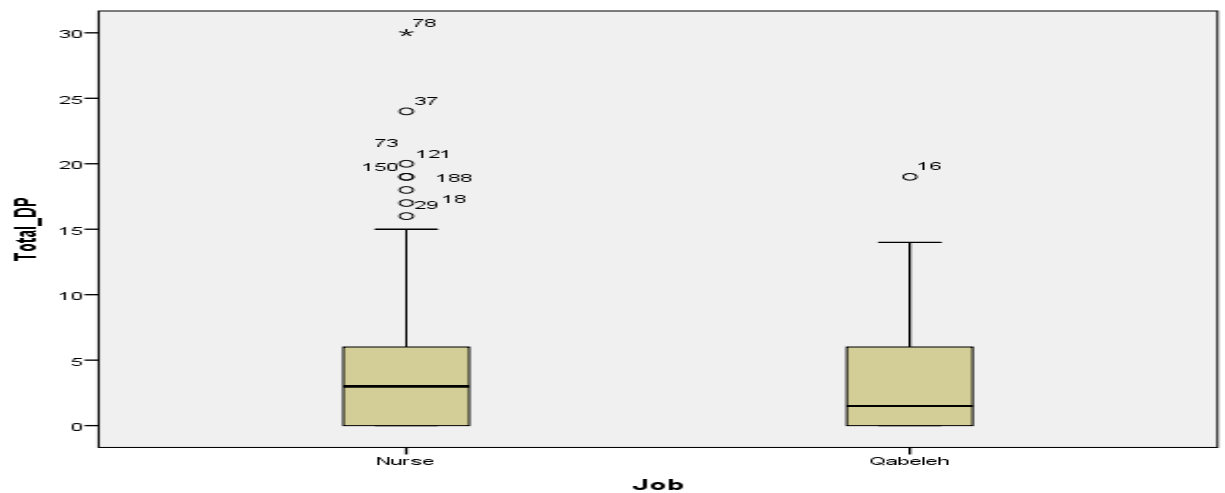
**Figure 16:** Qualification: Box plots (with 95% CIs) for MBI-DP



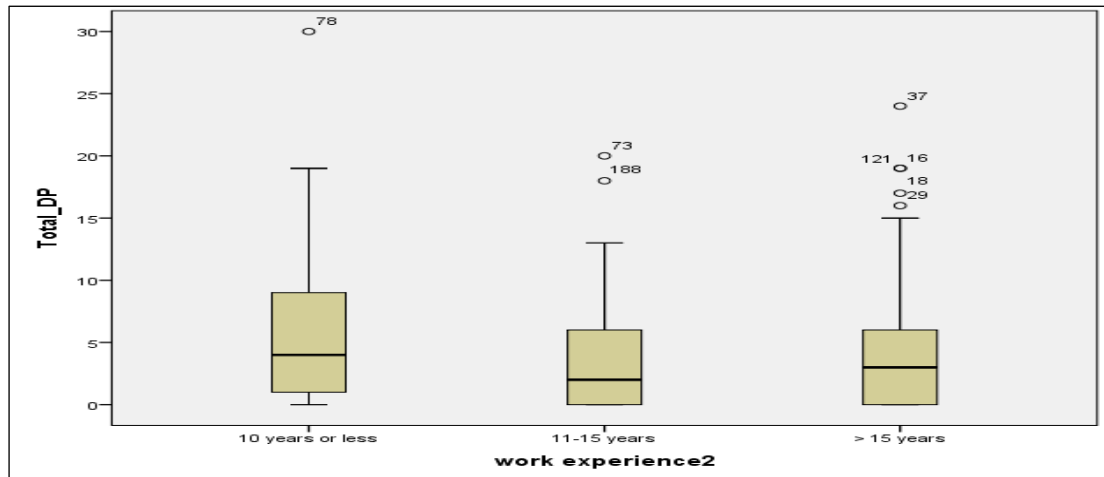
**Figure 17:** Marital Status: Box plots (with 95% CIs) for MBI-DP



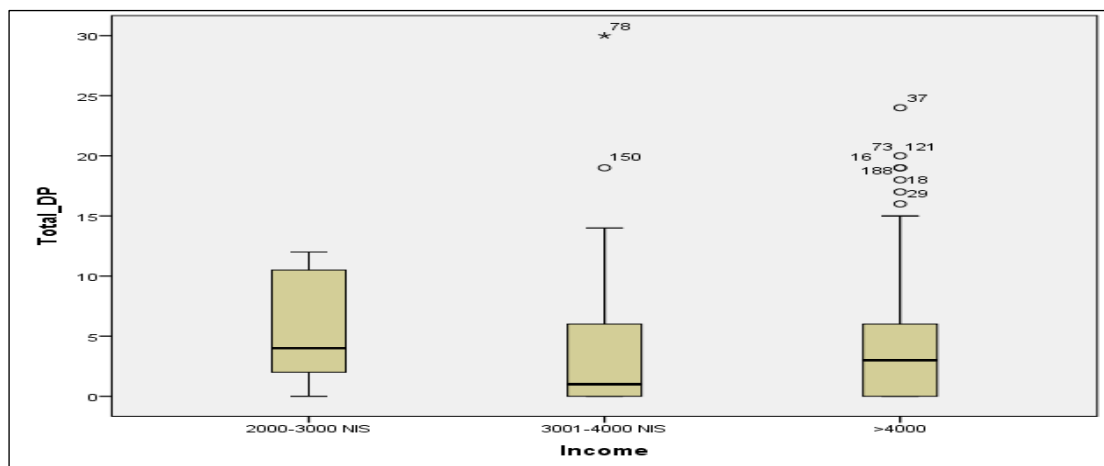
**Figure 18:** Number of Children: Box plots (with 95% CIs) for MBI-DP



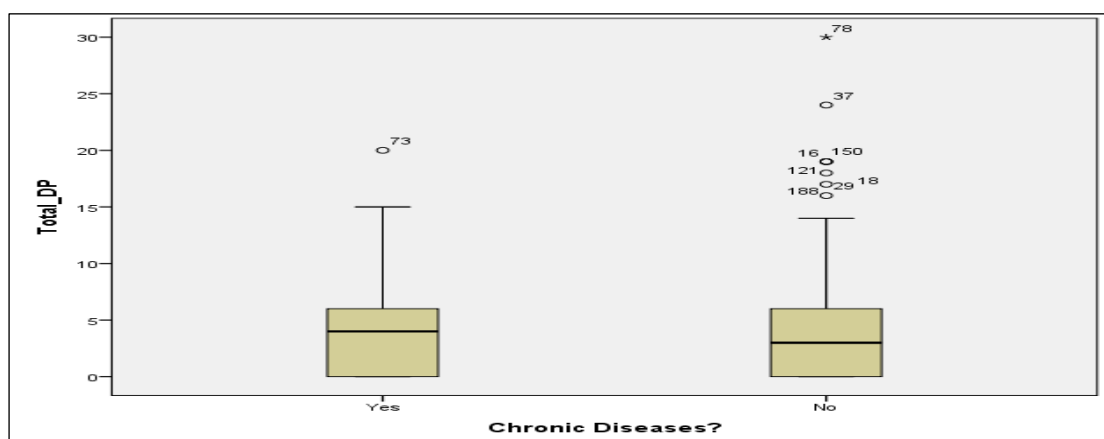
**Figure 19:** Specialization: Box plots (with 95% CIs) for MBI-DP



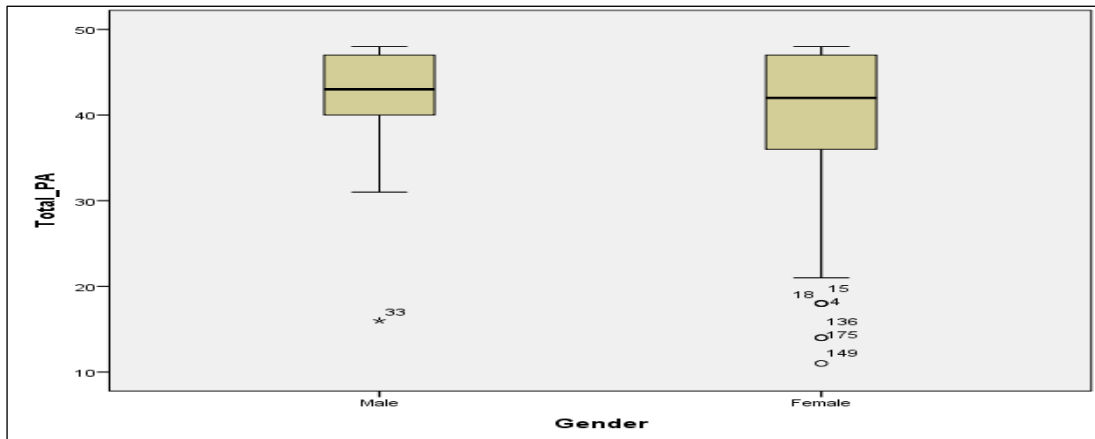
**Figure 20;** Experience: Box plots (with 95% CIs) for MBI-DP



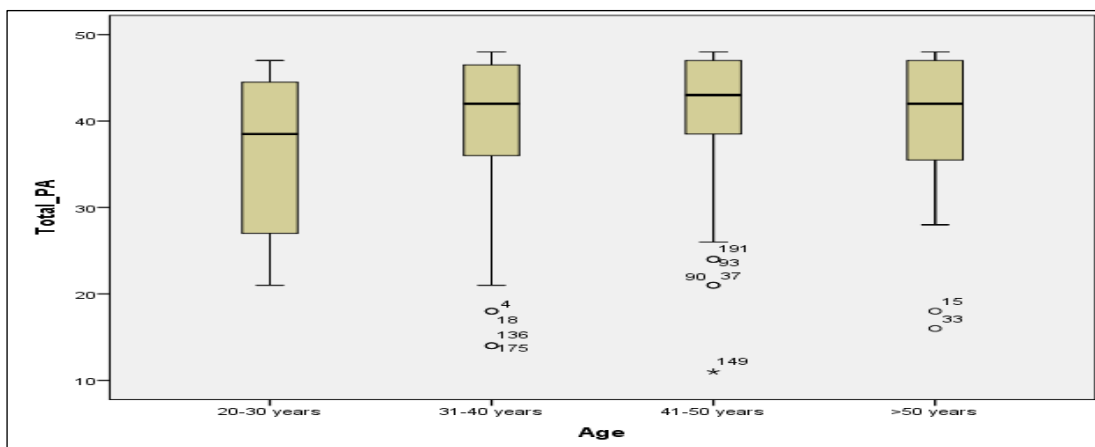
**Figure 21:** Income: Box plots (with 95% CIs) for MBI-DP



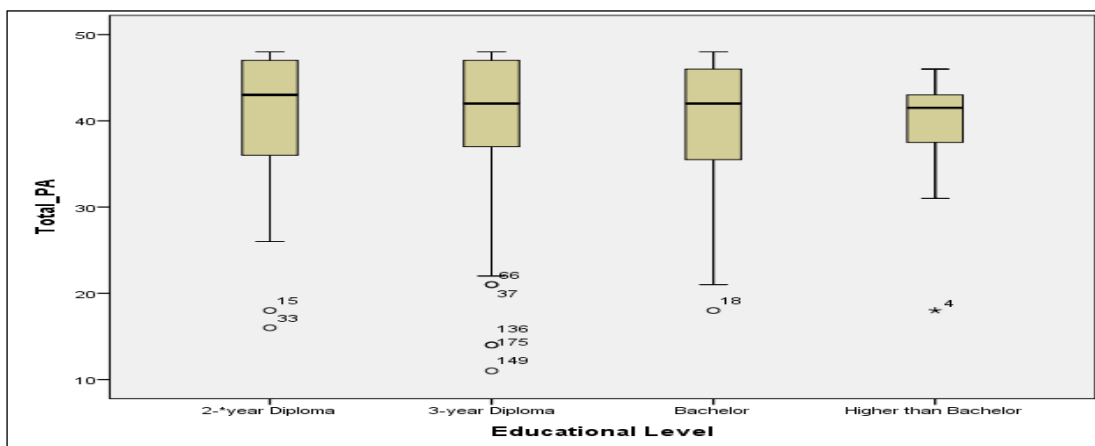
**Figure 22:** Suffering from chronic diseases: Box plots (with 95% CIs) for MBI-DP



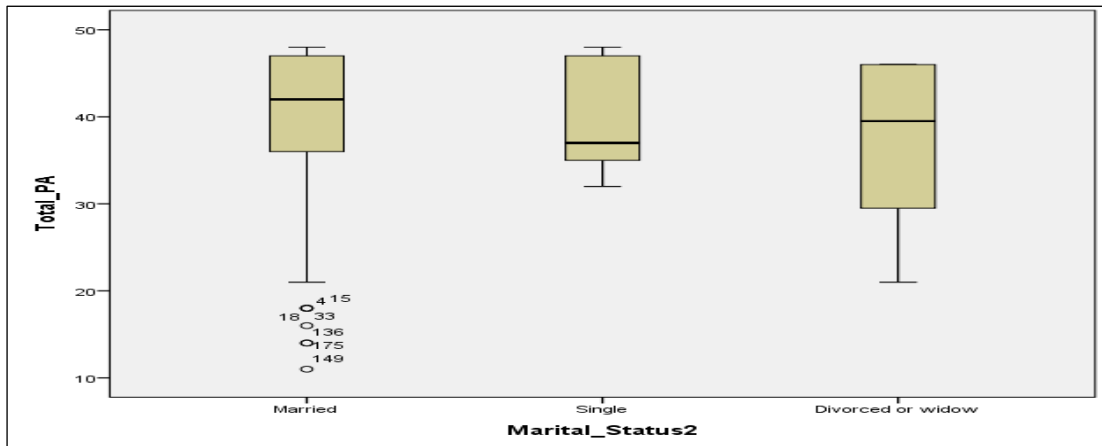
**Figure 23:** Gender: Box plots (with 95% CIs) for MBI-PA



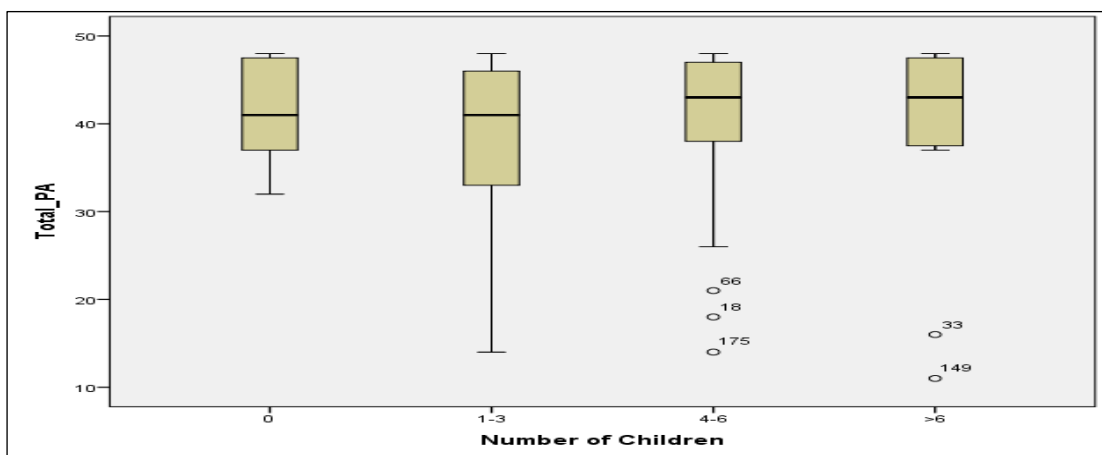
**Figure 24:** Age: Box plots (with 95% CIs) for MBI-PA



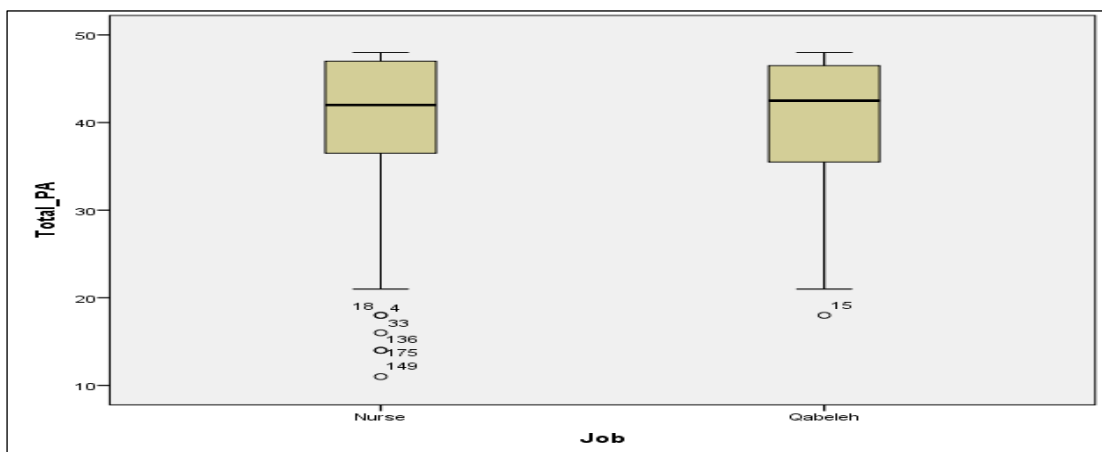
**Figure 25:** Qualification: Box plots (with 95% CIs) for MBI-PA



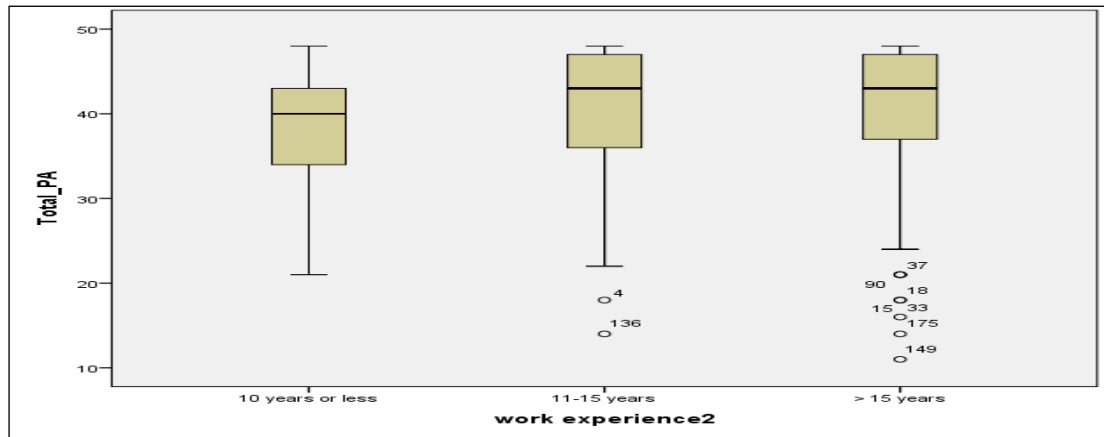
**Figure 26:** Marital Status: Box plots (with 95% CIs) for MBI-PA



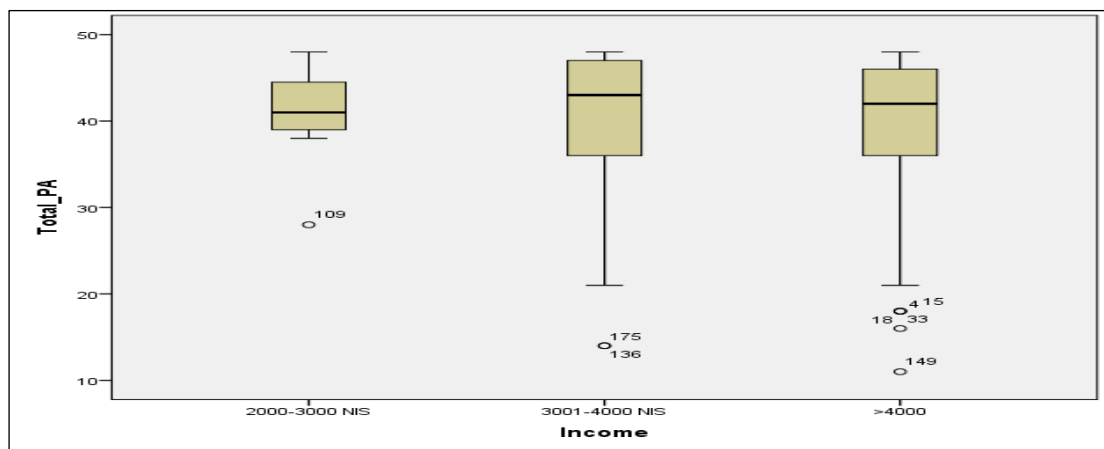
**Figure 27:** Numbers of children: Box plots (with 95% CIs) for MBI-PA



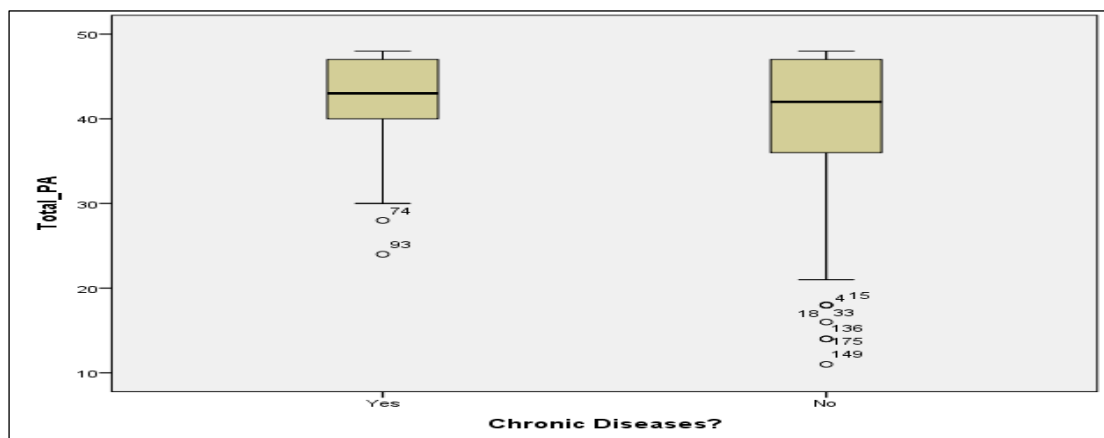
**Figure 28:** Specialization: Box plots (with 95% CIs) for MBI-PA



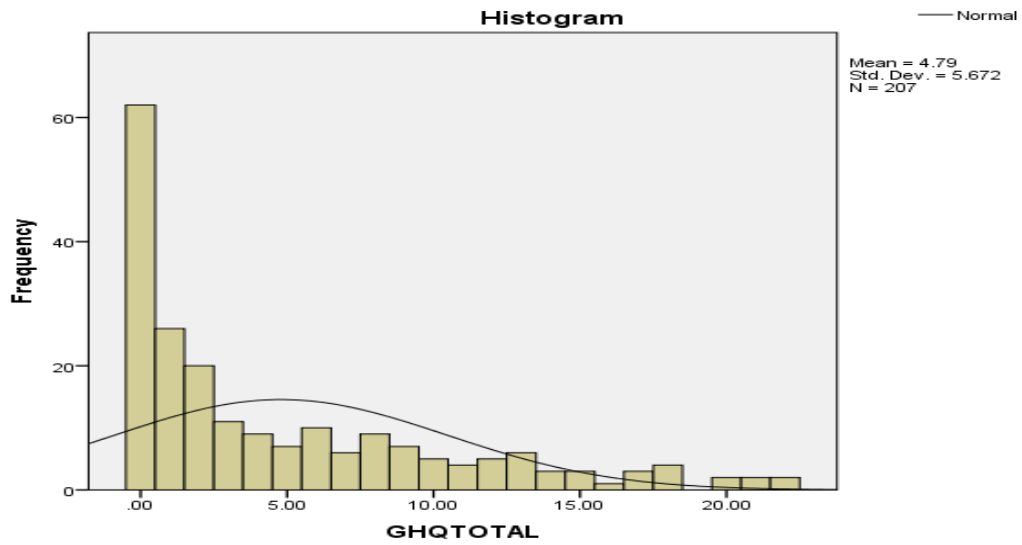
**Figure 29:** Experience: Box plots (with 95% CIs) for MBI-PA



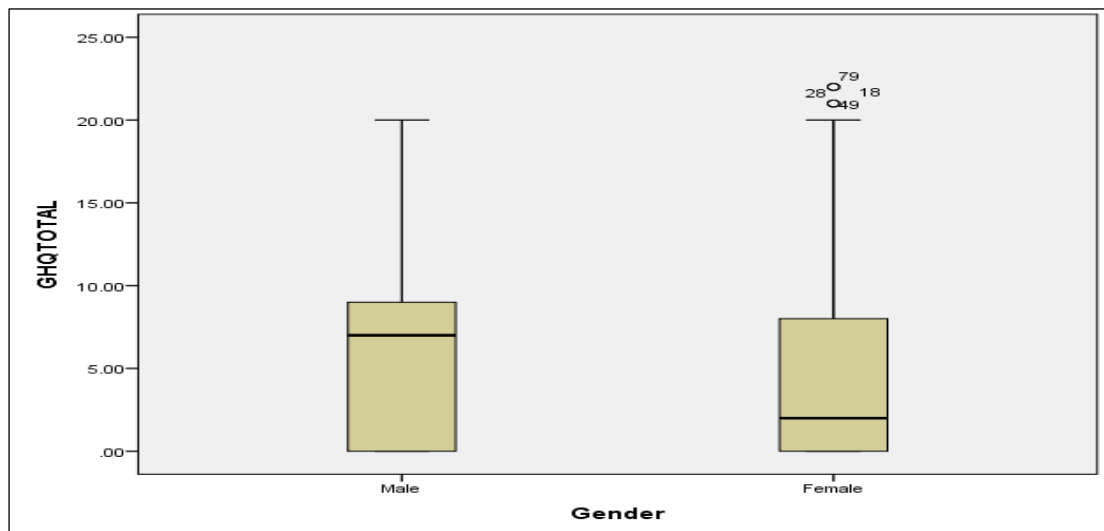
**Figure 30.** Income: Box plots (with 95% CIs) for MBI-PA



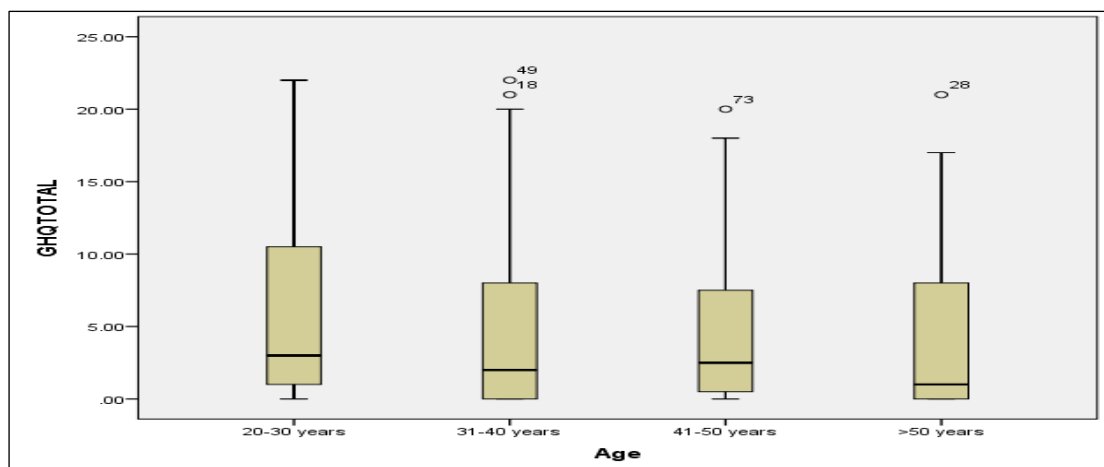
**Figure 31.** Suffering from chronic diseases: Box plots (with 95% CIs) for MBI-PA.



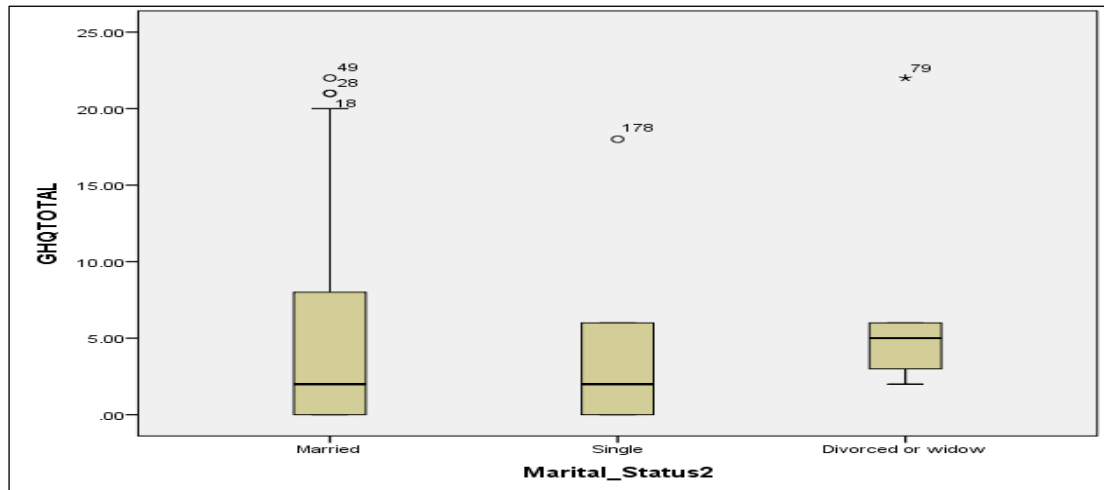
**Figure 32.** Histogram of GHQ Scores.



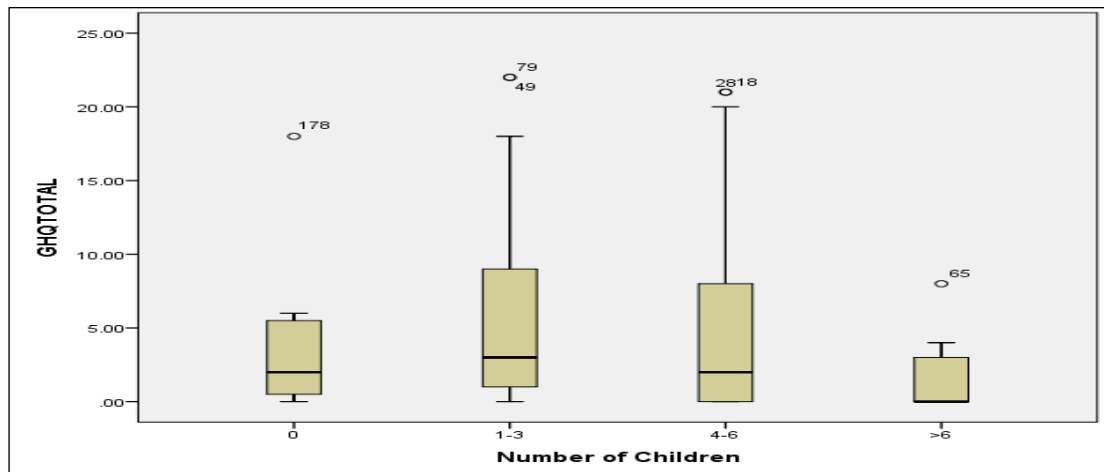
**Figure 33.** Gender: Box plots (with 95% CIs) for GHQ-28 total score



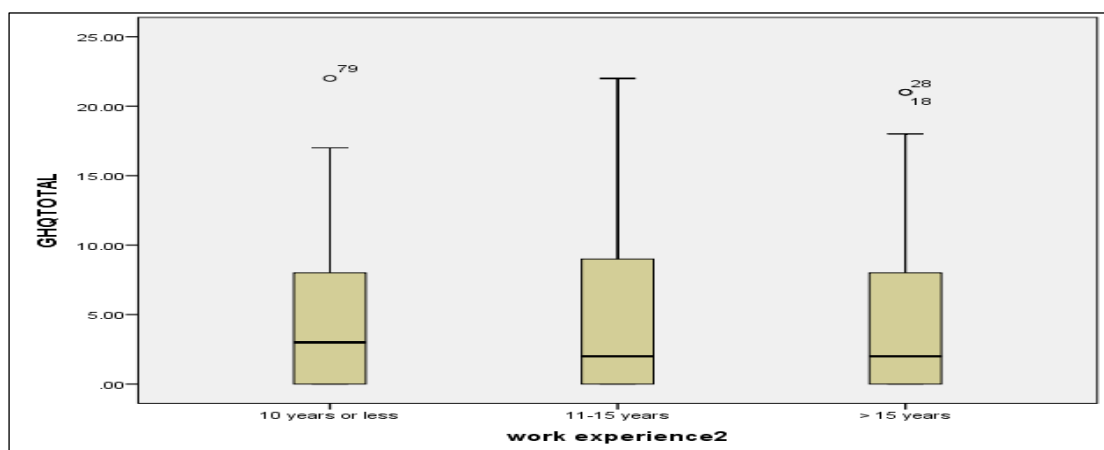
**Figure 34.** Age: Box plots (with 95% CIs) for GHQ-28 total score



**Figure 35.** Marital Status: Box plots (with 95% CIs) for GHQ-28 total score

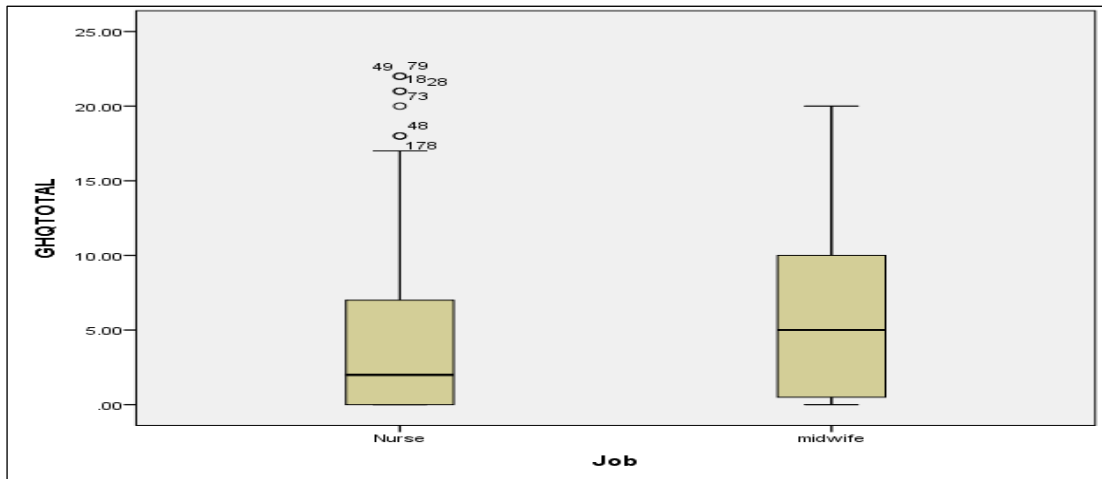


**Figure 36.** Number of children: Box plots (with 95% CIs) for GHQ-28 total score

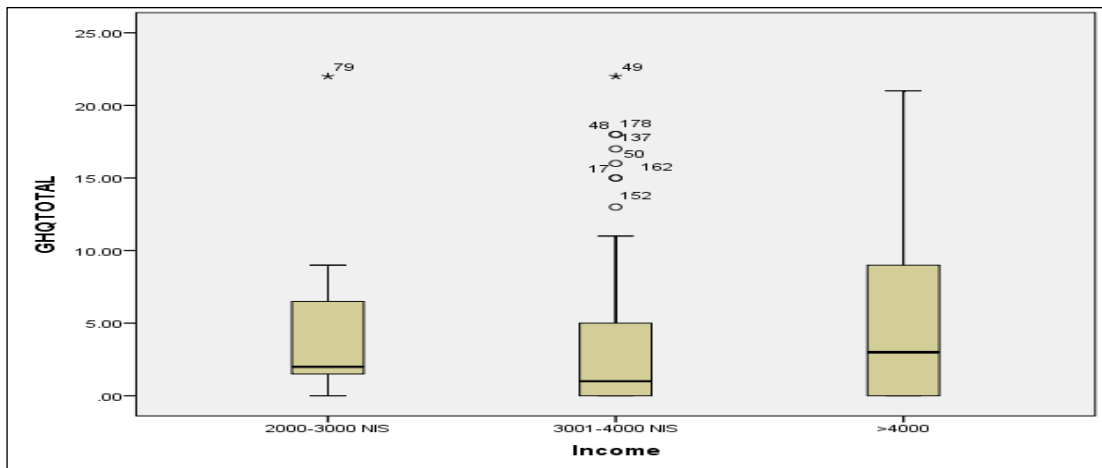


**Figure 37.** Work experience: Box plots (with 95% CIs) for GHQ-28 total score

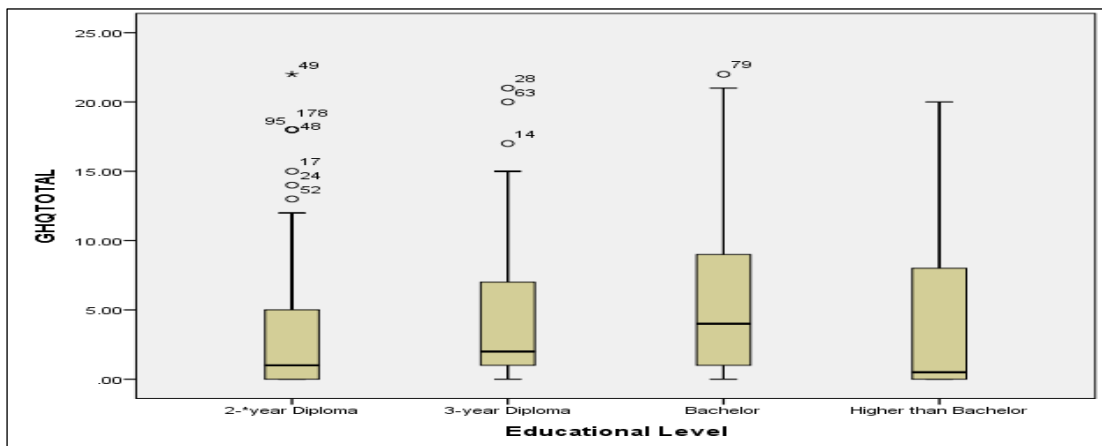




**Figure 38.** Specialization: Box plots (with 95% CIs) for GHQ-28 total score



**Figure 39.** Income: Box plots (with 95% CIs) for GHQ-28 total score



**Figure 40.** Qualification: Box plots (with 95% CIs) for GHQ-28 total score



**Figure 41.** Suffering from chronic diseases: Box plots (with 95% CIs) for GHQ-28 total score Anxiety, Insomnia, Depression, Somatization.

جامعة النجاح الوطنية

كلية الدراسات العليا

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الصحية الأولية في شمال الضفة الغربية

اعداد

إيهاب نعييرات

إشراف

د. إيمان الشاويش

قدمت هذه الأطروحة استكمالاً لمتطلبات الحصول على درجة الماجستير في برنامج تمريض  
الصحة النفسية المجتمعية، كلية الدراسات العليا، جامعة النجاح الوطنية، نابلس-فلسطين

2018

ب

## الاحتراق النفسي والتوترات النفسية لدى التمريض والقابلات العاملين في الرعاية الصحية الأولية في شمال الضفة الغربية

اعداد

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### الملخص

هدفت هذه الدراسة الى التعرف على مدى انتشار الاحتراق النفسي والاضطرابات النفسية لدى المرضى والممرضات والقابلات العاملين في مراكز الرعاية الصحية الأولية الواقعة في شمال الضفة الغربية.

من اجل تحقيق ذلك قام الباحث بتوزيع استبانة تتكون من مجالين الاول مقياس مازلاش (MBI) لقياس مستوى الاحتراق النفسي والثاني مقياس الصحة العامة 28 (GHQ-28) لقياس مدى انتشار الاضطرابات النفسية. تم توزيع هذه الاستبانة على عينه مقدارها 295 ممرضه وقابله يعملون في مراكز الرعاية الصحية الأولية في شمال الضفة الغربية، و بعد تجميع الاستمارات تم ترميزها وادخالها الى الحاسوب ومعالجتها احصائيا باستخدام برنامج الرزم الإحصائية للعلوم الاجتماعية ( SPSS ) وتم قياس صدقها وثباتها. كشفت النتائج ان معدل انتشار الاحتراق النفسي لدى الممرضين والممرضات والقابلات العاملين في مراكز الرعاية الصحية الأولية كان (10%)، وان ( 36.7 % ) من المشاركين درجاتهم عالية على بعد الاجهاد الانفعالي، وان (14%) درجاتهم عالية على بعد تلبد المشاعر، وكذلك ( 17.9 %) يشيع لديهم نقص الشعور بالإنجاز الشخصي. كما كشفت الدراسة ان (22.6%) كانوا يعانون من اضطرابات نفسيه.

بناء الى ما توصلت اليه الدراسة من نتائج، اوصى الباحث بضرورة قيام وزارة الصحة الفلسطينية واصحاب القرار بإنشاء برامج منتظمة للدعم النفسي وادارة التوتر الناتج عن ضغوط العمل لدى الممرضين والممرضات والقابلات العاملين في مراكز الرعاية الصحية الأولية.

