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RESEARCH ARTICLE

The Level of Psychological Burnout among Health Sector Workers -Field Study at the Level of Health Institutions in the State of Guelma-

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ABSTRACT

The current study aimed to try to reveal the levels of total psychological burnout among health workers, as well as the level of psychological burnout in its three dimensions (emotional exhaustion, depersonalization, dehumanization, low sense of achievement), in addition to trying to know some relationships and some differences between psychological burnout and some personal and professional variables, after confirming the validity and reliability of the psychological burnout scale of researcher Christina Maslach (MBI), and modified for the Algerian environment by researcher Nasraoui Sabah, where the study sample included (308) workers from various specialties in health institutions in the state of Guelma. To achieve the objectives of the study, the descriptive approach was relied upon, and the results showed that the scale was characterized by high validity and reliability, in addition to the fact that health sector workers suffer from an average level of total psychological burnout, and from average emotional dullness, in addition to high emotional exhaustion and lack of achievement, while the results showed no correlation between the variable of psychological burnout and each of the variables of age and social status. As for the correlational relationships, the results led to the presence of a positive correlation between the variable of psychological burnout and the nature of work. There is also a significant correlation between burnout and the gender variable, and the results showed a relationship between each of the emotional exhaustion dimension and each of the work nature and gender variables, in addition to the emotional numbness dimension and each of the social status, gender and age variables, as well as between the lack of achievement dimension and each of the social status and age variables. Finally, regarding the differences, the study results showed that there were no statistically significant differences in burnout and some variables (gender, night shifts, desire for shifts, senior positions and work in Covid-19 interests), in addition to the absence of statistically significant differences in burnout with the variables (age, years of experience, nature of the institution, nature of work), and the results showed that there were statistically significant differences at the significance level of 0.05 for burnout among health sector workers attributed to the variable of the nature of the profession.

INTRODUCTION

In the field of social psychology, burnout is considered one of the most important and recent manifestations of professional psychological disorders. The term first appeared in 1953 by Will Schwartz in a study attempting to understand the reasons for the decline in morale among nurses and the withdrawal of doctors from psychiatric hospitals (Awad, 21, 2014). This was followed by Claude Veil's attempts to study

professional medical cases in 1959, and then numerous studies such as those by Graham Green in 1960, and Bradely, who considered burnout a case of psychological depression (Shurayt, 2012, 83). This was followed by the studies of the American researcher Freudenberger (1957) on cases of loss of motivation and stress among volunteers in addiction centers. Then came the contributions of researcher Christina Maslach in describing the phenomenon among workers in service professions and delving deeper into it (Khalfan and Hulai, 2016).

Working in the service sector is also considered one of the most important causes of burnout. This is due to the various internal and external pressures that directly affect the worker's health, productivity, and organizational behavior safety. Among these sectors is the healthcare sector, which witnesses different daily pressures that require workers, including doctors, to adapt, cope, and try to innovate solutions. Among these pressures are facing patient suffering, exposure to life and death situations, shortage of medical equipment and limited resources amid an increasing number of patients, as well as the mixing and multiplicity of tasks simultaneously. Additionally, there's physical fatigue and mental strain due to long working hours and varying work schedules and systems.

All these conditions manifest in some behavioral aspects among some doctors, such as arriving late or leaving work early, which affects the workflow, especially during night shifts where most services operate on a rotation basis. Some may even resort to absenteeism and use sick leave, especially during national or religious occasions. This can increase misconceptions among some, leading them to consider transitioning from the public sector to the private sector, or even contemplating early retirement or changing professions, despite the challenging academic journey and humanitarian work. All these manifestations indicate symptoms of burnout syndrome. **Therefore, it's important to ask: Are healthcare workers in hospital institutions of Guelma suffering from burnout?**

This question branches out into the following questions:

1. What is the level of emotional exhaustion among healthcare workers in Guelma?
2. What is the level of depersonalization among healthcare workers in Guelma?
3. What is the level of reduced personal accomplishment among healthcare workers in Guelma?
4. Is there a relationship between burnout and certain variables (gender, age, marital status, nature of work)?
5. Is there a relationship between dimensions of burnout (emotional exhaustion, depersonalization, reduced personal accomplishment) and certain variables (gender, age, marital status, nature of work)?
6. Are there statistically significant differences in burnout attributed to certain variables (gender, shifts, higher positions, working in COVID departments)?
7. Are there statistically significant differences in burnout attributed to certain variables (age, experience, nature of work, type of institution, work schedule)?

2) Study Hypotheses:

General Hypothesis:

Healthcare workers in Guelma do not suffer from a high level of burnout.

Secondary Hypotheses:

1- Healthcare workers in Guelma do not experience emotional exhaustion.
2- Healthcare workers in Guelma do not experience depersonalization.
3- Healthcare workers in Guelma do not experience reduced personal accomplishment.
4- There is no relationship between burnout and certain variables (gender, age, marital status, nature of work).

5- There is no relationship between dimensions of burnout (emotional exhaustion, depersonalization, reduced personal accomplishment) and certain variables (gender, age, marital status, nature of work).

6- There are no statistically significant differences in burnout attributed to certain variables (gender, shifts, higher positions, working in COVID departments).

7- There are no statistically significant differences in burnout attributed to certain variables (age, experience, nature of work, type of institution, work schedule).

3) Study Objectives and Importance:

Through our current study, we aim to:

- ✓ Determine the overall level of burnout among healthcare workers in the Guelma province.
- ✓ Assess the levels of burnout among healthcare workers in its three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment.
- ✓ Investigate the relationship between burnout and certain personal variables: age, gender, and experience.
- ✓ Explore the relationship between burnout and various professional variables: nature of the profession, workplace setting, work schedule, the impact of night shifts, and working in COVID-19 departments.
- ✓ Examine the relationship between dimensions of burnout (emotional exhaustion, depersonalization, reduced personal accomplishment) and certain demographic variables (gender, age, marital status, nature of work).
- ✓ Identify any significant differences in burnout concerning different variables such as gender, shifts, higher positions, working in COVID departments, age, experience, nature of work, type of institution, and work schedule.
- ✓ Validate and ensure the reliability of the adapted Maslach Burnout Inventory within the Algerian medical context.

The significance of this study lies in its examination of the issue of burnout from a social psychological perspective, which is considered one of the prevalent occupational psychological hazards in the healthcare sector. It leads to various negative impacts across different domains. The importance of this study can be categorized as follows:

- ✓ Understanding the psychological and social work environment in the healthcare sector and its potential hazards.
- ✓ Shedding light on working conditions at both individual and organizational levels.
- ✓ Proposing guidance strategies to highlight methods and interventions aimed at reducing burnout.

4) Study Terminology:

4-1 Burnout: A newly termed pathological syndrome in which the mental and organic psychological energy of the physician is depleted, linked to the psychological, social, and professional pressures they face. It is classified as one of the occupational psychological hazards.

4-2 Emotional Exhaustion: A period experienced by the physician characterized by loss of adaptability, intensity of influence, stress, and feeling of inability to give and respond to others.

4-3 Depersonalization (or Dehumanization): The physician's feeling of inhumanity or a sense of devaluation alongside loss of self-confidence, loss of interest in others, and dealing with them.

4-4 Accomplishment Reduced Feeling: A negative evaluation of oneself by the physician and a feeling of incompetence, as well as a negative self-image as professionals. Their work performance becomes contrary to what it should be, leading the physician to a general sense of discontent, believing they are not up to the standards and competencies of their position and thinking they have made professional mistakes.

4-5 Healthcare Workers: Any morally qualified individual holding a position in the healthcare sector with scientific qualifications in the field according to their specialization, whether medical,

paramedical, or administrative. They provide various services, whether medical, therapeutic, or convalescent, at various healthcare or hospital institutions.

5) PREVIOUS STUDIES:

Study by Moussa Ben Ferdi (2023): Titled "Burnout Among Night Shift Nurses in the Multi-Service Clinic in Souk Ahras", aimed to determine the levels of burnout and reveal differences in the three dimensions of burnout according to gender, marital status, and department. The sample comprised 44 nurses, and results showed a moderate level of burnout, with no statistically significant differences in burnout levels attributed to gender. However, significant differences were found in the dimension of depersonalization attributed to marital status, and significant differences were found in the depersonalization dimension attributed to the department.

Study by Herch Rida and Belhawari Ibrahim Toufik (2022): Titled "Burnout and Its Relationship with Depression Among Nurses Amid the COVID-19 Pandemic: A Field Study at Mohammed Boudiaf Medea Hospital", aimed to determine the levels of burnout and its relationship with depression. The sample comprised 140 nurses, and results revealed varying levels of burnout, along with a significant correlation between burnout and depression. No significant differences were found in burnout and depression levels attributed to gender.

Study by Ben Saleh Hadiya (2021): Titled "Burnout Among Healthcare Workers Amid the COVID-19 Pandemic: A Field Study on a Sample of Doctors and Nurses", aimed to identify the levels of burnout among them and explore differences in the profession variable in all dimensions of burnout. The sample comprised 124 individuals from Tlemcen and Mascara. Results showed varying levels of burnout, with emotional exhaustion ranking highest (58%), followed by depersonalization (31%). However, no significant differences were found in burnout levels attributed to the profession.

Study by Suleiman Masoud (2020): Titled "Burnout Among Doctors and Healthcare Workers at November 1st Hospital in Oran During the COVID-19 Pandemic", aimed to determine the level of burnout and its relationship with gender, experience, and job. The sample comprised 110 individuals, and results showed gender-based differences in emotional exhaustion and reduced accomplishment. No differences were found in depersonalization and reduced accomplishment attributed to experience, nor in emotional exhaustion and reduced accomplishment attributed to job.

Study by Moufak and Taleb (2020): Titled "Level of Burnout Among Anesthesiologists and Intensive Care Doctors: A Field Study in Aïn Témouchent Province", aimed to determine the level of burnout among anesthesiologists and intensive care doctors and differences between genders. The sample comprised 26 physicians selected purposively. Results indicated a high level of burnout among them, with differences between females and males.

Study by Habib and Ben Ahmed (2019): Titled "Burnout and Gender Among Specialized Doctors in the Health Sector of Tiaret Province", aimed to identify differences between genders in burnout levels. The sample comprised 104 doctors, and results showed no gender-based differences in burnout levels.

Study by Boujemaa Saida (2019): Titled "Burnout Among Psychologists and General Practitioners: A Comparative Study", aimed to understand the nature of burnout and differences between them in all three dimensions. The sample comprised 120 individuals, with 60 clinical psychologists and 60 general practitioners. Results indicated difficulties in work for all participants, with significant differences favoring general practitioners in burnout levels. High levels were recorded in emotional exhaustion and depersonalization dimensions.

Study by Walid Bahoush and El Hadi Batchou (2019): Titled "Level of Burnout Among Nurses Working in the Public Health Sector: A Field Study", aimed to determine the level of burnout among a sample of 60 nurses using the descriptive method and applying the Maslach Burnout Inventory. Results showed high

levels of burnout, with emotional exhaustion at 70%, followed by reduced accomplishment at 68%, and depersonalization at 65%.

Study by Mourad Khalassi (2019): Titled "Level of Burnout Among a Sample of Nurses", aimed to identify the level of burnout among 114 nurses from various specialties in Constantine. Using the descriptive-correlational method and applying the Maslach Burnout Inventory and Jackson's scale (1986), results indicated high levels of emotional exhaustion (73%), depersonalization (64.90%), and reduced accomplishment (61.40%).

Study by Samati Khaldoun (2018): Titled "Burnout Among Physicians: A Field Study at Youssef Damergi Public Hospital", conducted on a sample of 79 randomly selected physicians. Using the descriptive method and the Maslach Burnout Inventory, the study aimed to determine burnout levels and found no statistically significant differences attributed to gender, seniority, or medical specialty.

Study by Ben Yahia Fatima and Znade Dalila (2018): Titled "Burnout Among Nurses Working in the Cancer Control Department", aimed to determine burnout levels among 100 nurses in the department, revealing variations in burnout levels among nurses.

Study by Zawi Amal and Meziane Mohamed (2018): Titled "Level of Burnout Among Nurses in the Emergency Department and Its Relationship with Some Demographic Variables at University Hospital Tebessa Model", aimed to uncover nurses' suffering and change societal perspectives. The study revealed high levels of burnout among nurses, with statistically significant gender differences in burnout levels favoring males, as well as significant differences attributed to marital status favoring unmarried individuals.

Study by Ben Sayeh (2018): Titled "Level of Burnout Among a Sample of Nurses", aimed to determine burnout levels and differences between nurses based on marital status and professional experience. Conducted on a sample of 32 nurses using the descriptive method and the Maslach Burnout Inventory, results showed high levels of burnout, with no statistically significant differences attributed to marital status or professional experience.

Study by Tabbani and Kharbash (2018): Titled "Emotional Intelligence and Its Relationship with Burnout Among Shift Doctors at Zohraoui Public Hospital in M'sila", aimed to explore the relationship between emotional intelligence and burnout among a sample of 60 shift doctors. Results indicated a high level of burnout among shift doctors at Zohraoui Public Hospital in M'sila.

Study by Mansour and Beyd Al Qoul (2018): Titled "Occupational Stress Among Physicians Working in the Public Hospital: A Field Study Among a Sample of Physicians at Guelma Public Hospital", aimed to determine the level of occupational stress and differences between genders. Conducted on a sample of 30 randomly selected physicians using the descriptive method and Ben Zrouel's stress scale (2008), results indicated high levels of psychological stress among physicians, with no differences in stress levels between genders.

Heli and Khalfan's (2016) study titled "Occupational Burnout Among Physicians: A Field Study in the Emergency Department of Ndir Mohamed Btizi and Zou University Hospital" aimed to determine the level of occupational burnout according to age and gender variables, in addition to attempting to identify differences among them. The study was conducted on a sample of 47 physicians, and the results concluded the suffering of physicians from a high level of burnout. Furthermore, there were no differences in the level of burnout based on gender and age variables.

Through reviewing the literature of previous studies, we notice an increasing interest in the phenomenon of burnout in recent years, especially in the medical field by researchers from various scientific disciplines and research fields, especially after the spread of the coronavirus. It was also observed that the interest in this phenomenon was largely limited to some fields such as education and sports. Through the results obtained, we noticed that the medical profession in all its categories and specialties always suffers from high levels of burnout in all its dimensions. Additionally, most of the study results indicate the absence of

differences at the level of the nature of the profession, gender, and experience, which calls for more attention to this phenomenon and taking care of this segment of workers in society, trying to understand the reasons behind its spread and attempting to find possible solutions.

As for the studies of researchers such as Barkou Mazouz and Nawal Ben Brahim (2020), Walid Bekhouch and El Hadi Batchou (2019), Smain Ben Dharf and Mohammed Zaki (2019), Yasmina Hellaily (2019), Ben Saih Massouda (2018), Zawi Amal and Maziane Mohamed (2018), in addition to a contribution by Sabrina Slimani under the title "Burnout Among a Sample of Night Shift Nurses in the Emergency and Surgical Department at El Wadi Hospital" at the International Conference on Work Suffering Among Nurses - Diagnosis and Therapeutic Approaches - (Slimani and Wadi, February 11-12, 2020), all these studies came up with similar results, indicating nurses' suffering from high levels of burnout, except for the study by Othmani Naïma and Dr. Valtah (2020) titled "Burnout and its Relationship with Some Personal and Job Variables Among Nurses at Ahmed Medghri Saida Hospital," and Fatima Yahya and Dalila Zenad's (2018) study titled "Burnout Among Nurses Working in Cancer Control Departments in Some Health Institutions in Both Algiers and Blida," where the results showed varying levels of burnout.

However, Khadija Mellal Hajira Saba's (2021) study titled "Burnout Among Semi-Medical Sector Workers" presented results contrary to other studies, where nurses experience low levels of burnout.

6) Theoretical Framework of The Study:

6-1 Definition of Burnout:

There are several definitions of the concept of burnout, including:

Freudenberger H (1972) defines burnout as a gradual process leading to the physical and emotional exhaustion of the individual, leaving them completely empty and devoid of all energy.

Christina M & Jackson (1981) divided burnout into three basic dimensions for the first time. They considered burnout as the individual's feeling of emotional exhaustion, which is the loss of energy for work and performance due to increased job demands, dehumanization, which is the individual's feeling of harshness and negativity, and mood disturbance, and finally, the feeling of reduced accomplishment, which is the individual's feeling of decreased success and the belief that their efforts are futile.

According to Samadoni in Zainab Shaqir (2002), burnout refers to a state of emotional or physical exhaustion due to the pressures the individual faces, indicating negative changes in relationships and attitudes towards others due to emotional and psychological demands.

As described by Askar in Zainab Shaqir (2002), burnout is physical and emotional depletion, accompanied by symptoms such as reluctance to go to work, feelings of guilt and blame, fatigue, exhaustion throughout the day, avoiding conversations with colleagues about personal work matters, suspicion, and continuous absenteeism.

6-2 Sources of Burnout:

Sources of burnout can be divided into three main categories:

Individual Level: These sources stem from false beliefs and thoughts, which are unrealistic assumptions. Individuals feel incomplete and face multiple needs and daily problems, trying to live beyond their personal capabilities, inevitably leading to pressure. These are internal or psychological personal sources related to the individual, and individuals who are stricter and more committed are more susceptible to burnout as a result.

Professional Level: These are external sources related to the nature of the profession, work environment, and prevailing atmosphere in the organization. Scholars such as Kim (1992), Kieffer (1994), Neibrugge (1994), and Pezet Langevin (2006) assert that burnout is an inevitable result of various work obstacles and pressures.

Social Level: Many studies emphasize the impact of social factors on the phenomenon of burnout. Studies by Sultan Al-Mashaan, Askar (1988), Kirkaldy et al. (1992), Nadia Al-Ashqar (1995), and Meir (1995) highlight the influence of social roles and gender differences or social requirements and their interaction with the nature of work and the organization.

6-3 Symptoms of Burnout:

Symptoms of burnout can be divided into several categories:

Physical Symptoms:

Chronic fatigue and physical exhaustion leading to physical collapse.

- Difficulty sleeping and insomnia.
- Bone and joint pain.
- Digestive system disorders.
- Cardiovascular disorders.
- Immune system disorders.
- Psychological disorders.

Cognitive Symptoms:

- Difficulty making decisions.
- Impaired concentration, memory, and problem-solving.
- Loss of motivation and enthusiasm.
- Suicidal and pessimistic thoughts.

Emotional Symptoms:

- Mood swings.
- Increased tension and agitation.
- Excessive irritability.
- Feelings of sadness and frustration.
- Feeling of despair.
- Thought disturbances (suicidal thoughts).

Behavioral Symptoms:

- Increasing episodes of anger.
- Various professional, social, and family conflicts.
- Social isolation and withdrawal.
- Neglect of self-care and recreational activities.
- Increased risk-taking behaviors such as substance abuse (tobacco, alcohol, drugs).
- Increased absenteeism from work.

6-4 Stages of Burnout:

Similar to researcher Christina Maslach, who believes that burnout goes through three stages, most researchers have divided it into more stages like Adloushi, Kronbuz (1985), Brodsky, Brunst, and Tabb (1997), Schaufeli and Peeters (2000), into four stages: Enthusiasm, Stagnation, Frustration, and Apathy. Additionally, Etiezer (1981) divided it into five stages: Frustration, Anger, Aggression, Withdrawal, and Depression. Furthermore, Burke, Schearer, and Diezca (1984) divided it into eight stages. Generally, the stages of burnout can be divided into:

Stage of Warning: Signs of burnout begin to appear in the form of recurrent, simple symptoms over long periods similar to chronic anxiety. In this stage, the individual should identify the sources of stress to choose appropriate treatment strategies such as taking breaks and avoiding stressors.

Resistance Stage: A critical stage characterized by the individual becoming accustomed to pain and being drawn into a state of stability, leading to the subsequent critical stage.

Breaking Stage: The most important stage in the burnout process where defense mechanisms fail to respond like in previous stages. Symptoms escalate to fatigue, severe exhaustion, insomnia, and even loss of enjoyment in leisure activities. It's optimal to consult a doctor for a treatment plan.

Stage of Exhaustion and Fatigue: A stage of physical and mental collapse where the individual enters a state of depression and chronic suffering. Immediate intervention by a doctor and therapist is necessary, along with taking a long-term sick leave.

6-5 Treatment Methods for Burnout:

Cognitive-Behavioral Therapy (CBT): Considered one of the most effective treatment options, CBT aims to learn new strategies that affect how individuals interpret and respond based on their personalities. These strategies include problem-solving strategies (Mednick & Al, 1975), rational thinking (Endler & Parker, 1990), cognitive-emotional confrontation strategies (Martin & Al, 1992), preventative coping strategies (Matheny & Al, 1986), confrontation with control and avoidance strategies, rational thinking, and imagination (Kirk & Koeski, 1993), among others such as problem-solving strategies and defense mechanism strategies.

7-STUDY FRAMEWORK:

7-1 Study Boundaries:

7-1-1 Time Boundaries:

The distribution and retrieval process of the scale took approximately two months, from July 31, 2022, to September 30, 2023.

7-1-2 Spatial Boundaries:

The study was conducted in various healthcare structures in the Guelma province, divided into three types of institutions: university hospital institutions, hospital institutions, and public neighborhood health institutions. The latter are further divided into two types: multi-service clinics and therapy halls.

7-1-3 Human Boundaries:

The study included various categories of workers in hospital institutions of all types, divided into three main layers: doctors (specialized doctors, general practitioners, and dentists), paramedical staff consisting of various medical branches (nurses, nursing assistants, laboratory technicians, biologists, radiology technicians, midwives, and psychologists), and administrative staff including administrative employees, professional workers, drivers, and security guards. The sample size was 308 individuals from the study population.

7-1-4 Subject Boundaries:

The study was limited to the variable of overall burnout and its three dimensions, and its relationship with some demographic variables such as age, gender, and experience, in addition to some professional variables such as job nature, workplace, and work schedule.

7-2 Methodology:

The descriptive method was adopted as the most appropriate to achieve the objectives of our study, which aims to determine the level of burnout and identify differences according to the research's subject matter and sample characteristics.

7-3 Study Sample:

The study sample consisted of 308 individuals selected randomly, distributed according to demographic variables as illustrated in the following tables:

According to the gender variable:

Table 01, Distribution of sample individuals by gender variable

Gender					
		Frequency	**Percentage**	**Cumulative Percentage**	**Acceptable Percentage**
Acceptable	Male	89	28.9	28.9	28.9
	Female	219	71.1	71.1	71.1
	Total	308	100		100

Prepared by the researcher based on SPSS V 22 outputs.

From Table No. (01), it is evident that the number of females is larger than males, with (219) individuals accounting for 71.1%, while the number of males is (89) individuals, constituting 28.9%.

According to the age variable:

Table 02, Distribution of sample individuals by age variable

Age					
Age Categories		**Frequency**	**Percentage**	**Cumulative Percentage**	**Acceptable Percentage**
Acceptable	Less than 26 years old	21	6.8	6.8	6.8
	From 26 years old to less than 35 years old	108	35.1	41.9	35.1
	From 35 years old to less than 45 years old	125	40.6	82.5	40.6
	From 45 years old to less than 55 years old	45	14.6	97.1	14.6
	More than 55 years old	9	2.9	100	2.9
	Total	308	100		100

Prepared by the researcher relying on the outputs of SPSS V 22

it is evident from Table (02) that there is variation in the distribution of sample individuals regarding age categories. The age category from 35 to less than 45 years old has the highest percentage, with a total of (125) individuals, accounting for (40.6%). This is followed closely by the age category from 26 to less than 35 years old, with (108) individuals, making up (35.1%) of the sample. Next is the age category from 45 to less than 55 years old, comprising (45) individuals with a percentage of (14.6%). Then, the age category below 26 years old, with (21) individuals, representing (6.8%), and lastly, the age category over 55 years old, with (9) individuals, accounting for (2.9%).

According to the professional experience variable:

Table 03, Distribution of sample individuals by experience variable

Experience					
Experience Categories		**Frequency**	**Percentage**	**Cumulative Percentage**	**Acceptable Percentage**
Acceptable	Less than 5 years	67	21,8	21,8	21,8
	From 5 to less than 10 years	75	24,4	46,1	24,4
	From 10 to less than 15 years	74	24.0	70,1	24,0

	From 15 to less than 20 years	40	13.0	83,1	13.0
	More than 20 years	52	16,9	100	16,9
	Total	308	100,0		100,0

Prepared by the researcher based on SPSS V 22 outputs.

Table No. (03): Distribution of Sample Individuals by Professional Experience Variable We observe convergence among the groups as follows:

The percentage of individuals with experience between 5 to less than 10 years and those with experience between 10 to less than 15 years is 24.4% and 24% respectively, with the number of individuals being 75 and 74 respectively. Following them are those with less than 5 years of experience, comprising 21.8%, with a total of 67 individuals. Next are those with more than 20 years of experience, representing 16.9%, with a total of 52 individuals. Finally, individuals with experience between 15 to less than 20 years amount to 40 individuals, constituting 13%.

According to the variable of nature of work:

Table 04, Distribution of Sample Individuals by Nature of Work variable

Nature of Occupation						
Experience Categories			**Frequency**	**Percentage**	**Cumulative Percentage**	**Acceptable Percentage**
Acceptable	Medical Staff	Specialist Doctors	27	8.77	8.77	8.77
		General Practitioners	51	16.56	25.33	16.56
		Dentists	10	3.25	28.58	3.25
	Semi-Medical Staff	Nurses	180	58.44	87.02	58.44
	Staff Administrators	Administrative	23	7.46	94.49	7.46
		Professional Workers	71	5.52	100	5.52
		Total	308	100,0		100,0

From the SPSS V 22 outputs

it is evident from Table 04 that the sample individuals were divided into three occupational categories

Semi-Medical Staff, numbering 180 individuals, representing the largest proportion at 58.44%. This category includes various semi-medical specialties such as nurses, nursing aides, biologists, laboratory technicians, radiology aides, midwives, and psychologists

Medical Staff, comprising 88 individuals, accounting for 28.57% of the sample. This category is further subdivided into three groups: specialist doctors, with 27 individuals (8.77%); general practitioners, with 51 individuals (16.56%); and dental surgeons, with 10 individuals (3.25%).

Common Staff, consisting of 40 workers, representing the smallest proportion at 10.52%. This category includes various administrative staff members as well as common workers such as drivers, guards, professional workers, and janitors.

According to the variable of the nature of the institution:

Table 05, Distribution of the sample individuals according to the nature of the institution variable

Healthcare Institution					
		Frequency	**Percentage**	**Cumulative Percentage**	**Acceptable Percentage**
Acceptable	University Hospital	31	10.1	10.1	10.1
	Hospital	87	28.2	38.3	28.2
	Multi-service Clinic	168	54.5	92.9	54.5
	Therapy Hall	22	7.1	100	7.1
	Total	308	100		100

From the preparation of the researcher relying on the outputs of SPSS V 22

we notice from Table 05 a variation in the distribution of sample individuals. The employees in multi-service clinics amounted to 168 individuals, constituting 54.5%. They were followed by those in hospital institutions at 28.2% with a total of 87 individuals. Then, employees in university hospital institutions were 31 individuals, representing 10.1%. Finally, therapy hall workers were at 7.1% with a total of 22 individuals.

According to the variable of the nature of working hours:

Table 06, Sample distribution by nature of work variable

Nature of work schedule					
		Frequency	**Percentage**	**Cumulative Percentage**	**Acceptable Percentage**
Acceptable	"8-hour daily	198	64,3	64,3	64,3
	12-hour day shift	44	14.3	78,6	14,3
	12-hour night shift	13	4,2	82,8	4,2
	24-hour shift	24	7,8	90,6	7,8
	Other"	29	9,4	100	9,4
	Total	308	100		100

From the preparation of the researcher relying on the outputs of SPSS V 22

"The table number (06) illustrates the distribution of healthcare workers according to the nature of their shifts. It shows that a large proportion works 8-hour shifts, totaling (198) individuals, constituting (64.3%). Following them are those working 12-hour day shifts, numbering (44) individuals, representing (14.3%). Next are those working 24-hour shifts, totaling (24) individuals, making up (7.8%). Finally, there are workers on 12-hour night shifts, numbering (13) individuals, with a percentage of (4.2%). Additionally, there is a category of workers with other shift patterns, totaling (29) individuals, representing (9.4%).

Table 07, Distribution of sample individuals according to (Shift Preference, night shifts, Senior positions, Covid-19 service) variables

Shift Preference					
		Frequency	Percentage	Cumulative Percentage	Acceptable Percentage
Acceptable	desired	70	22,7	22,7	22,7
	undesired	221	71,8	94,5	71,8
	No Response	5	5,5	100	5,5
	Total	308	100		100
Night Shifts					
		Frequency	Percentage	Cumulative Percentage	Acceptable Percentage
Acceptable	Accepted	164	53,2	53,2	53,2
	Not Accepted	138	44.8	98,1	44,8
	No Response	6	1.9	100	1.9
	Total	308	100		100
Senior positions					
		Frequency	Percentage	Cumulative Percentage	Acceptable Percentage
Acceptable	Beneficiary	56	18,2	18,2	18,2
	Non-beneficiary	236	76,6	94,8	76,6
	No Response	16	5,2	100	5,2
	Total	308	100		100
Covid-19 service					
		Frequency	Percentage	Cumulative Percentage	Acceptable Percentage
Acceptable	Worked	200	64,9	64,9	64,9
	Did not work"	105	34,1	99	34.1
	No Response	3	1.0	100	1.0
	Total	308	100		100

From the preparation of the researcher relying on the outputs of SPSS V 22

The table (07) indicates that 53.2% of the sample participants engage in night shifts, totaling 164 individuals. Additionally, 71.8% of them do not prefer working night shifts. Moreover, 76.6% of the sample did not benefit from higher positions, while the majority, 64.9%, worked in COVID-19-related tasks.

7-4 Study Tool:

We developed a study tool in the form of a questionnaire after reviewing relevant previous studies. It was divided into two parts. The first part focused on personal information such as age, gender, and experience. The second part consisted of the Maslach Burnout Inventory (MBI) adapted for the Algerian context by researcher Nasrawi Sabah. It comprises twenty-two items distributed across three dimensions:

- ✓ Nine items measure emotional exhaustion at work (1, 2, 3, 6, 8, 13, 14, 16, 20).
- ✓ Five items gauge depersonalization, assessing negative feelings towards patients and colleagues (5, 10, 11, 15, 22).
- ✓ Eight items (4, 7, 9, 12, 17, 18, 19, 21) address reduced personal accomplishment, evaluating efficiency and desire for success.

- ✓ Respondents were provided with seven response options for each item, ranging from "Never" (0) to "Every day" (6). Negative items after personal accomplishment are reverse-scored. (Nasrawi, 2015-2016).

The results of the Maslach Burnout Inventory (MBI) and its three dimensions are interpreted according to Table (08).

Table 08, Represents Levels of Burnout

Level	Accomplishment Reduced Feeling	Emotional Exhaustion	Depersonalization	Burnout
Low	Greater than 30	Less than 6	Less than 16	Less than 27
Medium	Between 31 - 36	Between 6 - 12	Between 17 - 26	Between 28 - 98
High	Less than 30	Greater than 13	Greater than 27	Greater than 99

Questionnaire Reliability and Validity:

7-4-1-1 Reliability: We verified the internal consistency reliability of the scale by calculating the Pearson correlation coefficient between the scores of each item within the three dimensions and the total score of the dimension it belongs to, using the SPSS version 22 statistical package. The results are presented in Table 09 below:

Table 09, represents the reliability of internal consistency for the dimension of emotional stress,

Dimension	Emotional Exhaustion								
Items	Item20	Item16	Item14	Item13	Item8	Item6	Item3	Item2	Item1
Correlation Coefficient	**,0628	**,0700	**0,709	**0,662	**0,809	**0,678	**0,687	**0,644	**0,746
Significance Value	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Prepared by the researcher based on the outputs of SPSS V22

it is evident from the previous Table No. (09) that the correlation values of the items with the dimension mean were high, ranging between 0.628 and 0.809. All of them were statistically significant at the level of 0.01, indicating the consistency of the items with the Achievement Deficiency dimension. Therefore, all items of the axis are internally consistent with the axis to which they belong, confirming their reliability.

Table 10, represents the reliability of internal consistency for the dimension of Achievement Deficiency

Dimension	Achievement Deficiency							
Items	Item21	Item19	Item18	Item17	Item12	Item9	Item7	Item4
Correlation Coefficient	**0,649	**0,662	**0,710	**0,664	**0,637	**0,660	**0,411	**0,466
Significance	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

value								

Prepared by the researcher based on the outputs of SPSS V 22.

It is evident from the above Table (10) that the correlation values of the items with the average of the dimension were high, ranging from 0.411 to 0.710, and all were statistically significant at the 0.01 level. This indicates the consistency of the items with the dimension of task performance, thus confirming their validity.

Table 11, represents the internal consistency reliability of the emotional exhaustion dimension

Dimension	**the emotional exhaustion**				
Items	Item22	Item15	Item11	Item10	Item5
Correlation Coefficient	0,655**	0,511**	0,809**	0,834**	0,683**
Significance value	0,000	0,000	0,000	0,000	0,000

Prepared by the researcher based on the outputs of SPSS V 22.

Table (11) indicates that the correlation values of the items with the average of the dimension were high, ranging from 0.511 to 0.834, and all were statistically significant at the 0.01 level, indicating consistency of the items with the dimension of emotional exhaustion. Therefore, all items of the dimension are internally consistent with the dimension they belong to, proving their reliability.

We also measured the construct validity of the scale by calculating the correlation coefficients between each dimension of burnout and the variable itself. It is evident from the subsequent table that the burnout scale demonstrates validity and is suitable for measurement, as the correlation coefficients are statistically significant for all dimensions: emotional exhaustion, personal accomplishment, and depersonalization, with values of 0.852, 0.660, and 0.590, respectively, at a significance level of 0.001, as illustrated in Table (12) below:

Table 12, represents the construct validity of the scale

scale	Burnout		
dimensions	Reduced Personal Accomplishment	Depersonalization	Emotional Exhaustion
Correlation Coefficient	0.590**	0.660**	0.852**
Significance level	0.000	0.000	0.000

Prepared by the researcher based on the outputs of SPSS V 22.

7-4-1-2 Reliability:

The reliability of the instrument was assessed using two methods:

Cronbach's Alpha coefficient: The study instrument obtained a Cronbach's Alpha coefficient of 0.759 using the formula in SPSS 22, which is an acceptable value exceeding the threshold of 0.70. The reliability of the three dimensions ranged between 0.750 as the minimum and 0.864 as the maximum. This indicates that the questionnaire exhibits a high level of consistency and can be relied upon in field studies, as shown in Table (13).

Table, (13) represents the reliability using Cronbach's Alpha coefficient

	Emotional Exhaustion	Depersonalization	Reduced Personal Accomplishment	Burnout
Number of Items	9	5	8	22
Cronbach's Alpha Coefficient	0.864	750,0	0.752	0.759

Prepared by the researcher based on the outputs of SPSS V 22.

Split-Half Method: It is evident from the previous table that the correlation coefficient reached 0.731. Additionally, we corrected the correlation coefficient using the Spearman-Brown prophecy formula for split-half reliability due to the unequal variance values and the Cronbach's Alpha reliability coefficient between the two halves. The latter reached a value of 0.590, indicating a high level of reliability for the questionnaire, which can be relied upon in field studies as illustrated in the subsequent Table (14).

Table No,(14) represents the reliability using the split-half method

	Correlation Coefficient	Variation	Standard Deviation	Average	Guttman Coefficient
Group1	0.788	174 .503	13.210	37.92	0.590
Group2	0.436	87.815	9.371	35.07	
Total	0.731	371.997	19 .289	72.99	

Prepared by the researcher based on the outputs of SPSS V 22.

Statistical Methods Used:

To analyze the obtained data, the statistical package SPSS V22 version 22 was utilized. Among the statistical methods relied upon were:

- Percentages, frequencies, standard deviation, and mean.
- Independent T-test for comparing two independent samples.
- Kolmogorov-Smirnov and Shapiro-Wilk tests for assessing distribution.
- Pearson correlation coefficient.
- Guttman coefficient.
- Cronbach's alpha coefficient.
- One Way ANOVA for testing variance.
- Levene's test for homogeneity of variances.

7-5 – Results Analysis and Discussion:

7-5-1 Distribution Test:

We conducted a normality test for the burnout variable, computing both the Kolmogorov-Smirnov and Shapiro-Wilk tests, as shown in the subsequent Table (15).

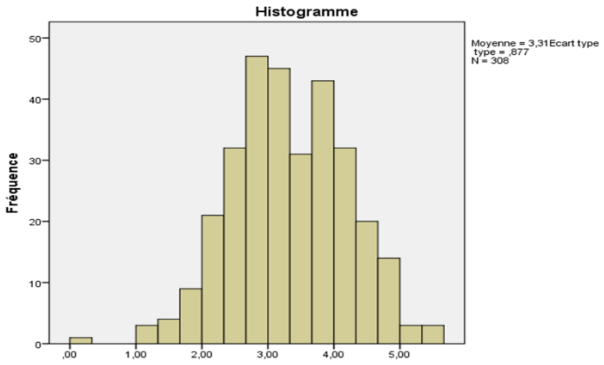
Table, (15) represents the distribution test

	Kolmogorov-Smirnova			Shapiro-Wilk		
	the statistical value	Degrees of freedom.	Significance level.	the statistical value	Degrees of freedom.	Significance level.
Burnout	0.049	308	.0076	0.993	308	0.165

Prepared by the researcher based on the outputs of SPSS V 22.

From the previous table (15), it is evident that the Kolmogorov-Smirnov value for burnout is 0.049, with a significance level of 0.076, which is greater than the significant value of 0.05. Similarly, the Shapiro-Wilk

value is 0.993, with a statistical significance level of 0.165, which is also greater than the significance level of 0.05. Therefore, the data for the burnout variable follows a normal distribution, as illustrated in the histogram (Figure 01).



Burnout

Graph number (01) represents the nature of the distribution of the sample individuals. SPSS V 22 outputs

7-5-2 Results Analysis:

The main hypothesis states that "Healthcare sector workers do not suffer from high levels of burnout at a significance level of 0.05." This hypothesis was tested by calculating the mean scores obtained and comparing them with the theoretical average scale value. As observed in Table (10), the calculated mean is 72.92, which aligns with the theoretical average estimated at 28-98 as shown in Table (08). Therefore, healthcare sector workers experience an average level of burnout.

To determine the significance of this difference, whether it is significant or attributed to chance, a one-sample t-test was conducted.

Table, (16) represents the arithmetic means of the dimensions of burnout

		Burnout	**Emotional Exhaustion**	**Depersonalization**	**Low Accomplishment**
Number of simples	**Accepted**	**308**	**308**	308	**308**
	The missing	0	0	0	0
The Average		72.92	31.78	8.64	32.49

It is prepared by the researcher based on the outputs of SPSS V 22.

The subsequent Table No. (17) shows that the t-test value for a single sample is 0.000 sig=, which is smaller than the tabulated value of 1.990 at a significance level of 0.05. Thus, it is statistically significant.

Table, (17) represents the mean scores and the t-test value

Degrees of burnout	**The arithmetic mean**	**The theoretical mean**	**The difference between them**	**t-value**	**degrees of freedom**	**sig**	**The significance**
	72.92	98	25.08	22.810	307	,0000	The significance

It is prepared by the researcher based on the outputs of SPSS V 22.

1. The first hypothesis states: "Healthcare sector workers do not experience emotional exhaustion at a significance level of 0.05." From Table (10) above, the calculated mean for emotional exhaustion at the significance level of 0.05 is 31.78, which corresponds to the theoretical mean of 27 as shown in Table (08). Therefore, we reject the null hypothesis and conclude that healthcare sector workers experience high emotional exhaustion at a significance level of 0.05.
2. The second hypothesis states: "Healthcare sector workers do not experience emotional detachment at a significance level of 0.05." The obtained result for emotional detachment from Table (10) at a significance level of 0.05 is 8.64, which aligns with the theoretical mean range of 6-12 shown in Table (02). Thus, we reject the null hypothesis and accept the alternative hypothesis that healthcare sector workers experience moderate emotional detachment at a significance level of 0.05.
3. The third hypothesis states: "Healthcare sector workers do not experience reduced accomplishment at a significance level of 0.05." The calculated mean for reduced accomplishment from Table (10) at a significance level of 0.05 is 32.49, which is higher than the theoretical mean. Hence, we reject the null hypothesis and accept the alternative hypothesis that healthcare sector workers experience high levels of reduced accomplishment at a significance level of 0.05.
4. The fourth hypothesis states: "There is no relationship between burnout and some variables (gender, age, marital status, nature of work)." To confirm the validity of this hypothesis, we calculated the Pearson correlation coefficient, and the results were as follows:

Table, (18) represents the value of the Pearson correlation coefficient and the level of significance between psychological burnout and the variables (gender, age, marital status, nature of work)

Burnout	Gender	Age	Marital Status	Nature of Work
Correlation Coefficient	1,53**	0,020	0,097	0119*
Significance Level	0,007	0,727	0,089	0,037

It is prepared by the researcher based on the outputs of SPSS V 22.

Based on the results obtained in the previous table (Table 18), there is a statistically significant correlation between burnout and gender at a significance level of 0.007, with a correlation coefficient value of 1.53. The results also revealed a positive correlation between burnout and nature of work, with a Pearson correlation coefficient of 0.119 at a significance level of 0.037.

However, the results indicated no significant correlation between burnout and age, marital status, with correlation coefficient values of 0.020 and 0.097 respectively, both exceeding the significance level of 0.05, rendering them statistically non-significant.

5.The fifth hypothesis suggests that "There is no relationship between dimensions of burnout (emotional exhaustion, depersonalization, reduced personal accomplishment) and some variables (gender, age, marital status, and nature of work)."

To confirm the validity of this hypothesis, we calculated the Pearson correlation coefficient, and the results are as shown in the following table (Table 19).

Table, (19) represents the value of the Pearson correlation coefficient and the level of significance for the dimensions of psychological burnout and the variables (gender, age, marital status, nature of work)

Dimensions of Burnout		Gender	Age	Marital Status	Nature of Work
Emotional Exhaustion	Correlation Coefficient	0,175**	0,056	0,140*	0,211**
	Significance Level	0,002	0,319	0,014	0,000

Depersonalization	Correlation Coefficient	0,170**	0,165**	0,177**	0,107
	Significance Level	0,003	0,004	0.002	0,061
Reduced Personal Accomplishment	Correlation Coefficient	0,068	0,137*	0,137*	0,087
	Significance Level	0,235	0,016	0,017	0,126

It is prepared by the researcher based on the outputs of SPSS V 22.

From the results shown in the previous Table (19), it is evident that there is a significant correlation between the three dimensions of burnout and most of the variables. There is a correlation between:

- ✓ Emotional Exhaustion dimension and both work nature and gender variables at a significance level of 0.001, with correlation coefficients of 0.211 and 0.175 respectively, and significance levels of 0.000 and 0.002 respectively. Additionally, with the marital status variable at a significance level of 0.005, with a coefficient of 0.140 and a significance level of 0.014.
- ✓ Depersonalization dimension and the marital status, gender, and age variables, at a significance level of 0.001, with coefficients of (0.177, 0.170, 0.165) and significance levels of (0.002, 0.003, 0.004) respectively.
- ✓ Reduced Personal Accomplishment dimension and both marital status and age variables at a significance level of 0.005, with correlation coefficients of 0.037 and significance levels of 0.017 and 0.016 respectively.

6- As for the question whose text was: "Are there statistically significant differences in burnout and some variables (gender, night shifts, desire for night shifts, senior positions, and working in COVID interests)?", the following hypotheses were formulated:

- ✓ There are no statistically significant differences for healthcare sector workers attributed to the gender variable.
- ✓ There are no statistically significant differences for healthcare sector workers attributed to the night shifts variable.
- ✓ There are no statistically significant differences for healthcare sector workers attributed to the desire for night shifts variable.
- ✓ There are no statistically significant differences for healthcare sector workers attributed to the senior positions variable.
- ✓ There are no statistically significant differences for healthcare sector workers attributed to working in COVID interests variable.

To test the validity of the hypothesis stating that there are no statistically significant differences at a significance level of 0.05 for burnout among healthcare sector workers according to these variables, an independent t-test was used, and the results are shown in the following Table (20).

Table. (20) represents the means, Levens' test for homogeneity, and the t-value for the variables (gender, shifts, positions, Covid interest)

Burnout		**Levene's test for homogeneity**		**Independent samples t-test**				
		Value of F	**Level of significance**	**Value of T**	**Degrees of freedom**	**Level of significance**	**The arithmetic mean.**	
							male	**female**
Gender	Homogeneity hypothesis	2.409	0.112	1.892	306	0.059	77.53	71.04

	Heterogeneity hypothesis			1.644	126	0.103		
Shifts							He do	He does not
Shifts	Homogeneity hypothesis	9.036	0.003	1.727	300	0.086	73.15	72.84
	Heterogeneity hypothesis			1.755	300	0.080		
Sinior positions							beneficiary	no
Sinior positions	Homogeneity hypothesis	0.547	0.460	0.449	290	0.618	70.70	73.20
	Heterogeneity hypothesis			0.499	83	0.620		
Working Covid-19							yes	no
Working Covid-19	Homogeneity hypothesis	0.969	0.326	0.449	303	0.654	73.07	72.56
	Heterogeneity hypothesis			0.449	203	0.659		

It is prepared by the researcher based on the outputs of SPSS V 22.

✓ There are no statistically significant differences for health sector workers due to the gender variable.

It is clear from Table No. (20) above that the result of the Levens test for homogeneity is supportive of homogeneity, as the value of the level of significance reached (0.112), and this value is greater than specified in the hypothesis, which is (0.05), and therefore the T test was relied upon for equality of means corresponding to the hypothesis of homogeneity. Referring also to the test of differences in means, the value of the T test reached (1.892), which is less than the tabular value estimated at (1.990), and the level of significance reached (0.059), which is greater than (0.05). Therefore, we accept the null hypothesis and say that there are no significant differences. Statistics at the significance level of 0.05 for psychological burnout among health sector workers due to the gender variable.

✓ There are no statistically significant differences for health sector workers due to the night shift variable.

It is clear from Table No. (20) above that the result of the Levens test for homogeneity does not support homogeneity, as the value of the significance level reached (0.003), and this value is less than specified in the hypothesis, which is (0.05), and therefore the T test for equality of means was relied upon, corresponding to the hypothesis of homogeneity. Also, referring to the difference in means test, the value of the T test reached (1.755), which is less than the tabular value estimated at (1.990), and the level of significance reached (0.080), which is greater than (0.05). Therefore, we accept the null hypothesis and say that there are no significant differences. Statistical significance at the significance level of 0.05 for psychological burnout among health sector workers due to the night shift.

✓ There are no significant differences for workers in the health sector in Guelma due to the variable of senior positions.

It is clear from Table No. (20) above that the result of the Levens test for homogeneity is supportive of homogeneity, as the value of the significance level reached (0.460), and this value is greater than specified in the hypothesis, which is (0.05), and therefore the T test was relied upon for equality of means corresponding to the hypothesis of homogeneity. Referring also to the test of differences in means, the value of the T test reached (1.724), which is less than the tabular value estimated at (1.990), and the level of significance reached (0.618), which is greater than (0.05). Therefore, we accept the null hypothesis and say

that there are no significant differences. Statistics at the significance level of 0.05 for psychological burnout among health sector workers due to the senior positions variable.

- ✓ There are no significant differences for health sector workers in Guelma due to the variable of working in Covid departments.

It is clear from Table No. (20) above that the result of the Levens test for homogeneity is supportive of homogeneity, as the value of the significance level reached (0.326), and this value is greater than specified in the hypothesis, which is (0.05), and from this the T test was relied upon for equality of means corresponding to the hypothesis of homogeneity. Referring also to the test of differences in means, the value of the T test reached (0.449), which is less than the tabular value estimated at (1.990), and the level of significance reached (0.654), which is greater than (0.05). Therefore, we accept the null hypothesis and say that there are no significant differences. Statistics at the significance level of 0.05 for psychological burnout among health sector workers due to the working in Covid departments variable.

7- The seventh sub-hypothesis: As for the question that read: "Are there statistically significant differences in psychological burnout and some variables (age, years of experience, nature of work, nature of the institution, nature of work hours)?" The following hypotheses were developed:

- ✓ There are no statistically significant differences for health sector workers due to the age variable.
- ✓ There are no statistically significant differences for health sector workers due to the experience variable.

The variables	**The categories**	**NUMBER**	**The arithmetic mean**	**The standard deviation**	**The F value**	**Significance Level**
Age	Less than 25 years old	21	66.76	22.06	1.450	0.217
	to less than 35 25 years old	108	76.06	19.90		
	to less than 45 35 years old	125	71.43	17.69		
	to less than 55 45 years old	45	72.44	20.94		
	55 years old and above	9	72.67	15.75		
total		308	72.92	19.30		

- ✓ There are no significant differences for health sector workers in Guelma due to the workplace variable.
- ✓ There are no significant differences for health sector workers in Guelma due to the variable nature of work hours.
- ✓ There are no significant differences for health sector workers in Guelma due to the variable nature of the profession.
- ✓ There are no significant differences for health sector workers in Guelma due to the marital status variable.
- ✓ There are no significant differences for workers in the health sector in Guelma due to the variable number of children.

For the purpose of studying the validity of this hypothesis that says: "Are there statistically significant differences in psychological burnout and some variables (age, years of experience, nature of work, nature

of the institution, nature of working hours), we calculated the arithmetic averages and the one-way ANOVA test for the independent samples and the results were as follows:

- ✓ Regarding the hypothesis that "there are no statistically significant differences for health sector workers due to the age variable"

The results were as shown in the following table (21):

Table (21) represents the means, standard deviation, and F-value of variable age

It is prepared by the researcher based on the outputs of SPSS V 22.

- ✓ There are no statistically significant differences in burnout among healthcare workers attributed to years of experience, We notice from Table (21) that for the variable Age, the F-value was 1.450 with a significance level of 0.217, which is higher than the specified value in the null hypothesis at 0.05. Therefore, we conclude that there are no statistically significant differences at a significance level of 0.05 for burnout among healthcare workers attributed to age.

Table (22) represents the means, standard deviation, and F-value

The variables	The categories	NUMBER	The arithmetic mean	The standard deviation	The F value	Significance Level
Experience	Less than 5 years of	67	73.33	20.29	0,155	0,961
	5 to less than 10 years of	75	72.38	18.63		
	to less than 15 10 years of	74	72.80	19.86		
	to less than 20 15 years of	40	71.62	18.79		
	20 years of experience and above	52	74.46	19.14		
total		308	72.92	19.30		

It is prepared by the researcher based on the outputs of SPSS V 22

Similarly, for the variable Experience, the F-value was 0.155 with a significance level of 0.961. Since this value is greater than 0.05, we accept the null hypothesis and conclude that there are no statistically significant differences for burnout among healthcare workers attributed to experience.

- ✓ There are no statistically significant differences in burnout among healthcare workers attributed to the nature of work.

Table (23) represents the means, standard deviation, and F-value

variables	categories	NUMBER	The arithmetic mean	The standard deviation	The F value	Significance Level
workplace	University hospital	31	71.84	19.36	2.067	0.105
	Hospital Multiservice	87	74.14	17.46		
	clinic	168	73.73	19.71		

	Therapy hall	22	63.36	21.50		
total		308	72.92	19.30		

It is prepared by the researcher based on the outputs of SPSS V 22

Regarding the variable Workplace, the F-value was 2.067 with a significance level of 0.105. Since this value is higher than 0.05, we accept the null hypothesis and conclude that there are no statistically significant differences for burnout among healthcare workers attributed to workplace.

- ✓ Regarding the hypothesis that "there are no significant differences for health sector workers attributable to the variable nature of work," the following table N (24) shows the results obtained.

Table (24) represents the means, standard deviations, and F-value Night shifts variabl.

Night shifts	Number	The arithmetic mean	The standard deviation	The F value	The significance level
Night work	164	72.84	18.76	0,096	0,909
Day work	138	73.15	19.85		
Refused to answer	6	69.67	24.18		
Total	308	72.92	19.30		

It is prepared by the researcher based on the outputs of SPSS V 22.

As shown in table N24, the F-value is 0.096 with a significance level of 0.909. This value is greater than the specified value in the hypothesis at 0.05. Therefore, we accept the null hypothesis and conclude that there are no statistically significant differences at the 0.05 significance level for burnout among healthcare sector workers attributed to night shifts.

- ✓ Regarding the hypothesis that "there are no significant differences for health sector workers attributable to the variable nature of the profession," Table N(25) records the results:

Table (25) represents the means, standard deviation, and F-value Nature of shift variable

The variables	The categories	NUMBER	The arithmetic mean	The standard deviation	The F value	Significance Level
Nature of shift	Specialist doctor	27	73.88	14.86	2.836	0.025
	General practitioner	61	79.33	17.11		
	Nurses	180	71.44	19.24		

	Administrative staff	23	63.77	27.56		
	Skilled workers	17	75.86	21.11		
total		308	72.92	19.30		

It is prepared by the researcher based on the outputs of SPSS V 22

For the variable Shift Type, the F-value was 2.836 with a significance level of 0.025. Since this value is greater than 0.05, we accept the null hypothesis and conclude that there are no statistically significant differences for burnout among healthcare workers attributed to shift type.

Table (26) represents the means, standard deviation, and F-value

The variables	**The categories**	**NUMBER**	**The arithmetic mean**	**The standard deviation**	**The F value**	**Significance Level**
Occupation Marital status	Married	198	71.62	19.41	1.394	0,245
	Single	94	75.11	19.38		
	Widowed	12	72.61	15.97		
	Divorced	04	86.75	16.42		
total		308	72.92	19.30		

It is prepared by the researcher based on the outputs of SPSS V 22

As for the variable Occupation, the F-value was 0.025 with a significance level of 2.836. Since this value is less than 0.05, we reject the null hypothesis and conclude that there are statistically significant differences for burnout among healthcare workers attributed to occupation.

Regarding the variable Marital Status, the F-value was 0.245 with a significance level of 1.394. Since this value is greater than 0.05, we accept the null hypothesis and conclude that there are no statistically significant differences for burnout among healthcare workers attributed to marital status.

Table (27) represents the means, standard deviation, and F-value for variable number of children

The variables	**The categories**	**Number**	**The arithmetic mean**	**The standard deviation**	**The F value**	**Significance Level**
Number of children	0	36	66.04	19.36	1.508	0.164
	1	47	74.72	20.04		
	2	76	76.22	19.28		
	3	88	70.92	19.15		
	4	35	71.89	19.05		
	More then 5	28	78.18	17.13		

total	308	72.92	19.30		

It is prepared by the researcher based on the outputs of SPSS V 22

Finally, for the variable Number of Children, the F-value was 1.508 with a significance level of 0.164. Since this value is greater than 0.05, we accept the null hypothesis and conclude that there are no statistically significant differences for burnout among healthcare workers attributed to the number of children.

7-3 DISCUSSION OF RESULTS:

The results indicate a high level of burnout among physicians across all three dimensions (emotional exhaustion, depersonalization, and reduced personal accomplishment). Additionally, there were no statistically significant differences observed in burnout based on gender, age, or experience.

These findings are consistent with studies by Ben Salah Hadia (2021), Moufek and Taleb (2020), Halaa and Khalfan (2016), Halaa and Khalfan (2016), Mansour and Baid Al-Qawl (2018), and Tabani and Kharbash (2018). However, the results regarding the dimensions of burnout align with Ben Salah's study (2021) but differ from those of Suleiman Masoud (2020) and Mansour and Baid Al-Qawl (2018).

Regarding gender, the results are similar to studies by Habibi and Ben Ahmed (2019), Halaa and Khalfan (2016), and Samati (2018) but contradict Suleiman's (2018) study. The findings on age align with Halaa and Khalfan (2016), and experience aligns with Samati (2018) and Suleiman (2020).

The issue of burnout has garnered significant attention, especially in the medical field, particularly amidst the COVID-19 pandemic. Most studies indicate that healthcare workers experience high levels of burnout, prompting further investigation into its causes and potential mitigation strategies.

CONCLUSION:

Burnout has become a prominent concern in the healthcare sector, particularly with the emergence of the COVID-19 pandemic. This issue spans various psychological, social, and professional domains. The healthcare sector, known for its diverse services, presents organizational challenges due to its varied structural composition and the wide range of specialties and tasks. The results indicate high levels of burnout among healthcare workers, emphasizing the need for further research into its underlying causes and potential interventions. Importantly, the results reveal:

- ✓ Health sector workers have an average level of psychological burnout and average emotional distress.
- ✓ In addition to effective attrition and a lack of high achievement.
- ✓ While the results show no relationship between the association between psychological burnout and both biological diversity and social status.
- ✓ The results also noted that there is also a positive correlation between harmful diversity, burnout, and the nature of work.
- ✓ There is also a significant correlation between psychological burnout and sexual change.
- ✓ The results resulted in a relationship between the emotional targeting dimension and the nature of work and gender.
- ✓ In addition to the dimension of insensitivity and variations of marital status, gender, and age.
- ✓ As well as between the subsequent results and everything related to the various social and annual status.
- ✓ The results of the study also revealed that there were no statistically significant differences in psychological burnout and some of them (gender, night shifts, liner in shifts, senior judicial positions in Covid-19 departments).
- ✓ In addition, there are no statistically significant differences in psychological burnout with wine (age, experience, institution, and changes in employment).

- ✓ The results also showed statistically significant differences at the significance level of 0.05 for psychological burnout among workers in the health sector due to the change in the nature of the profession.

There are medium and high levels of psychological burnout, and there are three different categories of workers in their diversity, and this is what opens the door to scientific research for more precise knowledge of the institution and its manifestations in this phenomenon.

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This is a list of the appendices tables:

1. Table No. (01) Distribution of sample members according to gender variable.

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3. Table No. (03): Distribution of sample members according to the professional experience variable.

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19. Table No. (19) Represents the value of the Pearson correlation coefficient and the level of significance for the dimensions of psychological burnout and the variables (gender, age, marital status, nature of work).

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Charts:

1. Graph No. (01): Represents the nature of the distribution of sample individuals.