

# OCCUPATIONAL STRESS AND COPING STRATEGIES AMONG NURSES IN SOME PUBLIC HOSPITALS

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## Abstract:

The main objective of this study revolves around attempting to understand the significance of differences in professional stress and coping strategies among nurses. To test the validity of these hypotheses, a purposive sample of 152 nurses was selected, including 82 male and 70 female nurses, ranging in age from 22 to 53 years. The Cohen Stress Scale and the Paulhan Coping Strategies Scale were administered to the nurses .

After testing the research objectives, the following results were obtained:

-Moderate levels of stress were prevalent in our sample, due to continuous exposure to psychological pressures.

-The prevalence of emotion-focused coping strategies was observed and this result can be attributed to a lack of effective problem-solving skills when faced with challenging situations. They tend to have a negative approach to dealing with stressful events.

**Keywords:** occupational stress, coping strategies, nurses.

## Introduction:

Human beings have always been, and continue to be, in search of stability and security, especially in an era characterised by pressure. Despite overcoming problems and difficulties and reducing physical strain, this development has transformed old problems into new ones, especially psychological problems and stress.

Some believe that the issue of work-related stress is complex and multifaceted. However, we argue that despite its complexity, its management is even more complex and intertwined. This complexity has created challenges in identifying strategies for coping with stress, "aimed at restoring psychological and social equilibrium based on one's own knowledge, beliefs and psychological references, including religious beliefs, family traditions, social skills and different educational and cultural experiences". Although everyone experiences stress, there are individual differences in psychological, family and professional conditions. Nurses, in particular, face multiple and stressful pressures in their profession. Nursing is considered a demanding profession because Algerian nurses face a number of problems in

hospitals, including a lack of resources, necessary medicines, undefined responsibilities, scattered activities and demanding working hours, especially night shifts. All of these factors manifest as deficiencies, fatigue, dissatisfaction and neglect. The aim of this study is therefore to restore the importance of this group, to reduce their stress levels and to help them develop self-awareness and appropriate strategies for coping with and adapting to stressful events.

### **1- The problem:**

The scientific advances in health care in this century have been accompanied by developments and advances in nursing as a science and art. Nursing now has new theories and concepts that are different from those of the past. Nursing is the work done by nurses to assist people in activities that contribute to improving or restoring their health when they are ill.

Nursing services are now developed and organised on a sound scientific basis. The profession requires a high level of competence and technical skills. Nurses act as a link between all health professionals in the hospital setting, which is why they are the focus of this study and research.

Poyen et al found that nurses are prone to various disorders, most of which are characterised by depressive symptoms. They were also found to have long periods of sickness absence due to work pressures.

Numerous studies, such as those by Beek (1988), Alkind (1988), Thomas (1989) and Harris (1989), have shown that health care workers and nurse managers are highly susceptible to social and psychological stress. This is because they are exposed to and have to respond to many stressful situations simultaneously (Linda Moussawi, 2001, p.5).

This group is considered one of the most susceptible to stress due to their continuous work with patients. Several statistics indicate that 80% of modern diseases are caused by psychological stress.

Gall et al (1996) define stress as "a physiological and psychological response to situations and events that disrupt and disturb the equilibrium of living organisms. It arises from a variety of sources and elicits a variety of responses, some of which are negative and some of which are positive. Despite its negative effects, many believe that a certain level of stress is necessary for happiness and mental well-being" (Hassan Mustafa Abdel-Moaty, 2006, p.21).

According to a 1991 report in H.R.M. Magazine, 70% to 90% of daily visitors to doctors' surgeries suffer from stress-related illnesses. In addition, the results of a study by Henry in 1991 showed that 70% of the individuals in the study believed that increased exposure to work-related stress had led to a decrease in their productivity. In addition, 20% were absent from work on a daily basis due to stress and one third of the sample were seriously considering resigning as a result of stress (Linda Moussawi, 2001, p.4).

As psychological stress persists, nurses may face difficulties and problems that hinder the achievement of their goals. In order to reduce the severity of psychological stress, effective adaptation and coping strategies need to be employed. Asaad Al-Amara defines coping strategies as "the individual's attempt to regain psychological equilibrium and adapt to events that pose immediate and future threats" (Saad Al-Amara, 2001, p.2).

Studies indicate that individuals differ in their reactions to stress and the strategies they use to cope with it. This has led researchers to recognise the impact of individual factors such as age, gender and marital status. However, there are other studies that take a different view. Based on this, the current study focuses on determining the level of occupational stress and coping strategies in a sample of nurses.

Based on the above, the following questions were asked:

- Do nurses experience high levels of psychological distress?
- What are the most common coping strategies used by nurses?

## **2- Aims of the study:**

- To determine the prevalence of high psychological distress among nurses.
- To identify the predominant emotion-focused coping strategies among nurses.

## **3- Definition of research terms:**

### **3-2 Occupational stress:**

**3-2-1 Conceptual definition:** It is defined by Ghareeb Abdel-Fattah Ghareeb in 1999 as "the physiological, psychological and behavioural response of an individual trying to adapt and cope with internal and external pressures" (Osman Yakhlef, 2001, p.45).

**3-2-2 Operational definition:** It refers to nurses' scores on the Perceived Stress Scale (PSS-14) developed by Cohen et al. in 1983, and they can be classified as follows:

- Nurses with low stress levels ranging from 20 to 46.
- Nurses with moderate stress ranging from 47 to 73.
- Nurses with high levels of stress, ranging from 74 to 100.

### **3-3 Coping strategies:**

**3-3-1 Conceptual definition:** It is defined by Lazarus and Folkman in 1997 as "cognitive and behavioural efforts to change or manage internal or external demands that exceed an individual's resources, with the aim of reducing or making them more manageable, i.e. attempting to manage stressful situations in an effective way. It is not a single act but a process that allows us to deal with different pressures" (Hassan Mustafa Abdel-Moty, 2006, p.99).

**3-3-2 Operational definition:** Coping strategies refer to the nurses' scores on the Paulhan Coping Strategies Questionnaire, which are divided into two main strategies:

**Problem-focused coping strategy:** This includes two dimensions:

- Problem-solving strategy, consisting of eight items.
- Social support seeking strategy, consisting of five items.

**Emotion-focused coping strategy:** It includes three dimensions:

- Avoidance coping with positive thinking, consisting of seven items.
- Positive reappraisal coping, consisting of five items.
- Self-blame, consisting of four items.

Due to the imbalance in the scale, the percentage was calculated for each coping strategy. A comparison is then made between problem-focused and emotion-focused coping strategies, and the one with the higher percentage is chosen to indicate its focus.

### **3-4 Definition of nursing:**

Nursing is defined by Lisan Al-Arab and Taj Al-Arus as "the proper care and attention given to a patient's illness, including providing medication, attending to their needs and caring for them during their illness" (Dalilat Ayatour, 1997, p.14).

In Latin, it means taking care of individuals, helping others and people. Nursing, in its broadest sense, is the technical, ethical and behavioural knowledge that enables individuals to acquire, through education and training, the skills necessary to practise this profession. It involves caring for both the healthy and the sick, physically, mentally, socially and emotionally. It is therefore rare to find someone who has not practised some form of nursing (Linda Musawi, 2001, p.48).

### **4- Research Aims:**

- To assess the level of stress experienced by nurses.
- To explore the nature of coping strategies used by nurses.

### **Definition of occupational stress:**

The word "stress" in Arabic dictionaries refers to oppression, distress and constraint (Al-Qamus Al-Arabi Al-Shamil, Arabic-Arabic, Dar Al-Rateb Al-Jam'iyah, p.444).

It is also used in the Oxford English Dictionary to refer to two types of stress: mental stress caused by external factors and physical stress (Oxford English Dictionary, English-English, p.1286).

According to the Al-Munhalla Dictionary, stress is defined as the accumulation of physical and mental disturbances due to various causes (such as illness, emotions and surgical shock) (Suhail Idris, 1999, p.1150).

The Grand Dictionary of Psychology defines it as "a reaction produced by the organism in response to any direct demand or signal" (Zwani Nazihah, same previous reference, p.87).

Croop (1990) defines it as the biological, physiological and psychological response to vigilance and individual defence against aggression or threat (Croop et m. vity, 2000, p.365).

In this context, Lazarus sees it as a set of physical and psychological disturbances caused by stressors (such as cold, illness and emotions). Stressors have been replaced by stressors by Bensalt (Oudia Wuld Yahya, same previous reference, p.86).

Both Folkman and Lazarus view psychological stress as an interaction or adaptation between the individual and the environment, where the individual perceives this relationship as exceeding his abilities and qualifications and disturbing his comfort and tranquillity (Azrouk, F.Z., same previous reference, p.23).

On the basis of the above perspectives, it can be concluded that there is no consensus on a single definition, due to the complexity of the phenomenon on the one hand, and the diversity of researchers' points of view in dealing with stress on the other. Some consider it to be a stimulating-activating factor that represents the stressor, while others perceive it as a response to a certain stimulus (internal or external).

It should be noted that the above-mentioned positions (stimulus-response) have been criticised because the stimulus leads to multiple responses and these responses cannot be absolutely predicted due to

individual differences. The third position is considered to be the most recent approach as it focuses on the interaction between the individual and the environment.

**-Factors that cause occupational stress:**

Research has classified stressors into different categories, whether internal or external. Among the factors causing stress, the following can be mentioned (Kate Kenan, 1999, pp. 23-27)

**-Internal forces acting on the individual:** These forces compel the individual to adopt a particular approach to carrying out their work, organising it and dealing with others. It should be noted that these inherent forces are effective under normal circumstances, but can become problematic when subjected to daily pressures. They play a significant role in controlling the individual's working life.

**-Urgent need:** When an individual is required to perform multiple tasks within a limited time frame, it leads to exhaustion of energy. The accumulation of pressures negatively affects their psychological wellbeing and performance.

**- Perfectionism:** This refers to the tendency to complete a task perfectly, without seeking help from others, for fear of compromising the quality of the work. In such cases, individuals exhaust themselves by focusing on unnecessary details that hinder the completion of their work. The accumulation of these tasks creates pressure on them due to their inability to complete their work.

**-People-pleasing:** This involves trying to please others by anticipating and fulfilling their needs, even if they do not explicitly ask for it. Under stressful conditions, individuals tend to have heightened sensitivities and expectations. They may experience tension and anger if their attempts fail.

**- Perseverance:** Putting in immense effort to complete a task within a specified time. Pressure arises when completion is delayed.

**- Constant strength:** Maintaining a sense of strength and constant enthusiasm, not seeking help from others even when needed. This leads the individual to struggle through difficulties alone.

**- Life events:** Major changes in an individual's life, such as the death of a relative or the transition from singlehood to marriage, can be considered non-painful events that cause stress (Ali Madi, 1991, p. 309).

**- Daily crises:** These include minor daily crises and annoyances that individuals face in their work, school or relationships, such as poverty or marital and family problems. When they accumulate to the point of disrupting the balance of life, they become a source of stress. Eight groups of minor stressors have been proposed: (1) (Marc Schwob, *Le Stress Dominos*, Flammarion, 1999, p.32).

-Environmental energy demands (preparing for work, looking after children).

-Health factors (chronic or recurrent illnesses).

-Time pressure, intensive working hours, lack of time.

-Interpersonal problems, particularly isolation.

-Environmental problems, such as unsafe noise.

-Financial pressures, debts.

-Job pressure, dissatisfaction, professional conflicts.

-Fear of the future, job security, economic status.

**Occupational factors:**

**Definition of occupational stress:** It is defined by Dalan Arsenault as "a state of mismatch between the aspirations of individuals and the reality of their working conditions" (Linda Mousawi, same reference as above, p. 95).

**3-2-2 The Professional Factors Framework: (Ali Askar, 2003, p. 121)**

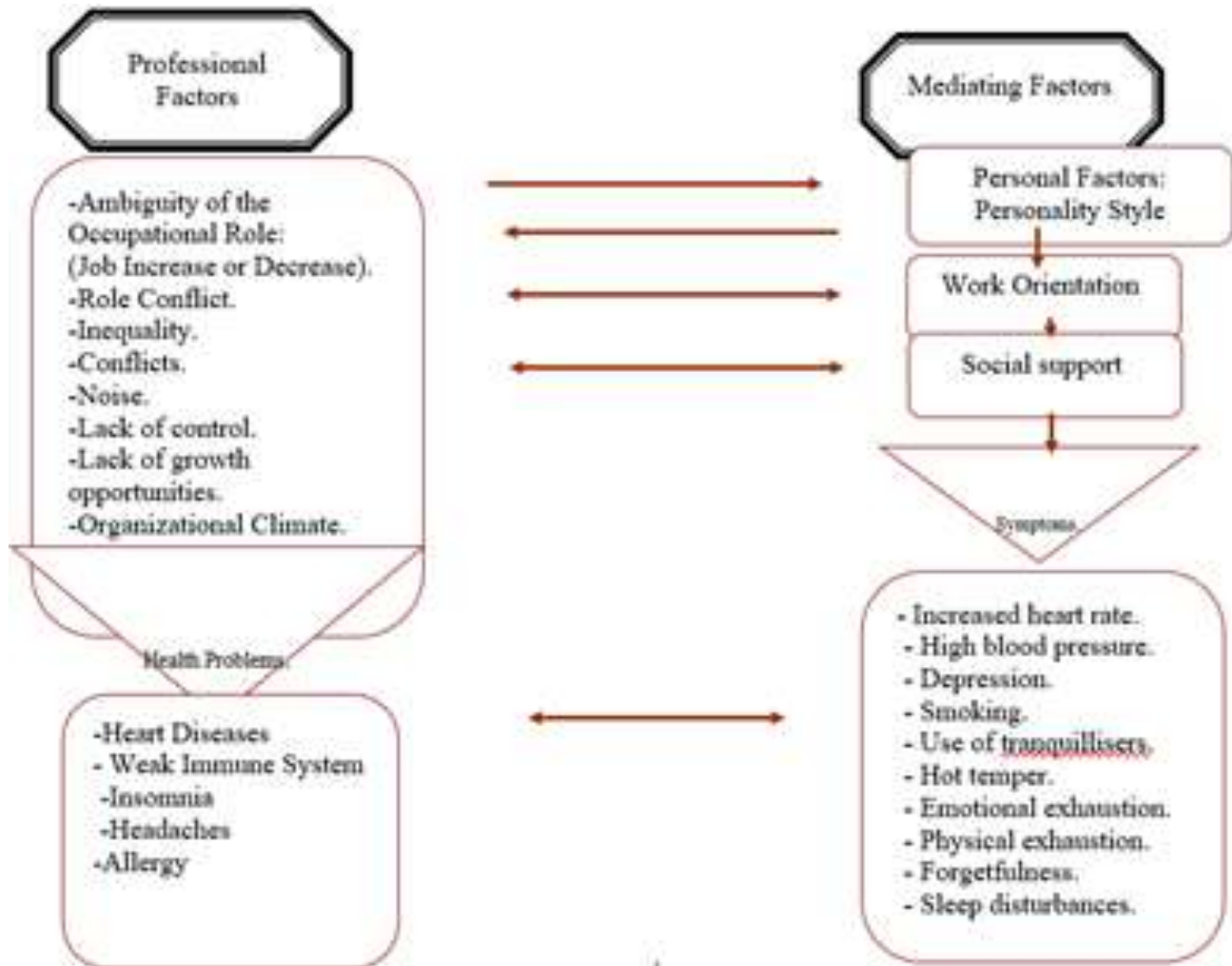


Figure (01) illustrates the occupational factors that cause occupational stress.

It is clear from this diagram that occupational stress and its persistence leads to a variety of health problems and physiological symptoms at different levels. Consequently, it serves as a warning signal for the worker in general and the nurse in particular, which naturally affects their professional performance.

The mismatch between the individual and their professional environment leads to physiological, organic and psychological problems.(1)

Bailey et al (1980) categorised the sources of occupational stress in nurses. Their list included factors such as difficulties in managing social relationships with other nurses and medical staff, patient care issues, technical knowledge and skill requirements, and workload.

Despite the variety of sources of stress, they vary according to the individual's personality, their perception of their professional field and the level of environmental intervention, such as support and social assistance. The following sections present different theoretical approaches to explaining stress and strategies for managing it.

### **Stress and coping strategies and their relationship with certain variables:**

#### **Stress and psychological resilience:**

Psychological resilience refers to the ability to withstand and cope with adversity. Susan Kobasa et al (1979) explained that personal characteristics associated with resilience include commitment, control and challenge. Therefore, individuals with high levels of psychological resilience and coping skills have a greater ability to anticipate crises and overcome stressful situations (Hassan Mustafa Abdel-Moaty, previous reference, p. 59).

#### **The relationship between stress and trait anxiety:**

Stressful situations are perceived as threatening to the identity of individuals with high trait anxiety. Studies by Spielberger, Gorsouch and Fag confirm that people with low trait anxiety perceive stressful situations as less threatening to their identity than people with high trait anxiety (Oudia Weld Yahya, previous reference, p. 57).

#### **The relationship between stress and social support:**

Social support plays a crucial role in alleviating the distress caused by stressful events. It mediates the relationship between life stressors and nervous or psychological breakdown. It makes individuals feel cared for and valued. A survey of nurses (McIntoch, 1991) found that social support reduced the psychological impact of patient death on nurses and helped them to cope with the experience. Burke and others (1987) found that a lack of supportive relationships at work can contribute to increased psychological distress and a sense of work exhaustion (Hassan Mustafa Abdel-Moaty, supra, pp. 63-64).

#### **The relationship between stress and personality types:**

**The Type A personality:** People with Type A behaviour patterns are characterised by aggressiveness, a sense of urgency, rapid speech and a tendency to be easily aroused. As a result, they are prone to developing cardiovascular disease and are also more susceptible to psychological stress.

**The Type C personality:** People with Type C behaviours are characterised by intense emotions, difficulty expressing and acknowledging their feelings, and a heightened sense of stress. Their response to stress is often mediated by cortical mechanisms.

**The Type B personality:** The Type B personality falls between the two previous types. They are known for their achievement-oriented behaviour, success and moderate and balanced response to stress. Individuals' responses to stress vary according to their individual characteristics. Some people are psychologically resilient, have Type B personality traits, or have social support that makes them less vulnerable to stress. They experience moderate or low levels of stress. Conversely, people who are anxious or have Type A or Type B personality traits are more susceptible to stress. To reduce the

severity of stress, our study focused on the best and most effective approach, which is to adhere to religious beliefs. (Abdul Ali Al-Ali, 2005, pp. 66-67).

## **6- Research methodology:**

Research methodologies vary according to the subjects studied. Research methodology refers to a set of rules established to arrive at the truth in science. Abdel Rahman Badawi defined it as "the art of organising a series of different ideas, either to discover the truth when it is unknown or to prove it to others when it is known" (Ammar Bouhoush and Mohammed Mahmoud Al-Dhunaybat, 2001, p. 98).

The appropriate approach to a research topic determines its subject. Therefore, a descriptive approach was adopted in this study due to the nature of the subject. The descriptive approach aims at describing and interpreting the object and identifying the conditions and relationships that exist between reality and facts. It is not limited to the collection and tabulation of data, but also involves a degree of interpretation of these data. It is a description and interpretation of the object, focusing on the existing conditions, relationships, beliefs, perspectives, values and attitudes of individuals.

The descriptive approach is a method of describing and quantifying the phenomenon under study by collecting standardised information about the problem, classifying it, analysing it and subjecting it to detailed study (Ammar Bouhoush, 2001, p. 140).

As for the objectives of the descriptive study, they include (Fawzi Garaibeh et al., 2002, p. 33):

- To understand the underlying trends in the data in order to make generalisations that will enable us to predict them in the future.
- Understanding the relationships between variables.
- Determine the central tendency and variation in the data to assess the differences between different groups and compare them with other communities.

## **7- Areas of study:**

### **7-1 Spatial scope:**

This research was carried out in several hospital centres, including:

- Blida: Ahmed Yacoubi Hospital, Ben Boulaïd Hospital, Frantz Fanon Hospital.
- Algiers: El-Douira Hospital Centre.
- Médéa: Ben Youcef Ben Khedda Al-Brouaqui Hospital, Al-Brouaqui Multiservice Clinic, Al-Brouaqui Dispensary.
- Ain Defla: Ain Defla Hospital, Khemis Miliana Multiservice Clinic.

These centres were selected in order to obtain the necessary sample for the study.

### **7-2 Temporal scope:**

The fieldwork started in November 2007, when contact was made with some hospital directors to explain the purpose of the research and how they could help us. In November and December, the questionnaire and the three scales, which include perceived psychological stress and coping strategies, were distributed. We had to explain some items that were not clear to them.

After collecting the data, in March 2008, the data were transcribed and analysed, and finally the results were interpreted.



### **8- Research sample:**

It is difficult for a researcher to contact a very large number of people relevant to his study to ask them questions and get answers. Therefore, the researcher has to resort to the method of selecting samples that represent the original population in order to obtain a miniature picture of the general thinking. The sampling process goes through several essential stages, which include

- Identifying a list of individuals from the specified groups.
- Determining the sample size.
- Selecting a sample that is representative of all.

#### **8-1 Sample size:**

The sample of this research consists of 152 nurses, including 82 male nurses and 70 female nurses. Their ages range from 22 to 53 years. Cohen's Perceived Psychological Stress Scale and Paulhan's Coping Strategies were applied to the sample individuals.

#### **8-2 Sampling method:**

The sample was selected using purposive sampling, which means that the researcher deliberately selects a sample because he or she believes it will best meet the objectives of the study. Therefore, the researcher selects sample elements because they know in advance that they are most capable of providing information about the research problem. In this study, nurses were selected to gather their opinions about their condition, how they cope with stress, and their perceptions of control, because this group is more capable than others of providing in-depth information, specialised analysis, and perspectives related to these measures that concern them.

### **9- Data collection tools:**

There are several methods and tools used to collect facts, information and data. A researcher may carry out experiments and observations on the subject of the study. If the research involves individuals or groups, the researcher may find it appropriate to conduct interviews or give them a questionnaire to answer. The researcher may use more than one method.

The tool is the means used by the researcher to obtain the facts, information and data needed for the study (Hassan Abdelhamid Rashwan, year unknown, pp. 115, 119).

Therefore, in order to study any phenomenon, appropriate measurement tools are used to achieve the desired objectives. The following tools were used in the current study:

**Information form:** This is a form containing a series of questions addressed to individuals with the aim of obtaining specific data. It is the most commonly used data collection tool in survey, exploratory and descriptive studies (Jamal Mohammad Abu Shanab, 2004, p. 92). It contains general information such as age and gender, in addition to 11 items to obtain more accurate and detailed information from the group of nurses.

### 9-2 Perceived Stress Scale (PSS-14):

The Perceived Stress Scale (PSS-14) allows for the assessment of the perceived importance of life situations to individuals as threatening to their well-being and beyond their control and predictability (Schwartz et al., 1994, p. 56). There are three versions of the Perceived Stress Scale: PSS-10, PSS-4 and PSS-14. In this study, we used the first version (PSS-14), which consists of 14 items. We chose it because of its ease of administration, its efficiency in terms of time and effort, and its suitability for the Algerian context. The scores were classified into three levels according to the following table:

Table 01: Classification of Perceived Stress Scale scores.

Total Score of Perceived Stress Scale	Perceived Stress Level
From 0 to 22	Low
From 23 to 46	Moderate
From 47 to 70	High

### 9-3 Coping Strategies Scale:

Lazarus and Folkman (1982) conducted interviews and surveys to explore the different ways in which individuals cope with different stressful situations. They identified two patterns: problem-focused coping strategies and emotion-focused coping strategies. Similarly, Selye et al (1985) identified two types of coping strategies: avoidant coping and vigilant coping.

Several scales have been developed to assess coping strategies based on Lazarus and Folkman's patterns (Folkman and Lazarus, 1985). These scales include

1/ First version: The Ways of Coping Checklist (W.C.C.R.) by Folkman and Lazarus (1985) consists of 64 items and includes eight subscales: problem solving, seeking support and acceptance, taking precautions and minimizing threats, positive reappraisal, self-blame, escape and avoidance, seeking social support and self-control.

2/ Second version: The abbreviated version of Vitaliano et al. (1985) consists of 42 items and includes five subscales: problem solving, self-blame, positive reappraisal, seeking social support and avoidance.

3/ Third version: Paulhan et al. (1984) adapted Vitaliano's abbreviated version, retaining 29 items and including five subscales: problem solving, seeking social support, avoidance with positive thinking, positive reappraisal, and self-blame.

In this study, the adapted and validated version of the third scale by Paulhan et al. (1984) was used. It consists of 29 items, and its reliability was assessed using Guttman's lambda formula, yielding a coefficient of 0.58 (N=30) (Tabibi, 1998, p. 209).

The following table illustrates the correction process for the Coping Strategies scale.

Table 02: Correction procedure for the Coping Strategies Scale.

Problem-Solving Coping Strategies		Emotion-Focused Coping Strategies		
Problem-Solving	Social Support	Positive Reframing	Positive Reappraisal	Self-Blame
1, 4, 6, 13, 16, 18, 24, 27	3, 10, 15, 21, 23	7, 8, 11, 17, 19, 22, 25	2, 5, 9, 12, 28	14, 20, 26, 29
0	0	0	0	0
Total		Total		

### 11- Analysis and discussion of the study results:

The prevalence of high occupational stress among nurses in certain public hospital settings

Levels of Occupational Stress	Males		Females		Total	
	Count	Percentage	Count	Percentage	Count	Percentage
Low	33	21.71	26	17.10	59	38.81
Moderate	50	32.89	43	28.28	93	61.17
Total	83	54.60	69	45.38	152	99.98

Table 03 shows the distribution of sample participants according to perceived levels of psychological distress and gender.

From Table 03 it can be seen that the majority of nurses in this sample experience moderate stress with 61.84% or 94 nurses. In addition, 23.15% or 58 nurses experience low stress, while there is no number of nurses who experience high stress.

Furthermore, it can be noted that men are more susceptible to occupational stress, accounting for approximately 55%, compared to women, who account for 45.38%. As for nurses with moderate stress, they represent about 33% compared to 28.28% of female nurses.

In order to study the significance of the differences between the level of occupational stress and gender, the chi-square statistic was calculated and was 6.08 at a significance level of 0.05, with degrees of freedom (df) of 2. After comparing it with the critical chi-square value of 5.99, it was concluded that the difference in individual stress tolerance levels is not due to gender, but to other factors. However, a study by Ellis (1990) contradicts the findings of this study as it suggests that women are more susceptible to stress than men. This can be attributed to the responsibilities associated with the profession, as women are unable to exercise their authority, which is considered a male prerogative, as they operate in a predominantly male society (Linda Musawi, same reference as above, p. 125).

Therefore, the prevalence of moderate occupational stress could be attributed to continuous exposure to job pressure. However, other studies contradict this finding. Bakal's study in 1979 confirmed that nurses have specific predispositions that prepare them for particular disturbances, which are the

psychological and social influences they have previously experienced. As a result, they accumulate chronic and cumulative stress, rendering their coping mechanisms ineffective because the overwhelming external demands exceed their adaptive capacity and energy (Dalila Aitour, same reference as above, p. 8. This is also consistent with the majority of studies conducted by Thomas (1988), Allamach (1988), and others, which indicate that health care workers, including nurse managers, are highly susceptible to the stress and strain of the hospital environment (Linda Musawi, same reference as above, p. 113). In addition, a study by David L. Turnipseed found that nurses' workload was a significant contributor to stress (Linda Musawi, 2001, pp. 60-67). Furthermore, Dewe's study revealed the existence of five common sources of stress among nurses, including heavy workload, problems and difficulties in working with other staff, challenges associated with treating critically ill patients, and readiness to deal with patients with acute conditions or poor prognosis (Linda Musawi, pp. 60-67).

All of these factors, such as workload, intensity of work, problems and difficulties in working with other staff, the challenges of managing critically ill patients, and the willingness to deal with patients with acute conditions or poor prognosis, contribute to increased levels of stress among nurses. However, there are differences between nurses in how they perceive these difficulties, with some experiencing a greater impact on their mental and physical health as a result of these pressures.

Poyen et al (2000) found that nurses are susceptible to a range of disorders, most of which are characterised by depressive symptoms, and that they often take long absences from work due to work-related pressures. Another report (1991 H.R.M. Magazine) indicates that 70% to 90% of daily clinic visitors suffer from stress-related illnesses. In addition, the results of a study by Henry (1991) showed that 70% of the participants in the study believed that increased exposure to work-related stress led to a decrease in their productivity. In addition, 20% of the participants were absent from work on a daily basis due to stress, and a third of the sample had seriously considered resigning from their jobs due to the pressures they were facing (Linda Musawi, 2001, p. 4).

Given the negative impact of work-related stress on mental and physical health, it is important for nurses to cope in a healthy way by seeking advice from professionals and training in stress management skills. They may also benefit from training in exercise, relaxation techniques, role-playing and cognitive restructuring. Participation in programmes and courses aimed at reducing the intensity of stress can also be beneficial. A study by Ellis in 1990 demonstrated the effectiveness of a stress-reduction programme for nursing students (Linda Musawi, pp. 69-75).

And there are those who do not perceive them as burdens, and this may be due to the internal locus of control that enables the nurse to be in control of most difficulties and burdens. Locus of control therefore has direct and indirect effects on mental and physical health. The direct impact is manifested in various body systems such as the nervous, endocrine and immune systems. For example, an individual's effective efforts to maintain control in stressful situations increase with excessive activity in the sympathetic nervous system. Loss of control accumulates with increased levels of cortisol in the blood, which in turn leads to reduced effectiveness of the immune system, allowing the growth of tumours and the development of certain infections. As for the indirect effects, a study by Watson in 1994 showed that beliefs about the ability to control illness generally influence the adoption of healthy

behaviours, such as taking care of one's health, engaging in physical activity, and adhering to treatment (Schweitzer, M.B., 2002, p. 327).

Our noble religion has also provided ways of dealing with these pressures and reducing their intensity. Adherence to religion provides a sense of security and contentment and makes the individual more capable of successfully facing and dealing with pressures. The wretched are those who are bankrupt in the treasures of faith and certainty. They are in misery, anger, humiliation and shame. The soul finds no happiness, purification, relief, or consolation except through faith in Allah. Life itself has no taste except with faith (Aaidh Abdullah Al-Qarni, 2004, p. 29).

Indeed, Allah, the Exalted in power, has described the state of the wretched in His Saying: "If any one turns away from My remembrance, he will indeed have a life of sorrow, and We shall gather him together blind on the Day of Judgment.

He will say: "My Lord! why hast Thou made me blind, when I was [once] able to see?" [Allah] will say: "Thus did Our Signs come to thee, and thou forgotst them, and thus shall thou be forgotten on this Day" (Surah Ta-Ha, 124-126) (Mustafa Abdel-Moaty, previous reference, p. ).

And regarding the state of the righteous, Allah Almighty says: "Whoever does righteousness, whether man or woman, while he is a believer, We shall certainly make him lead a good life, and We shall certainly give him his reward [in the Hereafter] according to the best of what he has done" (Surah An-Nahl, 97).

Religious psychological counselling is often used to reduce the sense of psychological pressure and to facilitate successful coping. It is based on the individual's knowledge of themselves, their Lord, their religion, and their religious and ethical values and principles.

There are certain guidelines that individuals should follow in order to cope with pressure, and they are as follows (Abi Zakaria Yahya Ibn Sharaf An-Nawawi, 1981, p. 702):

- Remembrance of Allah: The remembrance of Allah brings consolation to the soul and tranquillity to the heart. A heart that is preoccupied with Allah cannot be reached by Satan and is therefore better able to withstand pressures. Allah says: "It is through the remembrance of Allah that the hearts are secure" (Surah Ar-Ra'd, 28). Ibn Abbas (may Allah be pleased with him) narrated that the Messenger of Allah (peace be upon him) said: "Whoever perseveres in seeking forgiveness, Allah will relieve him of every worry, provide for him from sources he never imagined, and protect him from every difficulty" (Sunan Abu Dawood).

- Patience: It is a remedy used by the righteous to face their pressures. It is considered half of faith, and Allah Almighty praised those who are patient, saying: "And We shall certainly give to those who are patient their reward according to the best of what they used to do" (Surah An-Nahl, 96). This is due to the greatness of their status and the high ranks they attain.

- Supplication: It is an effective method of dealing with pressure. Ibn Al-Qayyim Al-Jawziyya mentioned a supplication that relieves worries and sorrows. In Al-Mustadrak and Sahih Ibn Hibban, Abdullah ibn Mas'ood reported that the Messenger of Allah (peace be upon him) said, "Whenever a servant of Allah says, 'O Allah, I am Your servant, the son of Your servant, the son of Your maid-servant. My forelock is in Thy Hand, Thy command over me is everlasting, and Thy decree over me is just. I ask Thee by every name belonging to Thee by which Thou hast called Thyself, or revealed in Thy

Book, or taught any of Thy creatures, or kept unrevealed with Thee in the knowledge of the Unseen, to make the Qur'an the life of my heart and the light of my breast, and a departure for my sorrow and a release for my anxiety and distress,' unless Allah removes his anxiety and distress and replaces it with happiness and gives him something better in its place" (Shamsuddin Ibn Abdullah Ibn Al-Qayyim Al-Jawziyya, 1991, p.30).

"And the Prophet (peace be upon him) teaches us that in times of need, distress and grief, we should say, as narrated by Ibn Abbas (may Allah be pleased with him), that the Messenger of Allah (peace be upon him) used to say in times of difficulty: 'There is no deity worthy of worship except Allah, the Mighty, the Forbearing. There is no god worthy of worship except Allah, the Lord of the great throne. There is no god worthy of worship except Allah, the Lord of the heavens and the Lord of the high throne' (Reported by Al-Bukhari and Muslim) (Abdul Haq Zdah, p. 161).

Likewise, the righteous predecessors teach us how to deal with pressures and problems by turning them into opportunities. Yusuf (peace be upon him) used his presence in prison to call people to Allah Almighty. Ibn Taymiyyah also turned his problems into great opportunities for success in this world and the Hereafter. He said, "What can my enemies do to me? My paradise is in my heart, it goes with me wherever I go. Imprisonment for me is an opportunity for solitude, and if they kill me, it is martyrdom, and if they exile me, it is a chance to travel. (Ali Al-Hamadi, 2005, p. 55).

The dominance of emotion-focused strategies among nurses in some public hospital institutions."

Table (04) shows the distribution of the sample by coping strategies and gender.

Levels of Occupational Stress	Males		Females		Total	
	Count	Percentage	Count	Percentage	Count	Percentage
Problem-Solving	33	21.71	35	23.02	68	44.73
Emotion-Focused	50	32.89	34	22.89	84	55.26
Total	83	54.60	69	45.38	152	99.99

From Table (04) we can see the dominance of emotion-focused strategies, with a percentage of 55.26% among the nurses, compared to problem-solving strategies, which reached a percentage of approximately 45%. It is noticeable that men tend to use emotion-focused strategies with a percentage of 32.89%, whereas women tend to use problem-solving strategies with a percentage of 23.02%. To determine the significance of the differences between coping strategies and gender, a chi-squared test was performed with a computed value of 1.81 and a tabulated value of 3.48 at a significance level of 0.05 and degrees of freedom (df) equal to 1. This indicates that the difference in the choice of coping strategies among nurses is not due to gender, but to other factors.

The results of our study differ from Perlin's 1984 study, which indicated that women tend to use emotion-focused strategies such as avoidance or self-blame, while men use problem-solving strategies. On the other hand, Lazarus and Folkman (1980) concluded that there are no differences between men and women in the use of coping strategies for stress, but rather that it is related to job-specific characteristics. This is supported by Deuve (1988) who believes that the strategies used are not related

to gender but are determined by the physical, social and psychological capabilities of the nurse (Linda Moussawi, same reference, p. 126).

It is known that individuals with an internal locus of control often use problem-focused strategies, whereas individuals with an external locus of control typically use emotion-focused strategies.

Research by Marmarosh and Elliott showed differences in locus of control between individuals with effective and ineffective problem-solving strategies. Those with effective problem solving strategies have internal control and use strategies that emphasise problem solving, organised thinking, cognitive activity and confidence in their decision-making abilities more than those with ineffective problem solving strategies (Haddar, Abdulaziz, 2006, p. 129).

A 1989 study by Cohen et al. confirms that internal control has a direct and positive effect on emotional well-being. External control, on the other hand, has an impact on vulnerability to stressful and aversive situations, such as experiencing anxiety and depression, negative self-esteem, and emotional distress (Haddar, Abdulaziz, 2006, p. 129).

In addition, Aiken conducted a study on the relationship between locus of control and depression using Rotter's Locus of Control Scale and the Beck Depression Inventory. The study found a positive correlation between depression and belief in external control (Haddar, Abdulaziz, 2006, p. 129).

The Nezu study was conducted on a sample of 213 male and female university students with the aim of identifying differences between individuals with effective and ineffective problem-solving strategies in terms of depression, anxiety and locus of control. They were divided into two groups based on their scores on the Personal Problem-Solving Inventory. The results showed that students with ineffective problem-solving strategies and external locus of control experienced higher levels of depression and anxiety than students with effective problem-solving strategies (Haddar, Abdulaziz, 2006, p. 129).

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However, nurses used problem-solving and self-evaluation strategies more than other strategies. This suggests that both problem-focused and emotion-focused strategies are used by nurses depending on their personalities, the types of pressures they face, their coping skills and the presence of support.

The results of some studies have shown that problem-focused coping strategies are more likely to be used in situations perceived as changeable, whereas emotion-focused strategies are more likely to be used in situations perceived as unchangeable (Arzouk, Fatima Zahra, 2006, p. 77).

Studies by Hamburg and others in 1953 and Visotesky in 1961 showed that both stress and coping occur simultaneously and sequentially. To highlight the interrelationship between these two aspects, Lazarus and Folkman conducted a study in 1980 with a sample of 100 individuals to examine their use

of both types of coping strategies. After analysing the results, they found that only 18 of the 100 participants used only one type of coping strategy. This confirms the idea of the simultaneous use of both problem-focused and emotion-focused coping strategies (Zouani, Nizha, 2001, p. 100).

### **Conclusion:**

In conclusion, the health sector is considered one of the most important sectors in Algeria because of the services it provides to various patients. This is achieved through the efforts of health professionals, including doctors, supervisors, administrators and nurses. We have chosen to focus on nurses because of their active role in various healthcare settings, helping to ensure the physical well-being of patients. Given the variety of roles and responsibilities that nurses have, they are often subject to professional pressures that have become a modern-day disease, affecting their lives in every way. In particular, Algerian nurses face difficult conditions such as increased workloads without incentives or bonuses, low monthly salaries and low living standards compared to nurses in Western societies. Therefore, the main objective of this research is to explore their stress levels and the nature of coping strategies used by both male and female nurses.

This study was conducted on a purposive sample of 152 nurses, including 82 male and 70 female nurses, aged between 22 and 53 years.

The study was conducted in several hospital centres, including Blida (Ahmed Yzid, Ben Boulaïd and Frantz Fanon Hospitals), Algiers (El-Douira Hospital), Médéa (Ben Youcef Ben Khedda El-Brouaqui Hospital, El-Brouaqui Multiservice Clinic and El-Brouaqui Clinic) and Ain Defla (Ain Defla Hospital and Khemis Miliana Multiservice Clinic). Cohen's perceived psychological stress scale and Paulhan's coping strategies scale were administered to the nurses in this study.

### **The objectives of this study were:**

- Is there a high level of psychological stress among nurses?
- What are the most common coping strategies used by nurses?

This study yielded several results concerning the sample of nurses from hospitals in Médéa, Blida, Algiers and Ain Defla. These results include:

- The prevalence of moderate occupational stress among our sample, due to their constant exposure to psychological pressure.
- No gender differences in occupational stress.
- The prevalence of emotion-focused coping strategies, which can be attributed to their lack of effective problem-solving skills when faced with challenging situations. They tend to have a negative approach to dealing with stressful events.
- No gender differences in coping strategies.
- Individuals tend to use negative coping strategies such as denial, concealment and avoidance when they perceive difficult situations as unchangeable or beyond their control. This finding is consistent with the 1986 study by Folkman et al.



**-The study offers a number of suggestions and recommendations, including:**

- a. Recognising that nurses, like any other individuals, need care and attention, especially given their role in society.
- b. Giving nursing its proper status and changing negative societal perceptions of the profession.
- c. Strengthen training programmes for nurses in stress management techniques, including physical exercise, relaxation techniques, role-playing and cognitive restructuring. Institutions should provide social support programmes that promote mutual understanding, freedom of expression and sharing of problems among participants.
- d. Establish psychological support centres in all hospitals, not only for patients but also for nurses.
- e. Re-evaluate the guidance provided to those interested in a career in nursing, taking into account the psychological, physical, mental and technical skills required by the profession
- f. Clearly define the roles and responsibilities of each nurse to avoid overlap and conflict.
- g. Increase the number of nurses in each unit based on workload requirements to reduce the quantitative workload and save time and effort.
- h. Provide remuneration and bonuses to nurses in recognition of their working conditions and create equal opportunities for promotion based on objective and standardised criteria of seniority and competence.
- i. Urging the state to prioritise the health sector in general and nurses in particular, and encouraging researchers to focus on this group.

In conclusion, it is hoped that this study will serve as a strong motivator for further research on nurses, whether through the development or adaptation of measurement scales appropriate to the Algerian environment and its characteristics. Emphasising the importance of field studies carried out in the Algerian context is crucial in order to achieve a solid scientific base that allows for a better understanding of the Algerian nursing profession.

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