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ماجستيـــر تمريـض العناية الحثيثـة

Level of Stress among Nurses Working in Cardiac Care Units at Governmental Hospitals in Gaza Strip

مستوى التوتر لدىَ الممرضين العاملين بوحدات عناية القلب في المستشفيات الحكومية بقطاع غزة

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نتيجة الحكم على أطروحة ماجستير

بناء على موافقة عمادة البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ **محمد صبري خالد صبري الشنطي** لنيل درجة الماجستير في كلية **التمريض**/ قسم **تمريض العناية الحثيثة** وموضوعها:

مستوى التوتر لدى الممرضين العاملين في وحدات رعاية القلب في المستشفيات الحكومية في قطاع غزة

Level of Stress among Nurses Working in Cardiac Care Units at Governmental Hospitals in the Gaza Strip

وبعد المناقشة العلنية التي تمت اليوم **الاحد 28 جمادي الأولى 1443**هـ الموافق **2022/01/02**م الساعة **العاشرة صباحا**، في **قاعة مؤتمرات مبنى طيبة** اجتمعت لجنة الحكم على الأطروحة والمكونة من:

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وبعد المداولة أوصت اللجنة بمنح الباحث درجة الماجستير في **كلية التمريض/قسم تمريض العناية الحثيثة**.

واللجنة إذ تمنحه هذه الدرجة فإنها توصيه بتقوى الله تعالى ولزوم طاعته وأن يسخر علمه في خدمة دينه ووطنه.

والله ولي التوفيق،،،

عميد البحث العلمي والدراسات العليا

أ. د. يوسف ابراهيم الجيش

Abstract

Background: - Level of stress plays a role of nurses in the health field, and personality. The nature of work in cardiac care units is stressful, which affects their health from several aspects sociodemographic, physiological, psychological, practical, and administrative aspects. In addition, the ways to relieve stress for nurses working in cardiac care units at government hospitals in the Gaza Strip. **Purpose of study:** To assess the level of stress among nurses working in cardiac care units at governmental hospitals in Gaza Strip. **Material and method:** A descriptive- cross-sectional design was used in the study, by a structural self admenstral questionnaire distributed to nurses. The approval of Helsinki and the Ministry of Health has been obtained. A Census sample was used in the study for 104 nurses working in cardiac care units, and coronary care units, at five governmental hospitals in Gaza Strip. only 98 nurses, filling the questionnaire, with a response rate of 96.55%. a pilot study in 30 nurses chooses randomly, after examine in Cronbach alpha 0.973 included in the study. **Main Results:** Study results revealed that N= 98 male nurses 62.2%, were female nurses 37.8%, 45.9% of age more than 30 years, 83.7% bachelor degree, Highly stress economic domain 79.16%, practical domain 70.96%, work and management pressure domain 70.28%, physiological domain 61.08%, and psychological domain 60.15%. Examine the use of stress relief method 74.13%. No statically significant relationship between stress and gender, age, workplace, monthly income, and work experience in nursing and Cardiac care units, in items in changing shifts 68.4%, I am bothered by the lack of financial incentives weighted mean of 88.6%, work shifts annoys me 79.39%, The lack of security personnel during visiting hours causes me to have unpleasant confrontations with the visitors " with a weighted mean of 85.10%, I feel lower back pain while working 71.02%, and I suffer from insomnia and difficulty sleeping 68.98%. level of stress 33% mild, from 34% to 66% moderate, and more than 67% severe stress Data analysis by a statistical package of social science **Main Recommendation:** Improve economic status among nurses **conclusion:** Nurses in cardiac and coronary care units high level of stress (severe) in economic domain 79.16%.

الملخص

المقدمة: - مستوى التوتر لدى الممرضيين يؤثر على العمل في المجال الصحي ، والشخصية. طبيعة العمل في وحدات رعاية القلب مرهقة ، وتؤثر على صحتهم من عدة جوانب اجتماعية وديموغرافية وفسيولوجية ونفسية وعملية وإدارية. بالإضافة إلى طرق تخفيف التوتر عن الممرضين العاملين في وحدات رعاية القلب في المستشفيات الحكومية في قطاع غزة. الغرض من الدراسة: تقييم مستوى التوتر لدى الممرضين العاملين في وحدات رعاية القلب في المستشفيات الحكومية في قطاع غزة. المادة والطريقة: تم استخدام التصميم الوصفي المقطعي في الدراسة ، من خلال استبيان التقرير الذاتي الهيكلي الموزع على الممرضين. تم اخذ موافقة هليسنكي و وزارة الصحة. شملت الدراسة كل العينة حيث بلغت 104 ممرضاً يعملون في وحدات رعاية القلب ، ووحدات العناية التاجية ، في خمسة مستشفيات حكومية في قطاع غزة. 98 ممرض فقط ، ملأوا الاستبيان بنسبة استجابة 96.55٪. دراسة تجريبية في 30 ممرض اختارت عشوائياً ، بعد الفحص في كرونباخ ألفا 0.973 المدرجة في الدراسة. أهم النتائج: أظهرت نتائج الدراسة أن عدد الممرضات = 98 ممرض 62.2٪ ذكور، 37.8٪ نساء، 45.9٪ أعمارهن فوق 30 سنة ، 83.7٪ حاصلين على درجة بكالويوس في التمريض ، مستويات التوتر في المجال اقتصادي شديد الإجهاد بلغ 79.16٪ ، مجال عملي بلغ مستوى الاجهاد 70.96٪ ، عمل وإدارة. مجال التوتر بلغ 70.28٪ ، المجال الفسيولوجي بلغ 61.08% ، المجال النفسي بلغ 60.15٪. فحص استخدام طريقة تخفيف التوتر 74.13٪. لا توجد علاقة ذات دلالة إحصائية بين الإجهاد والجنس والعمر ومكان العمل والدخل الشهري. في مناوبات متغيرة 68.4٪ ، أنا منزعج من عدم وجود حوافز مالية المتوسط المرجح 88.6٪ ، العمل نوبات العمل تزعجني 79.39٪ ، قلة رجال الأمن خلال ساعات الزيارة تسبب لي في مواجهات غير سارة مع الزائرين "بمتوسط مرجح 85.10٪ ، أشعر بآلام أسفل الظهر أثناء العمل 71.02٪ ، وأعاني من الأرق وصعوبة النوم. 68.98٪ مستوى الإجهاد 33٪ خفيف ، من 34٪ إلى 66٪ متوسط ، وأكثر من 67٪ إجهاد شديد . تحليل البيانات بواسطة الحزمة الإحصائية للعلوم الاجتماعية التوصية الرئيسية: تحسين الوضع الاقتصادي بين الممرضات الخلاصة: الممرضات في وحدات رعاية القلب والشريان التاجي مستوى عال من التوتر في المجال الاقتصادي 79.16٪.

Acknowledgment

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I thank God for the completion of this message

I can express my thanks and gratitude to my honorable Associate. professor: **Abdalkarim S. Radwan**, may God protect him

For his kindness to his acceptance supervised this research and his follow-up to it from the first steps, and his great effort, unlimited support, his sincere help to me, his wise guidance throughout the preparation period, which helped me to produce this work in this way, I ask God to reward him on my behalf.

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Dr. Arefa al bahri

Dr. Ahamad nijem

You preferred them to discuss the research, so they completed its structure and magnified its importance, so God rewarded them for me with the best reward.

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Dedication

In the name of God, the most gracious, the most merciful.

I begin to dedicate myself to our intercessor, our Prophet Muhammad, may God bless him and grant him peace.

To the source of tenderness, love, mentor, teacher, and role model that I could not find words to fulfill his right to my father.

To my mother's soul, I pray to God every day to rest in peace and Paradise.

To my grandmother who calls me success, she is blessing, tenderness, and love.

To my brothers and sisters

To my lovely wife, who stood always stood by my side. and she gave birth to the adornment of the worldly life, to my beautiful kids Khaled, Abdel Moneim, and Lujain.

To those, I am proud of, and the crown of my head, my uncles, aunts, and their sons.

To my family, friends, neighbors, and all my loved ones.

To the Islamic University of Gaza, especially the College of Nursing, my teacher, and my classmates.

To my second home, Al-Shifa medical complex, especially the Intensive Care Department with all its employees. Allow me to single out my martyr professor, **Dr. Ayman Abu Al-Awf**, and my late big brother, **Dr. Louay Al-Khalidi**.

To the judges of the questionnaire. Allow me to single out my friend **Dr. Jamal Qaddoumi** from the West Bank.

Table of Contents

List of Tables

List of Figures

Abberviations

AACN	American Association of Critical-Care Nurses
ANCC	American Nurses Credentialing Center
ANOVA	Analysis of Variance
ASN	Associate of Science in Nursing
BSN	Bachelor of Science in Nursing
CCN	Critical Care Nursing
CCU	Cardiac Care Unit
ECG	Electrocardiogram
ENSS	Expanded Nursing Stress Scale
GS	Gaza Strip
ICU	Intensive Care Unit
MoH	Ministry of Health
NP	Nurse Practitioner
PCBS	Palestinian Central Bureau of Statistics
PTSD	Post Traumatic Stress Disorder
RN	Registered Nurse
SD	Standard Deviation
SPSS	Statistical Package of Social Science
UNRWA	United Nations Relief and Works Agency
WHO	World Health Organization

Chapter 1
Introduction

Chapter 1
Introduction

1.1.Background of the Study

Historically developed cardiac care units (CCUs) to a life-threatening condition, and closed monitoring area for a cardiac patient, heart arrhythmias, and coronary diseases.

Cardiac care units are for sure considered as a stressful environment for any patient and health care provider due to many reasons. First, the restrictions of patient movement, loss of social support, the intense light sources, vital signs noises, and communications around the room are certainly stressful signs. (Gardner. et al., 2014).

Nurses who work inside CCUs play major roles in shaping the quality of the care services. Moreover, service providers like nurses need to have special skills and character when working in the CCU. Thus, service providers build up these skills when they are beginners to go to higher levels of competency reaching the expertise they need to find their places inside the unit. (Lategan, 2013) and (Summers, 2017).

These levels will give the service providers, nurses, the ability to let go of certain stressors, along with that, many professional courses are a must for the professionally of nurses aside from the huge experience nurses need to get within five years working in the CCUs. (Kaweesak & Bhurayanontachai, 2014).

Many studies research in level of stress in demographic factors, work experience, and job complexity, the level of stress different between countries. (Faraji. et al., 2019).

Stress affects attention, concentration, decision-making skills, and the ability to judge cases. As a result, this might lead to dreadful patient care. (Lauria et al., 2017).

Common stressors could be physical, psychological social, and ethical. There are many aspects of stressors that affect the quality of nurses working in CCU. These aspects could be summarized in several points. First, poor nurse attitude towards the job which needs professional training. Second of all, slow application of skills or even working in a busy department could be aspects of stress. (Rattray. et al., 2021). Wages

and low salaries affect the quality and time of working also. Working under pressure affects patients and causes mistakes like forgetting to give doses of medicine to some patients. Furthermore, interpersonal relationships, be positive or negative, could affect the quality of services. Having a night shift with some nurses might affect the type of relationship between the staff of service providers and as a result, social support is poor. Time of family visiting patients might increase the kind of relationships between nurses and the family. Many nurses do not trust other nurses on the confidentially of patients. This will result in poor communication and collaboration between nurses and will affect the quality of work negatively. One of the main reasons that affect work quality is the workload that results from a wrong diagnosis of doctors. (Sharma. et al., 2014).

Stress level varies between mild to 33%, moderate between 34% to 66%, severe more than 67%, were collected through a questionnaire to detect level and common stressors. This study aims to determine the level of stress among CCU nurses and to identify common causes of stressors in CCUs in the nurses in Gaza Strip (GS) as a targeted sample.

1.2.Problem Statement

CCU stressful environment causes the low quality of work due to multi factors like psychological, physiological, social, communication, and ethics. These factors may intensify the inconsistent outcomes of workers. Siraj. et al., (2014) explored the association between level of stress and work complexity through works hours, workload, changing shifts, quality of nursing care, physiological or psychological or social problems, in work conflict with colleagues or managers, or economic situations. In this study, the main problem lies in the ongoing transition of nurses in the governmental hospitals in Gaza Strip, and that caused many problems for the quality of work of nurses working inside the CCUs. The importance of this study is mainly about assessing levels of stress among nurses working in CCUs, and coronary care units, and determining whether stress relief needs to be considered by hospitals and health care administration or kept as it is.

1.3.Significance of the Study

This study aimed at finding out the degree level of stress in work among the staff nurses in CCUs and various determinants, which have an impact on it.

1.4.General Objective

To assess the level of stress among CCU nurses in the governmental hospitals in Gaza Strip.

1.5.Specific Objectives

- To identify the psychogeographic characteristics among CCU nurses at the governmental hospitals in Gaza Strip.
- To identify the most dreadful aspects of stress in CCUs which affect the CCU nurses.
- To explain the relationship between stress and sociodemographic factors of the nurse.
- To explain the relationship between stress and physiological factors of the nurse.
- To explain the relationship between stress and psychological factors of the nurse.
- To explain the relationship between stress and practical factors of the nurse.
- To set recommendations to the stakeholders about CCU nurses' situation.

1.6.Research Questions

- What is the level of stress among nurses working in CCUs at governmental hospitals in GS?
- Does the level of stress influence nursing care among CCU nurses?
- Is there a statistical difference between level of stress and age among CCU nurses?
- Is there a statistical difference between level of stress and gender among CCU nurses?

- Is there a statistical difference between level of stress and work experience among CCU nurses?
- Is there a statistical difference between level of stress and educational level among CCU nurses?
- Is there a statistical difference between level of stress and the workplace among CCU nurses?
- Is there a statistical difference between level of stress and, sociodemographic characteristics among CCU nurses?
- What are the recommendations to decrease stress levels among nurses working in CCUs at governmental hospitals in GS?

1.7.Context of the Study

1.7.1 Demographic context of Palestine

According to the Palestinian Central Bureau of Statistics (PCBS), historical Palestine covers approximately 27,000 km2, with the state of Palestine extending from Ras Al-Nakoura in the north to Rafah in the south.

The state of Palestine is surrounded on the west by Egypt and the Mediterranean Sea, on the east by Syria and Jordan, on the south by the Gulf of Aqaba, and the north by Lebanon. According to PCBs 2020s, the Palestinian population is predicted to be 5.1 million, including the inhabitants of Jerusalem, Palestine's everlasting capital.

The population distribution shows that 59.8% of the population lives in the northern governorate (west bank) and 40.2 percent in the southern governorate (GS) and that 50.9 percent of the population is male and 49.1 percent is female. The population distribution by age categories was 38.1 percent for those aged 0-14, 28.7% for those aged 15-29, and 5.3 percent for those aged 60 and up. (PCBS, 2020).

1.7.2 Demographic context of GS

GS is a small county off the shore of the Mediterranean Sea, located in the south of Palestine. GS is a densely populated area, with about 2.04 million people living in 378 km2 and a population density of approximately 5400 people per km2. In the GS, the population is divided across seven towns, ten villages, and eight camps. The Gaza Strip

is divided into five governorates: North Governorate (362,772 inhabitants); Gaza Governorate (625,824 inhabitants); Mid-zone Governorate (264,455 inhabitants); Khan-Younis Governorate (314,393 inhabitants); and Rafah Governorate (225,538 inhabitants) (PCBS, 2020).

1.7.3 Governmental Hospitals as Main Part Health Care System

Ministry of Health (MoH) is considered the main provider of secondary health care services (hospitals) in Palestine. There are 81 hospitals in West Bank and Gaza Strip with a bed capacity of 6,146 beds. 51 of the total hospital are in West Bank including East Jerusalem with a total bed capacity of 3,747 beds, while the rest are in Gaza Strip. Of the total hospitals, 27 of them are owned and operated by the MoH with a total bed capacity of 3,325 beds.

In Palestine, Non-Governmental Organizations have 34 hospitals with a capacity of 2,061 beds and the private sector has 16 hospitals with a capacity of 536 beds. United Nations Relief and Works Agency (UNRWA) has one hospital in Qalqiliya with a capacity of 63 beds. Military medical services have three hospitals in Gaza Strip with a capacity of 161 beds. The hospital beds of the MoH cover almost all specialties, including general surgery services and subspecialties, internal medicine, pediatrics, psychiatric and other specialties. Rehabilitation and physiotherapy services are offered by non-governmental organizations. MoH hospitals also provide services to patients through outpatient clinics, emergency departments, and hemodialysis units. There are 11 kidney dialysis units in hospitals of the MoH in the West Bank and in addition to one unit in An-Najah National University hospital in Nablus with a total of 183 machines. In 2016, a total of 147,494 hemodialysis sessions took place in total. Diagnostic radiological and laboratory services are provided in MoH hospitals, with a total of 643,324 Medical graphics conducted in the West Bank in 2018. (MoH 2018).

1.8.Theoretical definitions and Operational definitions

1.8.1 Theoretical definitions

Stress:

Stress is a "physical, mental, or emotional factor that causes bodily or mental tension. Stresses can be external (from the environment, psychological, or social situations) or internal (illness, or from a medical procedure). Stress can initiate the "fight or flight" response, a complex reaction of neurologic and endocrinologic systems". (William and Shiel., 2018).

Nurse:

A nurse is a healthcare professional focused on the care of individuals, families, and communities, so they may attain, maintain, or recover optimal health and quality of life from conception to death. Nursing involves a greater, and often continued, level of human interaction than any other health care discipline. It is a holistic discipline with its own body of scientific knowledge. Nurses work in collaboration with interdisciplinary team members to provide the best evidence-based care. At the highest levels of nursing practice, nurse practitioners may act as primary health care providers. (Maymoun and Sohail., 2020).

CCU:

The cardiac care unit, also known as critical care, is a multidisciplinary and interprofessional specialty dedicated to the comprehensive management of patients having, or at risk of developing, acute, life-threatening organ dysfunction. Intensive cardiac care uses an array of technologies that provide support for failing organ systems (Amin et al., 2016).

1.8.2 Operational definitions

Stress:

Stress is classified into three categories: low up to 33%, moderate from 34% to 66%, and severe more than 67%, and it is assessed according to the measurement level by research questionnaire.

Nurse:

CCU nurses at the governmental hospitals in the Gaza strip.

CCU:

CCU is a special caring unit located in five major hospitals in GS, concerned with cardiac life-threatening. Working in CCU might be overwhelming and stressful.

Governmental hospitals:

- **Al-Shifa medical complex:** is the largest and oldest medical complex and central hospital in the Gaza Strip. It is located in the neighborhood of North Rimal in Gaza City in the Gaza Governorate and contains three major hospitals "surgical, medical, and obstetrics". CCU Includes 12 beds and 16 nurses, coronary care unit 12 beds, and 16 nurses.
- **European Gaza Hospital:** is the only government hospital that serves the Rafah area, geographically located in khan-younes government, provides secondary services hospital. The coronary care unit includes 12 beds and 15 nurses.
- **Nasser medical complex:** is the second-largest governmental hospital in GS, serves in the Khan-Younes area. CCU includes 25 beds and 27 nurses.
- **Al-Aqsa Martyrs Hospital:** is one of the governmental hospitals, that serves the middle area in GS, and the Deir al Balah area**.** CCU includes 6 beds and 10 nurses.
- **Indonesian hospital:** is one of a governmental hospital in north Gaza area services, includes 8 beds and 20 nurses.

Chapter 2
Conceptual framework
And
Literature Review

Chapter 2
Conceptual framework And Literature Review

2.1 Conceptual framework

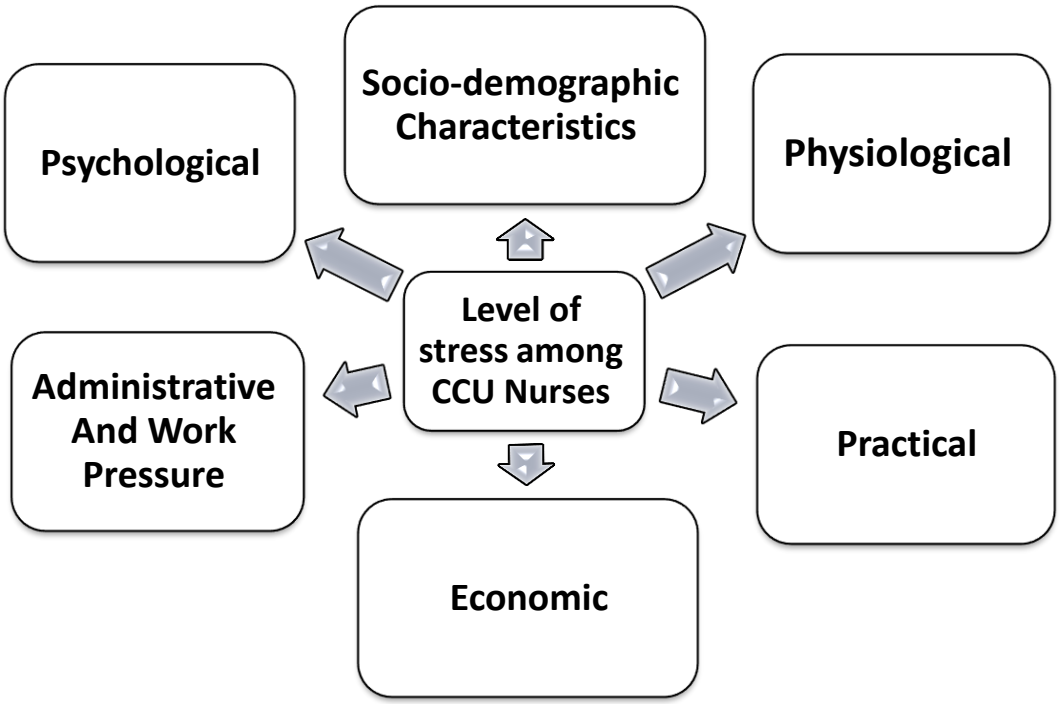

Figure (2.1): conceptual framework developed by the researcher.

The researcher draws the conceptual framework based on literature and personal experience, nurses working in CCUs, ascend a ladder of three levels of stress.

CCUs nurses are surrounded by many stressors that affect their personalities. Those stressors might be positive that they help nurses become more experts and may be negative that help nurses feel burned out and exhausted. Common stressors pose nurses to challenges because the surrounded environment of the CCUs needs support to break down stressors like physiological fatigue, disability, lack of energy, sleep disturbance, psychological depression, and risk of psychiatric morbidity (Vandevala. et al., 2017). Moral or ethical factors in CCUs include nurses' exposure to ethical issues every day affecting their behavior (Park. et al., 2015). In this study female and male nurses working in the CCU have different religious aspects and ethical factors in Gaza Strip. Insufficient payments for nurses' work intend to leave a huge gap between nurses' satisfaction with work. (McHugh, 2014). Moreover, interpersonal

relationships between CCU nurses who might have low self-esteem could affect their work. (Liu, et al., 2017). Too much work and hardships mean more responsibility and working night shifts for nurses in CCUs and physiology, this might cause Alzheimer's disease, with a change in brain chemicals. Finally, communication includes patient poor diagnosis that leads to false information. As a consequence, the patient's family support in treatment is poor. Moreover, doctors' attitude with nurses when assigning them to a busy department decreases trust between colleagues. (Monroe, 2020).

2.2 Stress

2.2.1 Definition of Stress

"Any type of change that causes physical, emotional, or psychological strain. Stress is your body's response to anything that requires attention or action". (Panchal & Yadav, 2020)

2.2.2 Types of Stress

- Acute stress (severe stress): Acute stress could be a short sort of stress which will either be positive or a lot of distressing; this can be the sort of stress we tend to most frequently encounter in everyday life. Signs fever energy expenditure, increase vital signs, tachypnea, and altered level in body hormones (Berger et al., 2019).
- Chronic stress (moderate stress): Chronic stress is stress that appears endless and continues, because the stress of unhealthy life wedding, chronic fatigue from work, chronic stress may also stem from traumatic experiences and childhood trauma (Fisher, 2019).
- Episodic acute stress: is acute stress that appears result to run rampant and be the way of life unendingly, making a lifetime of in progress distress, anxiety, and irritability (Ehrman, 2018).
- Eustress (mild stress): is fun and exciting. It's referred to as a positive sort of stress which will keep you energized. It's related to surges of vasoconstrictor hormones, as an example once you are athletics or athletics to satisfy a point in time, or job performance. stress may also be positive as a result of it pushes folks to try and do a lot of and fulfill their obligations (Rountree, 2011). Stress cannot be controlled in the slightest degree times, however is managed to guard

any type of negative impacts or effects. This method is termed stress management which implies strategies of handling or dominant stress. Stress management contains a massive result on workers and their performance because it brings concerning quality and competency, therefore, it's an excellent bigger impact on the standard of an organization as a result of if their workers are stress-free, they're a minimum of ninety-fifth involved concerning their duties, therefore the companies' blessings increase, trying outcome in a corporation. (Onochie, 2020).

2.2.3 Impact of Stress

Stress each inherent or external incentive that involves natural reactions is recognized. Extenuatory reaction to those stressors is thought of as stress reactions. Stress contributes to a broad form of signs and symptoms that cause acute or chronic diseases together with cardiovascular disease, increase adrenal cortical steroid level, upset, inflammatory/irritable gut syndromes, diabetes, and reduced quality of life among those stricken by cancer. Stress happens in three stages (Kong, et al., 2020). the primary stage is associate degree initial stage of alarm, which produces a rise of epinephrine. Living organisms will stand up to intense stress and keep alive. The second section could be a temporary conflict method that the body puts up to handle the matter, equilibrium between a rise or decrease the strain of stress. The last section is the temporary state section or uncompensation section (nervous shock) that arises once the body has utilized each part of its accessible assets (Polizzi, et al., 2020). Stress affects the various organs of the entire body. As so much as chronic stress thinks about, it stimulates infection within the vasculature, notably within the coronary arteries, can also alter cholesterol levels and excessive activation of the sympathetic nervous system. Regarding, endocrine stress, it affects the neural structure within the brain (Zhou, et al., 2021). the strain condition in n people experiencing pressure desires healthy and regular intake together with necessary supplements, moreover, workout and mind rest area unit often instructed for averting stress-induced anxiety-linked objections and malady. The affiliation between your mind and body is obvious once you examine the impact stress has on your life (Goldman, et al., 2018). Feeling stressed over a relationship, money, or your living scenario will produce physical health problems. The inverse is additionally true. Health issues, whether or not you are

handling high force per unit area otherwise you have polygenic disorder, will have an effect on your stress level and your mental state. once your brain experiences high degrees of stress, your body reacts consequently (Palomba, et al., 2018). Serious acute stress, like being concerned about a very natural disaster or getting in a verbal run-in, will trigger heart attacks, arrhythmias, and even overtime. However, this happens largely in people UN agency have already got heart disorders (Xu, et al.,2021). Stress conjointly takes associate degree emotional toll. whereas some stress might manufacture feelings of delicate anxiety or frustration, prolonged stress can even cause burnout, anxiety disorders, and depression. Chronic stress will have a heavy impact on your health furthermore. If your expertise chronic stress, your involuntary nervous system is going to be hyperactive, which is probably going to break your body (Agorastos, & Chrousos. 2021).

2.2.4 How is stress diagnosed?

Stress is a subjective issue, not measurable with tests, accept appear physiological symptoms of stress. The person experiencing it can determine whether is it present and how severe it feels. A healthcare provider may use questionnaires to limit the severity and understand your stress and how it affects your life. If you have chronic stress, your healthcare provider can evaluate symptoms that result from stress. For example, high blood pressure can be diagnosed and treated. To evaluate stress use both subjective, and objective data (Levkovich, et al., 2018).

2.2.5 What Are the Symptoms of Stress?

Stress can affect all aspects of your human life, including your emotions, behaviors, thinking ability, and physical condition. No part of the body is immune. But, because people handle stress differently, symptoms of stress can vary. Symptoms can be vague and maybe the same as those caused by medical conditions You may experience any of the following symptoms of stress (Ceccarelli, et al., 2019).

Physical symptoms of stress include:

- Low energy
- Headaches
- Upset stomach, including diarrhea, constipation, and nausea

- Aches, pains, and tense muscles
- Chest pain and rapid heartbeat
- Insomnia
- Frequent colds and infections
- Loss of sexual desire and/or ability
- Nervousness and shaking, ringing in the ear, cold or sweaty hands and feet
- Dry mouth and difficulty swallowing
- Clenched jaw and grinding teeth (Sarpong, 2020).

(Suzuki, et al., 2019) looked at the sleep disturbances of women nurses in Japan who worked as caregivers for elderly patients. The purpose of this study is to look into sleep disorders among Japanese female nurses. design of a cross-sectional research Female nurses aged 18 to 60 years old made up the majority of the 712 participants. The effect of an obese high degree of sleep disorder breathing in elderly women nurses. Slim nurses and young people care about their health, while obesity in older nurses can lead to cardiovascular disease and breathing problems.

(Lim & Cho, 2018) The impact of job stress on physiological and psychological symptoms in nurses is the subject of this study. The goal of the study is to show a link between occupational stress and physical and psychological problems. In general nursing, there are 648 people. Workload with stress can raise fatigue, and job satisfaction can increase fatigue and physio/psychological symptoms. Burnout causes low fatigue, whereas high workload causes fatigue and physio/psychological symptoms. To reduce physio/psychological symptoms, it is vital to utilize coping methods.

(Carvalho, et al., 2018) Aimed of study to assess heart rate in intensivist nurses, the level of stress was discussed. The study's goal was to determine the stress levels and heart rates of 31 nurses who worked in pediatric and adult critical care units. There are 31 critical care nurses from the University Hospital of West Paraná in Brazil. Using a noninvasive pulse oximeter to assess heart rate, researchers discovered a negative relationship between greater workload and decreased heart rate after working.

(Skela-Savič, et al., 2017) A cross-sectional study of nurses in Slovenian hospitals to explain low back pain. The purpose of this study is to look into the factors that cause

low back pain in nurses. There were 1744 nurses from 16 Slovenian hospitals in the population, with different academic degrees between nurses. Female gender, age, length of employment, years in present post, shift work, and the number of nurses per shift were all risk factors for low back pain among 85.9% of respondents. The study's findings suggest that management support, accessible equipment, education, awareness, and risk assessment are all necessary for lowering low back discomfort.

(Nicoletti, et al., 2014) Physical workload, muscle activity, and neck pain in nurses' night and day shifts: In nurses, a physiological examination and comparison were conducted between the day and night shifts. The purpose of this study was to examine physical exertion, musculoskeletal discomfort, and pulse rate among twenty Swiss nurses working night and day shifts. Twenty Swiss nurses worked night and day shifts in the population. With an increased heart rate, the day shift has greater work and muscle discomfort, whereas the night shift has a lower heart rate, lower workload, and less neck and muscle pain.

(Dalri, et al., 2014) In nurses, there is a link between physiological stress and workload. The goal of the research is to look into the link between workload and stress symptoms. A cross-sectional design with 95 nurses was used. Backache, fatigue/exhaustion, stiff neck, and stomach acidity are some of the physiological signs of working more than 78 hours per week. Working more than 36 hours per week increases physiological stress, and good treatment is dependent on a healthy team.

(Milutinović, et al., 2012) Examine the problem of stress and health among Serbian professional nurses. The study's goal is to examine professional stresses to assess stress among ICU nurses in 21 Serbian hospitals. Through the use of a cross-sectional design. The Expanded Nursing Stress Scale was used to analyze a sample population of 1000 nurses (ENSS). Physical and psychological stress are high in nurses, but social stress is lower, and sociodemographic stress is lower. Stress symptoms include headache, insomnia, fatigue, despair, lower back pain, mood swings, and chronic diseases such as hypertension, myocardial infarction, stroke, diabetes mellitus, and scaling differences between nurses. To summarize, these nurses are exposed to a variety of stressors in the workplace, including physical, psychological, and social factors. The link between nurses' perceptions of stress at work and their psychosomatic health.

Behavioral and Emotional symptoms of stress include:

- Changes in appetite -- either not eating or eating too much
- Procrastinating and avoiding responsibilities
- Increased use of alcohol, drugs, or cigarettes
- Exhibiting more nervous behaviors, such as nail-biting, fidgeting, and pacing
- Becoming easily agitated, frustrated, and moody
- Feeling overwhelmed like you are losing control or need to take control
- Having difficulty relaxing and quieting your mind
- Feeling bad about yourself (low self-esteem), lonely, worthless, and depressed
- Avoiding others. (Betts, et al., 2015).

(Radwan, 2021) psychological impact in Gaza government hospital nurses (covid 19). The purpose of this study is to determine the psychological impact on nurses who work with covid 19. In the Gaza Strip, there are 424 nurses, according to an online survey. With working in a patient, anxiety was milder than moderate and higher than high, indicating that the mean level of anxiety was not significant, but high anxiety was caused by family members infected with covid 19 and inadequate family support. Conclusion: When nurses are infected with the Covid virus, their psychological status changes, causing worry in the nurse's friends and family, as well as a sense of isolation, necessitating the use of a psychological program and family support.

(Emad, et al., 2021) Psychological discomfort among Gaza's healthcare personnel is a hot topic. The goal of this study is to look at psychological suffering, such as depression, anxiety, and stress, among healthcare personnel in Gaza who have been exposed to Covid 19. Covid 19 is a population of 231 health care providers who work with patients. As a result of working in a patient with covid 19 depression, anxiety, and stress, health care workers reported substantial psychological discomfort, with no significant differences in gender or work experience. With the period of Covid 19, this thesis examines various obstacles for health care workers in Gaza, including a lack of economic, social, and political support, as well as low salaries, a shortage of human personnel, sieges, and conflicts. Nonmedical health workers have a high number of nonmedical health workers have a high level of nonmedical health worker.

(Deng, et al., 2020) The relationship between job stress and sleep quality in community nurses in China is the subject of this study. The researchers want to see if there's a link between sleep quality and job stress in community hospitals in mainland China. The population consists of all nurses who work in a community center in Chengdu, China, with a total of 180 nurses. Another conclusion in the study was that increased job stress lowers sleep quality. ICU and emergency departments had significant job stress and poor sleep quality. . To sum up, occupational stress has a detrimental impact on Chinese community nurses' sleep quality; the higher the stress, the poorer the sleep quality.

(Mwirigi, 2020) Ethical dilemmas for doctors and nurses are the subject of this article. The study's goal is to look into the ethical issues that doctors and nurses face in end-of-life circumstances. At Kenyatta National Hospital, 110 nurses and 50 doctors work in the CCU. Stress, tension, burnout, conflicts, and feelings of guilt, vary amongst participants depending on hospital policy, experience, decision making, and patient case problem are all factors that contribute to their inability to manage and confront end-of-life decision making. Finally, research hospitals must clarify the policy to prevent ethical issues and complications for healthcare providers.

(Zheng, et al., 2018) How a nurse-managed to cope with a patient's death. The purpose of this study is to examine nurses' coping techniques when dealing with end-of-life patients. To differentiate, the population conducts a literature review. Extrinsic variables for coping include talking and being heard, spiritual practices, education and programming, and debriefing, whereas intrinsic factors include boundaries, contemplation, sobbing, death beliefs, life, and job experience, and daily routines and activity. In a patient nearing the end of life, nurses are more likely to use extrinsic groups than intrinsic groups.

(Abu-El-Noor et al., 2018) After the Israel war, healthcare personnel suffered from posttraumatic stress disorder. The goal of this study is to determine the level of stress and PTSD symptoms among healthcare personnel during the 2014 Gaza Strip war. There are 324 doctors and nurses working at the government hospital with victims of the 2014 war in a hot crisis region, including the ICU, emergency department, and operating rooms. The outcome of female high-level stress is that females are more

stressed than females, nurses are more stressed than physicians, and the level of trauma is not affected by living region or department of work, although it does alter with education level. Conclusion: Highly traumatic stress in healthcare personnel during the conflict need intervention to minimize traumatic stress levels.

(Wolf, et al., 2017) Experiences of working as a weary emergency nurse. The purpose of this study is to describe the nurse's experience with exhaustion and the influence of nurse personality, care quality, and work performance on weariness. As a focus group, 16 nurses worked in an emergency room. As a result of a nurse's workload being excessively high, a remedy to physical, psychological, and cognitive stress is required. Conclusion: High-level fatigue has a detrimental impact on nursing job performance, negatively impacts the healthcare system, and in some circumstances causes violent mental and emotional fatigue for nurses who deal with environmental hospital communication.

(Drury, et al., 2014) In Australia, there is a discussion regarding psychological symptoms in registered nurses. The goal of the study is to look into psychological aspects such as satisfaction, exhaustion, anxiety, sadness, and stress as they relate to satisfaction with the quality of care. Population: ten registered nurses in a focus group with a semi-structured interview plan for each participant. As a result, seven nurses can improve their psychological status and grow themselves through self-satisfaction. Conclusion Family support, collegial support, and infrastructure for nurses to build up working and nursing care quality are all factors that contribute to job satisfaction for nurses.

(Lee, et al., 2012) The association between sex life and work stress among married nurses is the subject of this study. The first goal of the study was to look at the relationship between sex life and workload, and the second purpose was to look at the influence of workload on nurses' mental health. Taiwan has a population of 100 married nurses. This leads to a negative association between sex life and workload, with an increase in workload lowering sex life among married nurses. Another conclusion is that mental health does not vary with the workload, but good life sex does. To summarize the study on the effect of workload on life sex and nursing care quality, nurses require less work and more pay to improve their quality of life.

Cognitive symptoms of stress include:

- Constant worrying
- Racing thoughts
- Forgetfulness and disorganization
- Inability to focus
- Poor judgment
- Being pessimistic or seeing only the negative side (Bigham, et al., 2014).

(Yılmaz, 2017) pits connected professional nurses against a variety of pressures. The goal of this study is to define and explain the idea of nurse resilience to intervention. This image of physical and mental health is based on a study-based literature evaluation about stressors, their sources, and factors that can help reduce stress. Can conclude the nursing force for change to improve health systems through resilience and enhance nurse knowledge to preserve changeability.

(Lawal & Idemudia, 2017) The role of emotional skills and organizational environment in stress work in nurses. The purpose of this study is to look into emotional intelligence and organizational support in the context of nursing work stress. In Nigeria, the population prefers Ibadan University Hospital, which has 228 nurses. According to nursing stressors, the application of emotional intelligence and organizational support in work stress is independent. Conclusion emotional nurse's judgment, as well as management's support for the hospital's work stress effect.

(Hoffart, et al., 2015) Changes in cognitive behavior associated with post-traumatic stress disorder (PTSD). The researchers wanted to see if there was a link between self-compassion components and evidence of cognitive stress and subsequent PTSD symptoms during therapy. PTSD exposure in a group of 65 people. PTSD and looking signs of cognitive stress, particularly in self-judgment, have a close link. To minimize complications, it is recommended that in the therapy of PTSD patients, self-judgment, isolation, and over-identification be reduced, and self-kindness be increased.

(Aseratie, et al., 2014) Used the nursing process to train nurses in Ethiopian government hospitals. The study's goal is to determine what factors influence nurses' ability to apply the nursing process. In the study, 202 nurses were sampled from 12 government hospitals in Addis Ababa. Nurses are stressed as a result of a chaotic work environment; 25% of nurses are anxious as a result of a large number of patient visits;

highly educated nurses can implement nursing processes and arrange the environment better than low-knowledge nurses. Conclusion Organizing environmental work and raising educational levels can improve the quality of nursing health services; however, an unorganized job leads to poor nursing care, conflicting roles, medication errors, and readmission with a similar problem, as well as dissatisfaction with the care patients, have received.

(Iglesias & de Bengoa, 2013) Among critical care nurses, there is a link between burnout and job satisfaction, as well as stress. The purpose of this study is to show the link between burnout and job satisfaction, as well as job stress and signs and symptoms in nurses. In Spanish, there are 74 critical care nurses in the population. As a result, Spanish nurses experience significant stress, strong emotional feelings, and low treatment quality, depending on their personality. Conclude that stressors can cause patients to have negative attitudes toward them.

Practical stressors among nurses: -

(Lewandowska, et al., 2020) Have raised concerns about the impact of weariness on nurses' work in intensive care units. The study's goal is to look at how alarms affect nurses in critical care units. In multi-critical care units, 389 nurses are employed. Alarms can diminish nurse-patient trust, new equipment requires more effort, and multi-alarms require a lengthy time to reset with no mechanism to manage alarms. Alarms weary nurses and patients; therefore, required alarms must be managed to reduce fatigue in nurses and patients and to provide quality care.

(Salehi, et al., 2020) Nurses in critical care face ethical problems when using restraint. The study's goal is to look into what causes critical care nurses to have ethical issues when it comes to employing physical restraint on patients. With framework interview, 17 nurses from various critical care units. Physical constraint causes unfavorable feelings between nurses and patients, which has an impact on nurse quality of care. The conclusion identified ethical difficulties between patient restraint and nurse physical, emotional, autonomy, safety, and outcome, and that nurses need to strike a balance between patient health and benefits of patient restraint with patient safety and nurse performance criteria.

(Vrontis, et al., 2019) Nurses in the healthcare industry face a lot of stress. The study's goal is to look at the environmental, situational, and individual elements that influence

nurses' stress levels. In a multi-hospital setting, there are 100 nurses. In nurses, this results in a positive link between the environment and the scenario component. The favorable association between stress and total nursing performance is explained in the conclusion.

(Mahran, 2017) Critical Care Nurses Face Challenges and Work Crisis. The goal of the research is to evaluate the challenges and work crises that critical care nurses face at Assuit University Hospitals. The study uses a descriptive qualitative research model as its research model. The study's participants are 45 distinct ICUs at Assiut University Hospital. According to the findings, 82.22 percent of nurses are stressed due to increased workload on the night shift, 97.8% fear of infection, 73.3 percent conflict between nurses and doctors, 84.5 percent working under pressure, 93.3 responsible for equipment and facility, and 91.1 percent family life is at risk. Workload, patient family, and increasing job hours, according to the study, provide a challenge to nurses and enhance their stress levels.

(Gouzou, et al., 2015) At a Greek Coronary Care Unit, nurses were asked to rate their satisfaction with their jobs and their workload. The purpose of this study is to look into professional satisfaction among Greek CCU nurses and see if there are any links between job satisfaction and CCU workload. Design a descriptive correlational study with cross-sectional comparisons over three years for CCU and ICU patients (from May 2007 to June 2010). Six general coronary care facilities in Greece were chosen at random from a group of 66 people. The majority of employees are satisfied with their jobs, however, there is a low percentage of employees that rotate between jobs, which is problematic. To summarize, low to moderate levels of job satisfaction are influenced by workload, money, shift work, work location, nursing personality, and workload.

(Reich, et al., 2015) The workload of nurses in a coronary care unit based on activity score. The goal of the research is to evaluate workload in the coronary care unit, divide effort between shifts, and compare nurse staff. In Al Brazil, 604 nurses are working in a coronary care unit. As a result, the afternoon shifts have the most workload. To conclude the study, additional nurses are required to reduce workload; two nurses are required for every four patients to meet patient needs.

(Hudek-Knežević, et al., 2011) Professional burnout has been studied in terms of stress and attitudes toward work. The purpose of this research is to look into personality

traits, organizational stress, and attitudes about work and interactions. 118 nurses work in a hospital, most of whom are female. As a result of burnout, professional-quality suffers, organizational priorities suffer, stress suffers, commitment is a negative element at work, and conflict and job overload wreak havoc on the nursing profession. Conclusion: Depending on nurse personality, devotion to work harms nurses, and can predict burnout.

Economic aspect for nurse's stressors

(Lewko, et al., 2019) The link between mental health and life satisfaction among expert profession nurses. The goal of the research is to determine the link between mental health and quality of life and satisfaction. In the Podlaskie Voivodeship area, there are 523 nurses over the age of 40. Nurses with low financial status have more mental health symptoms; however, other factors such as work experience, nature of work, place of residence, age, material status, having a partner, and having children have no effect on mental health. Nurses with mental health symptoms also have physiological signs of stress, such as somatic symptoms, anxiety, insomnia, and social dysfunction. Conclusion: Professional nurses' quality of life is influenced by their financial situation.

(Akter, et al., 2019) Barriers to Bangladeshi nurses' quality of work-life. The study's goal is to find out what obstacles registered nurses in Bangladesh face in terms of quality and work-life balance. Discussion with a focus group of 30 registered nurses. Workload, transportation between hospital and house, low health services, loss of supervisory support, lack of promotion chances, hospital policy gaps, shortage of night staff, and risk allowances are the results of seven barriers in this study. To remove hurdles from registered nurses in Bangladesh, the administration and leaders must work together.

(Dopelt, et al., 2019) Factors affecting paramedics as a profession in Israel. The goal of the study is to look into the variables that cause paramedics to leave the profession in Israel. 533 paramedics in the population answered the questionnaire by email. Extrinsic issues included a lack of job possibilities, significant and hard physical demands coupled with low pay, exceptionally long work hours, and shift work, all of which harmed family and personal life. Conclusion: Paramedics will switch jobs as a result of the findings.

(Hamid, et al., 2014) Job satisfaction among nurses in Pakistan. The study's goal is to look into the numerous elements that influence nurse job satisfaction. In Pakistan, 41 nurses are working in private and public hospitals. Working in the spirit of serving humanity, working in a functional system and facing increased accountability, working against all odds, in public hospitals found hard working conditions, limited resources, working hard and stressed out despite a well-functioning system are three results chosen nurses with family support in the study. Conclusion: Improving the working environment for nurses as part of the healthcare system has an impact on the quality of care while also lowering costs.

Management and work pressure

(Faraji, et al., 2019) In Iranian CCU nurses, occupational stress is linked to demographic characteristics. The purpose of this study is to look into the work stress experienced by Iranian critical care unit nurses. In Iran, 155 critical care nurses were chosen at random from a population of 155. The outcome was due to high work-related stress, a low-stress physical environment, and no statistically significant differences in sex, age, academic degree, or work experience. Conclusion: Occupational stress is high, but stress in the physical environment is minimal.

(Napi, et al., 2019) Priority in the triage emergency department. The study's goal is to establish a priority for the emergency department's triage sector. Inpatients should use a systemic review. As a result, the quantity of patients takes precedence over priority; a lack of doctors adds to the workload and stress, putting the patient's life in jeopardy; and there are no urgent patients in emergencies. Conclusion: Establish a priority procedure and a pleasant atmosphere for health-care services, with a reduced workload, prioritization research, and confirmation of relevant studies' limits.

(Ottrey, et al., 2018) At mealtimes on the hospital ward, staff perceptions and experiences of guests were investigated. The study's goal is to look into the role of visitors in hospitals. Semi-structured interview with 61 staff members. There are three outcomes:

1- Visitors assist the patient in eating meals and reinforce the patient-health-care-services interaction.

2- When a visitor hampered patient progress and disrupted staff work procedures, a worker gave a bad glance.

3- Visiting with a patient meal is a fantastic way to promote patient health and collaboration with hospital staff. Conclusion: Depending on the time, the role of patient visitors is positive or detrimental for the patient. More research into the role of patient visitors is needed.

(Shahvali, et al., 2018) There is a link between nurses' moral sensitivity and patient satisfaction with nursing care quality. The purpose of this study is to look at the link between moral nurse sensitivity and patient satisfaction with care quality. There are 93 nurses and 70 patients in the population. As a result, there is a positive correlation between moral sensitivity for nurses and patient satisfaction, with no significant differences in sex, job location, marital status, kind of responsibility, or work shift. The conclusion is critical for patient happiness in healthcare services; administrators require additional study and samples to explain patient satisfaction elements.

(Strong, 2018) The occupational danger for healthcare professionals on a Tanzanian hospital's maternity unit. In this study, healthcare providers frequently work in low-resource environments with limited equipment and tools for patient care, as well as a lack of personal protective equipment to prevent infection. Recommendations include ensuring a safe working environment for patients and health care workers to effectively care for patients and reduce abusive interactions.

(Chhugani & James, 2017) The largest workforce of the healthcare system in India is nurses, hence this is a hot topic. The study will concentrate on the demands of patients as well as the administration of the healthcare system. This study discusses issues related to working in a hospital, such as workplace mental violence, a shortage of staff, workplace health hazards, long working hours, a lack of synchronicity, and a lack of recognition concerning material and supply, as well as a lack of sufficient time to work in synchronicity with the team throughout the shift. Positive practice environment, improved equipment and materials quality, positive teamwork, recruitment/retention policy, closing the education-service gap, workload balance in quality and quantity, and evidence-based practice are all included in this study's recommendations for problem-solving in the hospital. Can the study infer that nurses should be encouraged to solve problems, improve science and abilities, and be motivated.

(Beehr, 2014) Occupational stress in the workplace has been linked to negative psychological and physical results for individuals. Stress has an impact on one's

physical and mental health, as well as job performance. Because there is no job description for a worker, it is impossible to explain the outcome, which increases stress. There is also less knowledge about the worker's position, which increases the impact of stress. The multi-study focuses on the use of social support to reduce stress. The promotion of some colleagues who are of the same level as me stresses me in more than one direction. Work schedule is constant without stress, but the changeable effect of stress is an indicator of poor adjustment in family roles. Job characteristics need autonomy, variety, task feedback, task Significance, and task identity, in a combination of these are motivating job performance. The worker is more stressed than the central organizing role. Understandably, relocating one's living quarters can be stressful, and certain occupations practically need it. The importance of appearing on time at work will most likely be influenced by the nature of the job, the employer's organization, and the supervisor's judgment. Arriving on time is likely to be less stressful. work-related anxiety Individual stresses are caused by job stressors, but not by organizational outcomes.

(Elmblad, 2013) Workplace incivility: Prevalence, Severity, and Consequences with Proposed Interventions. The goal of the study is to find out how often incivility and burnout are among anesthesia nurses. The findings revealed a link between workplace incivility and job workload, as well as a link between patient safety and exhaustion. To provide a safe atmosphere for nurses and patients, the administration must reduce workload, workplace incivility, and exhaustion.

2.3 Sociodemographic characteristics study

- Sociodemographic factors like sex, age, work environment, and work experience are correlated to work-related stress and burnout among nurses.
- work-related stress and burnout among professionals in medical settings.
- complex workplaces wherein they encounter life-threatening diseases.
- intricate patient and family circumstances, and individuals in high distress.
- overworked, under-resourced, undertrained, inadequately supervised, and undervalued these issues (Ezenwaji, et al., 2019).

(Akter, et al., 2018) Quality of work-life among nurses in Bangladesh's tertiary hospitals was predicted by many factors. The purpose of this study is to look at the

level of quality using a multifactor approach. In six hospitals in Bangladesh, 228 registered nurses were chosen at random. Result Monthly income, followed by the work environment, organizational commitment, and job stress, is the best predictor of care quality. Conclusion: If quality and quantity of nursing care are key contributing variables to nurses' monthly income, a quiet workplace, legal and ethical rights of nurses, and a reduction in job stress.

(Azimi, 2017) Effects of Stress on Critical Care Nurses. The goal of this study was to find critical care nurses with professional personality qualities who operate systematically to decrease, prevent, and cope with stress. The study uses a cross-sectional research paradigm with a population of 767 ICU nurses. Males and females who worked as ICU nurses were included in the study. The results of a poll revealed that males have limited collaboration, need to work under supervision, and are more stressed in the surgical ICU. It was also discovered that married and elderly nurses are less stressed. ICU bed number, shift time, working on holidays, education level, and demographic characteristics such as BMI were all common stressors. Surprisingly, the number of children was rather low.

(Hashemian, et al., 2015) Stress Among Iranian Nurses Working in Critical Care Units. The study's goal is to find out how stressed nurses are. In Tehran, 3643 questionnaires were distributed at random to nurses working in the dialysis department, CCU, and ICU. As a result of the increase in age synchronized with low stress, female and widow nurses experience 2.5 times more stress than single female nurses, working night shift and changeable shifts causes more stress and physio/psychological stress symptoms, but fixed shift and morning shifts cause less stress, and stress levels decrease with nurse experience greater than five years on the job. Conclude that stress is relative and variable among nurses, and that coping skills can be used to reduce stress among nurses.

(Calvarese, 2015) Effect of gender on stress factor among students. The study's goal is to look into the link between gender and stress. University students were given the Population 224 questionnaire. Females are more likely to display high levels of stress despair, irritation, and anxiety, whereas male psychological stress expresses fury. Conclusion Female stress is a common occurrence, and women talk about it more than males.

(Benavente, et al., 2014) Stress factors and sociodemographic variables on sleep quality of nursing students (Benavente, Silva, Higashi, Guido, & Costa, 2014). The study's goal is to correlate stress indicators with sociodemographic parameters. In this study, there were 151 nurses in the population. As a result of a new graduate academic degree, increased stress levels and complaints of sleep disorders decreased hours of sleep and increased stress due to inability to manage time at work. As a result of more professional reduction stress and time management, and improved sleep quality. Conclusion: The environment and some socio-demographic parameters affect the quality and duration of sleep in student nurses.

2.4 Coping strategies among nurses

(Odonkor & Adams, 2021) stress predictor in health-care professionals The goal of the study is to establish the amount of stress among healthcare workers in Western Ghana, as well as the factors that contribute to it. There are 400 people in the healthcare provider's population. As a result, 69.5 percent of those polled said they were stressed. Female respondents were more stressed than male responders. We discovered that 40.4 percent of respondents intend to change jobs as a result of workplace stress. Respondents aged 56 were 3.16 times more likely than those in the other age groups to be stressed. We discovered a link between respondents' sociodemographic variables and their stress levels. Conclusion Increase the number of staff to reduce stress and workload and have a psychologist on hand to assist health care personnel with coping skills.

(Hsieh, et al., 2020) Elements related to spiritual care among Taiwanese nurses' competence. The study's goal is to identify factors that influence spiritual care competencies. By questionnaire, 303 nurses were included in the study. Spiritual care requires knowledge and religious training as a result of the contributing variables. Conclusion Religious nurses are concerned about the quality of care they provide and how they can improve clinical outcomes.

(Andrews, et al., 2020) In nursing, the experience of self-care and self-compassion. The purpose of this study is to look into nurses' self-care compassion. In the United Kingdom, there are 30 different levels of nurses. As a result of needing permission to self-care and be self-compassionate, a supervisor nurse can reduce stress by speaking

paragraph emotional self-care, improving relationships, and developing a conceptual framework with a nurse who is working. Conclusion Nurses require compassion for themselves and education on self-care.

(Perera, et al., 2018) The role of religion and spirituality in nurse stress management. The purpose of this study is to look into the function of religious and spiritual needs in stress relief. Different cultures, social classes, and religions require different types of nurses. As a result, not all nurses with stress can utilize spirituals and religious stress resilience; instead, depending on sociocultural factors, they can use another strategy. Conclusion: Health-care providers who are under a lot of emotional strain need better techniques to cope with stress.

(Ghiasi & Keramat, 2018) Anxiety reduction through listening to Quran recitation. The goal of the research is to examine and evaluate the impact of Quran recitation on anxiety in a variety of circumstances. A population systemic review of 973 papers was conducted, with 28 articles chosen at random. The consequence demonstrates the beneficial effect of listening to the Holy Quran being recited in diverse circumstances in lowering anxiety. The conclusion is that Quran recitation can be used as a non-pharmacological treatment for anxiety in a variety of situations.

(Calder Calisi, 2017). The impact of the relaxation response on nurses' levels of psychiatric illness, work-related stress, and patient-teaching confidence The study's objectives are to assess the effects of relaxation techniques on nurses, to educate nurses on relaxation techniques, and to investigate nurses' confidence in teaching their patients. 53 registered nurses in CCU Massachusetts general hospital were divided into two groups as case-control. Psychologically, there is no influence on group relaxation toward nurses, but nurses can teach a patient how to relax. Conclusion Nurses expressed trust in their ability to use this method with their patients.

(Gulavani & Shinde, 2014) Nurses' job happiness and occupational stress. The purpose of this study is to determine how occupational stress and job satisfaction affect nurses. In India, 100 nurses are working in tertiary care facilities. Uncertainty about therapy, communication with patients and their families, busyness, disagreement with colleagues, case death and dying, dispute with supervisors, insufficient emotional preparedness, discrimination, and confrontation with nurses are all sources of stress. Source pay and freedom are important factors in job happiness. Ability utilization,

achievement, daily action, advancement, authority, hospital policy, coworkers, creativity, security, social service, social status, moral worth, recognition, responsibility, supervision, human relations, variety, and working conditions are all reinforcing aspects. Conclusion: There is no link between sociodemographic characteristics and stress, although nurses' independence plays a significant role in stress relief.

(Jones, 2014) Occupational Stress and Its Contributing Factors in Iranian Nurses. The goal of this study was to look at fatigue and stress in ICU health care professionals based on demographic, employment, and organizational factors. A total of 31 persons were included in this cross-sectional study from ICUs in Paris-area hospitals (doctors, residents, registered nurses, nurse's aids, and physical therapists). A total of 31 health care employees on the night shift in an ICU were evaluated, with data acquired through questioning and interviews. Female doctors and nurses had higher stress levels and weariness, according to the findings, and they relieve stress through social support and monitoring. It was also shown that night shifts lasting more than 12 hours cause weariness. The study concludes that when doctors and nurses require stress relief, they should.

(Pham, et al., 2014) The influence of green tea and coffee consumption on depression in the Japanese working population is the subject of this study. The study's goal is to look at the link between green tea, coffee, and caffeine consumption and depression symptoms. In Japan, there were 537 participants. As a result, higher green tea and coffee intake was linked to a reduced prevalence of depressed symptoms, whereas higher caffeine consumption was linked to increased depressive symptoms. Conclusion: Use natural coffee and green tea to alleviate depressive symptoms while avoiding synthetic caffeine.

(Nahm, et al., 2012) Nurses' weight and stress-related self-care behaviors The goal of the study is to find elements that may encourage nurses to take better care of themselves. In urban teaching hospitals, there are a total of 183 registered nurses. As a result, the majority of nurses do not exercise, half eat an irregular diet, and the majority of the study is overweight depending on BMI. Nurses who eat irregular meals and do not exercise are more stressed, and the majority of stress relievers are regular eating and exercise. Conclusions: Lack of exercise and an irregular diet cause health

problems in elderly nurses aged 45 and up; encourage nurses to consume a balanced diet and participate in sports activities.

(Zulkurnaini, et al., 2012) The effects of listening to the Al-Quran and classical music on the brainwaves. Using electroencephalograms, the researchers hope to analyze and compare the impact of listening to the Al-Quran and classical music on human brain waves (EEG). A total of 28 people were chosen at random from Universiti Teknologi. When listening to the Quran, the brain wave changes by 12.67 percent, whereas when listening to music, it changes by 9.96 percent. Listening to the Quran is more calming than listening to classical music.

2.5 Nurses

Nurses play a vital role in health care services, and quality of care, and square measure usually the unsung heroes in health care facilities and emergency response. they're usually the primary communicator, and preparation to sight health emergencies and work on the front lines of infection bar and management the delivery of primary health care, as well as promotion, prevention, treatment, and rehabilitation. In several countries, nurses compose 1/2 all health care professionals and have a significant role in however health actions square measure organized and applied, each at the front-line and social control levels. they're usually the primary and typically solely health professionals a patient can see and therefore the quality of their initial assessment and consequent care is important to strengthen health outcomes. World Health Organization (WHO 2021).

2.5.1 Nursing education level

Nursing assistants work in-home care and semi-permanent care settings. additionally, cited as “nursing assistants” and “nursing aides,” nursing assistants typically function the first purpose of contact between the patient’s members of the family and also the care organization. They assist with the patient’s daily activities like bathing, dressing, eating, and ambulating. looking at state rules and coaching, they'll administer medication below supervising, take important signs, fill out patient charting and news exploitation electronic anamnesis code, and alternative tasks that don’t need advanced coaching (Edemekong, et al., 2017).

Licensed sensible nurses square measure chargeable for providing patient care by acting because of the primary someone between the care team and also the patient. They additionally could also be chargeable for human activity with the patient's family. sensible nurses monitor patients' health and do some physical care tasks, like taking force per unit area, inserting catheters, beginning blood vessel fluid and drugs, and ever-changing a dressing. whether or not or not the requirements for supervising to perform these tasks varies by state (Spinsante, et al., 2021)

A nurse contains a broad variety of responsibilities, as well as administering medication, conducive to a patient's medical aid arrangement, and collaborating with the health team. In some workplaces, once you reach the nurse level of nursing, will specialized positions open up within the special units, like vital care nurse, case management nurse, and flight nurse. To become a nurse, you want to earn either AN Associate of Science in Nursing (ASN) or a Bachelor of Science in Nursing (BSN). when with success graduating from either kind of program (Riley, et al., 2021).

Master of Science in Nursing isn't a job however a degree, the degree you would like to become RN or to settle on another role specialty. Earning your master's degree may be a likelihood for you to advance your education in your space of greatest interest, whether or not that's providing higher patient care, educating a successive generation of practitioners, running positions, or administering in a corporation (Fulton, et al., 2019).

Doctor of Nursing following doctoral-level preparation will be thought of because the next level of nursing is on top of the master of science in nursing. Doctoral-level data of care policy, nursing follow health data systems and structure leadership. Attending a doctor of nursing follow program is best for skilled nurses World Health Organization fancy artistic problem-solving and turning strategy into follow. Yankee Association of Critical-Care Nurses (AACN. 2019).

2.5.2 Cardiac Nurses Job Description

Cardiac care nurses work with patients with heart problems. these people will receive the care that they have to revive their heart health condition. Cardiac nurses are also known as vas nurses. internal organ nurses are exceptional communicators

United Nations agency offers effective steps to patients concerning rehabilitative and preventative physical stress steps (Dittman, & Hughes, 2018).

Cardiac nurses work closely with their patients to supply the subsequent services:

- operating with patients to cut back the risks of patients United Nations agency presently have heart conditions, developing plans to forestall future heart issues, and providing rehabilitation services for those sick from surgical procedure or heart issues.
- internal organ nursing involves operating closely with cardiologists to assist patients by assessing patients' current risk of coronary failure or heart condition.
- internal organ nurses facilitate their patients to set and meet their goals for their health, and they assist with implementing changes to their lifestyles.
- the duty responsibilities of internal organ nurses embrace caring for patients United Nations agency has a range of heart-related conditions, together with symptom cardiopathy, myocardiopathy, unstable angina, infarct, internal organ dysrhythmia, and arteria malady. it's necessary to recollect that internal organ nurses offer their services underneath the superintendence of a medical specialist.
- internal organ nurses should have specialized skills to perform their job. These skills embrace medical care, EKG watching, and administering medication through IV drips. Additions job responsibilities of internal organ nurses embrace internal organ watching, health assessments, stress-test evaluations, and post-surgical care in surgery units. (Kwok, et al., 2020) and (Frederix, et al., 2019)

2.5.3 Cardiac Nursing Certification

It is necessary to carry a minimum of credentials in nursing and have the registered nurse (RN) certification to be a cardiac nurse. Associate, bachelor's, and master's degrees in nursing are also are obtainable through local nursing school programs. Before deciding upon an education route, it's necessary to recollect that clinics and hospitals tend to point out employment preferences to nurses World Health

Organization has received in-depth nursing education from authorized schools and universities (Hickey, et al., 2018).

Upon completing a nursing degree program, the credentials to become a cardiac nurse come with a bit more nursing coursework and experience. The cardiac/vascular nurse certification examination is formed obtainable through the American Nurses Credentialing Center (ANCC) in collaboration with the Preventive Cardiovascular Nurses Association, The American Association of Cardiovascular and Pulmonary Rehabilitation, and also the Society for Vascular Nursing. (registered nurse 2021).

2.6 cardiac care units (CCUs) and governmental hospitals

The intensive cardiac care units, also known as coronary units, require complex infrastructures and equipment, as well as more staff than a normal hospital ward. There is therefore a need not only to properly equip the hospitals to provide the best care for the patients with coronary artery disease but also the obligation to manage limited and expensive resources more efficiently (Cequier, et al., 2019).

These have three main objectives:

- One to provide each patient with the correct level of care.
- Two to optimize the structural, technical, and human resources to avoid unnecessary admissions to the cardiac unit and to facilitate transfers from the cardiac unit to ensure more efficient use of the beds.
- Third to ensure continuity in the levels of care available. In short, the idea is to improve the quality of care, resource management, and patient satisfaction (Daghistani, et al., 2019).

The CCUs form an essential part of the cardiology service and aim to attend to heart patients who require a higher level of monitoring, nursing care, and medical response than that offered by conventional wards of the cardiology service but whose risk does not justify using the technical and human resources of a cardiac unit (Cramer, Helen, et al., 2018). Structural models range from multidisciplinary or multifaceted intermediate care units to specialized units. As mentioned earlier, in these units, the cardiologist can also take on responsibility for attending to patients with heart disease.

The intermediate cardiac care units are classed as specialized units, dedicated to one specialty in particular. As these units form part of the cardiology service, they can adapt to different organizational models, which are described below (Metkus, THOMAS S., et al., 2021). The rooms of the CCU must be readily accessible for the health professionals, and it must be possible to readily move beds and equipment emergency trolleys with electrical shock devices, portable X-ray equipment, and portable electrocardiogram at times of emergency. The doors should be wide (approximately 1.5 m). The rooms should also be sufficiently sound-proofed and air-conditioned, preferably with windows with natural light (Rungta, et al., 2020).

- The rooms should be large enough to deal with emergencies and it is recommended that they have 15 m2 of usable space.
- There should be at least 1 connection to the oxygen supply and 1 vacuum line per patient.
- The CCU should have a spacious working area for nursing staff (control area) where the center for monitoring vital signs and, if required, closed-circuit television screens for monitoring the patients are located.
- The electrical system of the CCU should be compliant with current legislation for specialized hospital units which require connection to their power generators. (Shaikh, 2018).

2.7 Human Resources (medical and nursing staff)

Suitably qualified and trained staff are essential to ensure that the CCUs run as smoothly as the cardiac units.

Medical Staff

There should be a person in charge of the unit who is responsible for the organization, clinical management, and training programs for the other staff. This person should be a specialist in cardiology with appropriate experience in managing acute and chronic heart disease. As the person in charge, the staff physicians should also be cardiology specialists (Nishimura, Rick A., et al., 2019). Concerning the number of cardiologists, the recent guidelines published by the Working Group on Acute Cardiac Care of the European Society of Cardiology recommend 1 physician

for every 6 beds. This number could well vary according to the functional setup of the cardiology service. (Bonnefoy, et al., 2018).

Nursing Staff

The role of the nursing staff in the CCU, as in the cardiac units, is essential for high-quality care. Thus, there should be a sufficient number of properly trained nurses, who should be able to interpret frequent arrhythmias, detect the first indications of deterioration in patients, and take decisions quickly in emergencies (start cardiopulmonary resuscitation maneuvers or perform defibrillation) (Motamedzadeh, et al., 2018). It is desirable that, in addition to appropriate training, the nursing staff assigned to a CCU have previous experience in attending to patients in intensive care units or CCUs. An appropriately trained and qualified full-time or part-time (also head of the CCU or hospital ward of the cardiology service) supervisor should be present (Goudarzi, et al., 2021). The degree of preparation necessary has forced the government to consider recognizing specialization in the field of cardiology. The task of the supervisor could also be essential in investigational studies done in the CCU itself. The rotation of nursing staff from the CCU with the other units of the cardiology service, and particularly the CCU, is a useful way of ensuring commitment, sense of duty, and the degree of training necessary for a suitable level of care (Karami, et al., 2017). The Working Group on Acute Cardiac Care of the European Society of Cardiology recommends that a total of 1.8 nurses be assigned per bed in the CCU. it seems reasonable that the number of nurses assigned to the CCU is sufficient to ensure a ratio of 1 per 4 to 6 beds (1.2-1.8 nurses per bed), although this ratio will depend on the individual characteristics of each ICCU. At least 2 nurses are recommended if the CCU is not included or is not close to the CCU or the hospital ward of the cardiology service. (Keshk, & Aly, 2018)

2.8 Working in CCU

Working in a CCU can be specifically stressful because of the severity of illness a patient is experiencing. This leads to more stress and affects the nurses themselves. It also leads to a higher death rate. As a result of that, some nurses may get involved in many ethical issues and challenging work situations too. If it is so stressful to work in a CCU, why then will most of the CCU nurses and CCU physicians

never develop burnout, severe stress, or compassion fatigue. Adding to that, families of patients are not very helpful when health workers take a patient history. CCU nurse believes that work stress is the most important factor in these conditions, but it is correlated with the sense of accomplishment and having influence and meaningful recognition (Kompanje, 2018).

2.9 Indications admission to CCU

The criteria for admission to the CCU should be guided by the basic objective of attending to patients with acute heart disease, particularly acute coronary syndrome, whose clinical condition does not require admission to the cardiac unit but who nevertheless are not sufficiently stable to be admitted to a conventional cardiology ward. These patients, therefore, need closer monitoring and more intensive care, as described at the beginning of this document. In general, we only have data from a few observational studies. Therefore, the recommendations made in this document are based solely on the consensus of an expert committee. (Ibrahim, et al., 2017).

2.10 Summary of framework and Literature Review

The researcher formed the previous variable based on the title of the research, where he talked about stress definition, type of stress with degree mild, moderate, severe, connected with type acute, Episodic acute stress, chronic, eustress with compensation between life and stress situations. Stress impact in detail begins acutely with source in human experience, and how to change status to adaption or need to psychiatric consultation. Stress diagnoses in objective issues, the appearance of symptoms include physiological, behavioral, emotional, and cognitive stress. Factors of sociodemographic stress connected with personal, family, and nature of work. Another step speaks in nurses as variables in the study, nurse's education levels, in specialties cardiac nurse certifications, and job description to CCU nurses. Area of working in CCU component, equipment, facilities, and human resources medical and nursing staff. Working in CCU with stress resources. Finally, indications admission to CCUs in cardiac and coronary cases. Summary of Literature Review Researcher divided the literature review depending on recent research from the year 2021 back to 2011, adopted with the relationship our study, study about stress, stress resources, nurses, critical care nurses, work pressure, management practice pressure, and

sociodemographic stressors. Study survey and used all sources, primary and secondary, to build a knowledge base on nurses working in the CCU. Studies that are concerned with the subject of the study, level of stress in nurses, and main field in framework stressful process. In this study, a presentation and survey of local, regional, and international studies on stress, its causes and levels on nurses in developing and developed countries, and the impact of culture on nurses. Through previous studies, it was found that there are similarities with our study in terms of the causes of increased stress and its impact on nurses, and the places were mostly critical departments in hospitals, with mentioning the reasons for reducing stress in other studies as part of our study. Previous studies included government hospitals and private hospitals depending on the region in which of the study.

Chapter 3

Materials and Methods

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Materials and Methods

3.1 Design of the Study

The research methodology is an organized set of steps through which the subject is studied to reach valuable results that contribute to solving problems, through a set of recommendations, in a sequential manner through which ideas are organized, data is collected, analyzed and tested, and then the results are reached our research.

The descriptive cross-sectional design was used in this study. To describe the phenomena and their data, the researcher presents and studied them under the light of several statistics and previously studied to reach accurate results that enable him to identify the reasons for the research problem.

It aims to collect data related to the subject of the study, to assess stress level of nurses working in cardiac care units at government hospitals in the Gaza Strip.

3.2 Study Setting

The study was conducted in all CCUs and coronary care units at governmental hospitals in the GS, in five major hospitals, which one of critical care units (Al Shifa medical complex in Gaza city, European Gaza Hospital in Khan-Younis, Indonesian in north Gaza, Nasser medical complex in Khan-Younis, and Al Aqsa Hospital in Dier El Balah for the middle zone in Gaza.).

3.3 Population of the Study

The study population consisted of all nurses (census sample) working in adult CCUs, and coronary care units in the Gaza strip governmental hospitals. The total number around 104 nurses working in five CCUs. Response 98 nurse average (96.55%) response rate.

3.4 Eligibility criteria

Inclusion Criteria:

- Nurses working in cardiac care unit at governmental hospitals, in five major hospitals targeted in the study.

- The nurses work in coronary care units in al-Shifa medical complex and Gaza European hospitals.

Exclusion Criteria:

- CCU nurses working in non-governmental hospitals.
- CCU nurses in pediatric or neonate CCU.
- The nurses working in CCU less than three months.

3.5 Period of the Study

The study is started in June 2021 and completed in December 2021.

3.6 Instrument of the Study

The researcher used a self-adminstral structured questionnaire, adopted a modified questionnaire. The questionnaire was distributed to CCU nurses after testing validity, and reliability, to assess the level of stress among nurses. The questionnaire consisted of five domains physiological, psychological, practical, management and work pressure, and economic closed-ended questions, by leckerd scale examined the causes of stress from several aspects 59 questions in five domains, and also 9 closed questions about ways to relieve stress, and two open-ended questions were distributed to all nurses working in cardiac units in government hospitals included in the study to be filled out manually, and then the data was unloaded using the statistical program, questionnaire in annex (2) after judgment in Arabic and English language.

3.7 Ethical and Administrative Considerations

Ethical approval the researcher obtained from the Helsinki Committee in Gaza, Helsinki approval in annex (1). Official approval and obtained from the Ministry of Health in Gaza, by the General Directorate of Human Resources Management, annex (3) facilitating the task from the Islamic University of Gaza, and annex (4) MoH facilitating the task for governmental hospitals. Each participant will receive a full explanation of the research and confidentiality purposes.

3.8 Pilot Study

The researcher has chosen (30) participants randomly from the target population as a pilot study. The selection was done, explored the appropriateness of

the study tool. This helped the researcher train on the data collection process, check the clarity of questions, scales, and the time required to fill out the questionnaire., the researcher included in the study's sample after reliability was measured.

3.9 Validity and Reliability of the Questionnaire

Validity

Face and content validity under supervision group of (10) experts in the critical care field in annex (5) who evaluated all the components and the context of the tool, to ensure that it is highly valid and relevant.

Reliability

A pilot of 30 participants, to assess relabeling of the questionnaire the researcher has done.

- Test-retest.

Reliability of the instrument

Table (3.1) shows the values of Chronbach's Alpha for each questionnaire domain of participants. The table illustrated the reliability of domains; values of Chronbach's Alpha were in the range from 0.820 and 0.939. Cronbach's alpha equals 0.973 for the entire questionnaire in a pilot sample, which indicates good reliability of the entire questionnaire.

Table (3.1): Reliability of the research for each domain of the questionnaire

No.	Domains	No. of item	Cronbach's Alpha
1.	The physiological aspects	11	0.916
2.	The psychological aspects	12	0.934
3.	The practical aspects	10	0.880
4.	The economic aspects	8	0.910
5.	Administrative aspects and work stress	18	0.939
6.	Methods used to relieve stress	9	0.820
Total		**61**	**0.973**

Internal Consistency

To check internal validity, the researcher calculated the correlation between each item and the corresponding domain. Tables (3.2) present the correlation coefficient for each item of a domain and the total of the corresponding domain. The P-values are less than 0.05 in most items; thus, the correlation coefficients of most items are significant at $\alpha = 0.05$, therefore it can be said that all items of each domain are consistent and valid to be measured what was set.

Table (3.2): Correlation coefficient of each domain and the total of these Domains

	Items	**Methods Used to Relieve Stress**	
Q #		**r**	**P-value**
1.	The physiological aspects	0.881**	0.000
2.	The psychological aspects	0.896**	0.000
3.	The practical aspects	0.839**	0.000
4.	The economic aspects	0.739**	0.000
5.	Administrative aspects and work stress	0.889**	0.000
6.	Methods used to relieve stress	0.297**	0.003

3.10 Statistical Analysis

- The researcher used the Statistical Package of Social Science (SPSS- version 25) program for data entry and analysis.
- Frequency tables were used to describe the frequency of specific characters.
- Some statistical tests were used as appropriate such as percentage (%), means and standard deviation (SD), t-test to assess whether the means of two groups are statistically different from each other, One-way analysis of variance (ANOVA) test to determine whether there are any significant differences among the means of more than two independent groups.
- As well as the researcher used Person correlation (r) to test the correlation between numerical data.
- Finally, the Probability value (P-value) less than 0.05 was considered statistically significant.

Chapter 4

Results and Discussion

Chapter 4
Results and Discussion

4.1 Sample distribution according to socio-demographic data

The study sample included 98 participants. The socio-demographic characteristics that were studied included age (years), marital status, number of children, place of working, education degree, of which in CCU, duration of nursing experience (years), the current salary, address, and work duty

4.1.1 Distribution of the study population according to their gender

Figure (4.1) pointed out that more than half of the study population in the study population were males (62.2%) while (37.78%) were females.

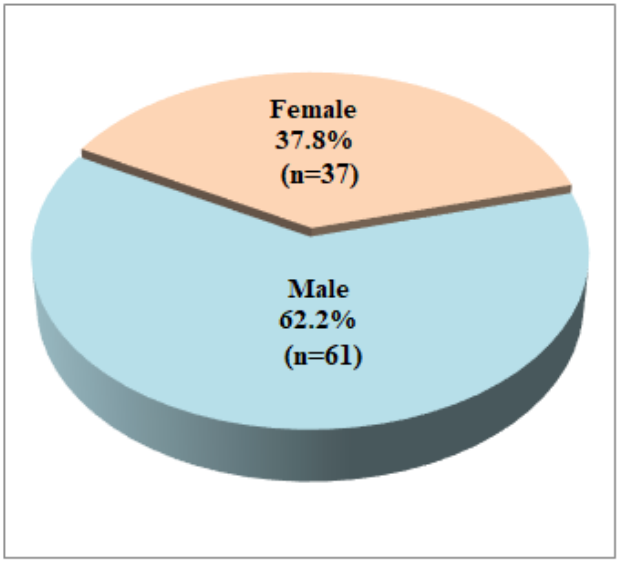

Figure (4.1): Distribution of study population according to their gender

4.1.2 Distribution of the study population according to their age

Figure (4.2) illustrated that the highest age groups of the participants were aged 30 years or more (45.9%) followed by 32.7% of them being aged between 26 to 30 years (32.7%), and the lowest age groups of study populations aged 25 years or less (21.4%). The average age among participants was 31.8±7.3 years. This was measured in multi articles, the research studied near study Abdou, & Saber, (2011), and another study not conducted to our studied with different in age percent to Zaree, (2018). Also Mohamed, & Abou-Abdou, (2018) are not conducted to our results. Rational

governmental hospitals adopt experience in all ages to change health skills and knowledge, but private hospitals depend on cost-effective for nurses chosen, with all hospitals need all age groups, different ages according to hospital economic and policy.

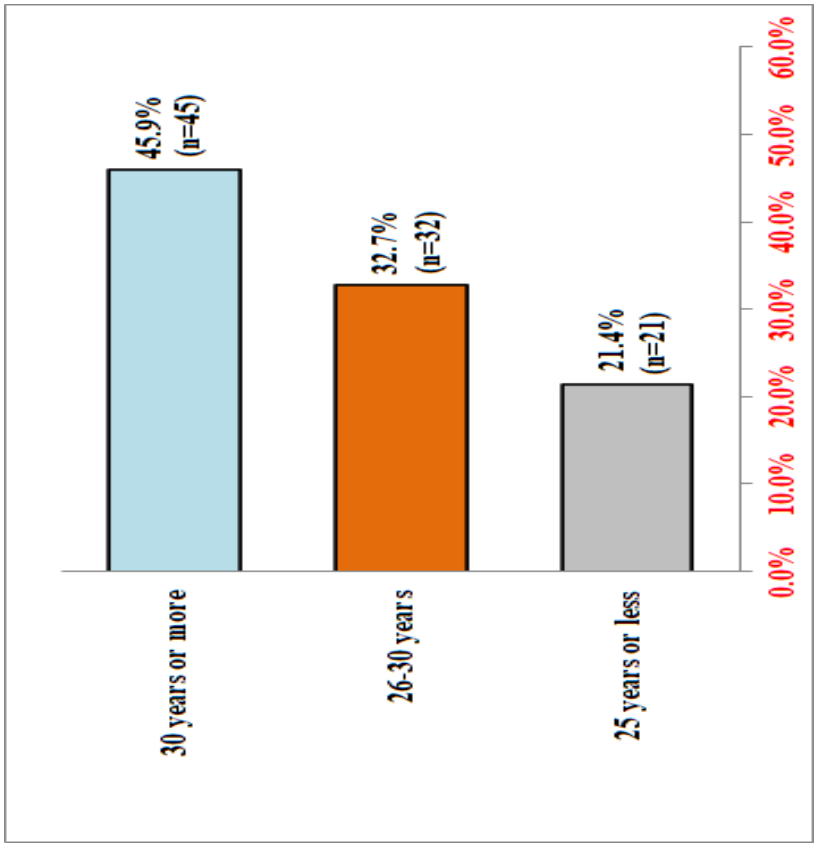

Figure (4.2): Distribution of study population according to their age

4.1.3 Distribution of the study population according to education levels

The distributions of the study population according to academic qualification showed that the highest group of the study population was finished the bachelor's degree (83.7%) while 6.1% of them have finished the postgraduate degree. The results illustrated that only 10.2% of them have finished the diploma nursing program (Figure 4.3). The light of our result shows that a similar result was reported by Al-Omari, (2015). Another study cannot have been conducted with the result Hersch, Rebekah., et al. (2016). Explain the relationship between academic degree and palace of working, critical care area policy bachelor degree dependent.

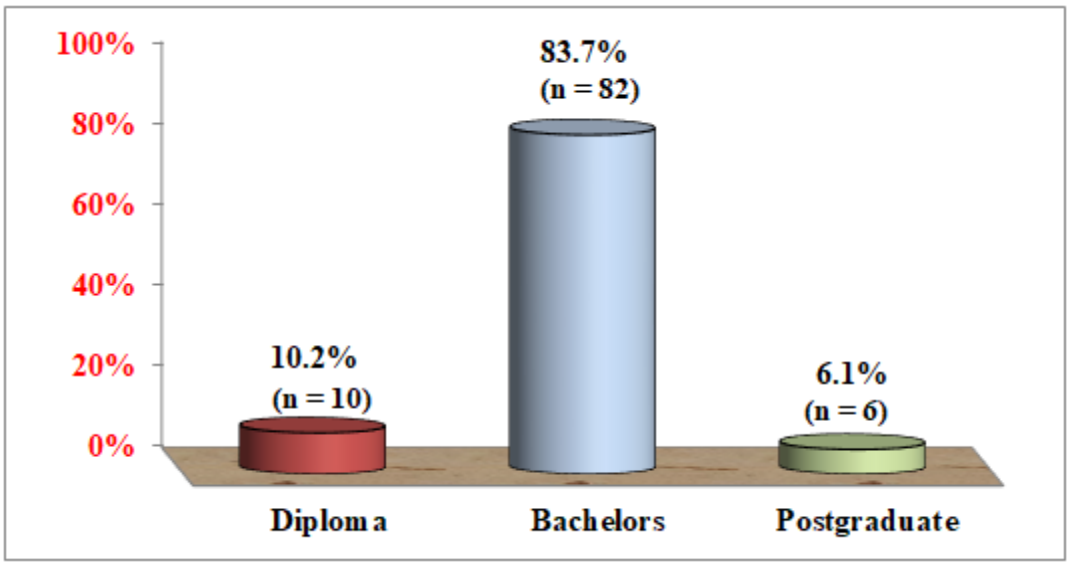

Figure (4.3): Distribution of study population according to academic qualification

4.1.4 Distribution of the study population according to their socio-demographic information

Table(4.1) illustrated that the majority of the study population were married (74.5%) while 25.5% of them were single. The distributions of the study population according to the number of children showed that more than half of participants have 2 children or less (52.1%) while 47.8% of them have more than 2 children. The average number of children among participants was 2.5±1.9 children. The distributions of the study population according to hospitals showed that 31.6% of participants work in Al-Shifa Medical Complex, 13.3% of participants work in European Gaza Hospital, 26.5% of participants work in Nasser Medical Complex, 10.2% of them work in Al Aqsa Hospital, 18.4% them worked in Indonesian Hospital. The distributions of the study population according to their years of experience showed that 36.7% of them have experience 5 years or less while 28.6% of them have experience from 6 to 10 years and 34.7% of them have experience more than 10 years. The average of experience years among participants was 9.2±7.3 years. Duration of nursing experience in CCU showed that 45.9% of them have experience of 3 years or less while 24.5% of them have experience from 4 to 6 years and 29.6% of them have more than 6 years experience. The average of experience years among participants was 5.7±5.5years. The results showed that 37.8% of the study population have a current salary of less than 1500 NIS and 62.2% of them 1500 NIS or more, with a comment

in economic situations in Palestine found poverty line in Palestine is 2,470 shekels, and the extreme poverty is 1,974 shekels, that mean nurses less than extreme poverty. (PCBS, 2020) The average overtime among participants was 1666.0±722.2 NIS. Regarding the address, the table showed that The percentage of the study population from North, Gaza, Middle Gaza, Khan Younis, and Rafah Governorates were 15.3%, 24.5%, 21.4%, 25.5%, and 13.3%, respectively. The results showed that the majority of the study population have change shifts per week of work duty (68.4%) followed by 26.5% of them having fixed morning shifts, and 5.1% having fixed shifts.

Table (4.1): Distribution of the study population according to their socio-demographic information

Variables	Groups	Frequency (n)	Percentage (%)	Mean±SD
Gender	Male	61	62.2	
	Female	37	37.8	
Age (years)	25 or less	21	21.4	31.8±7.3
	26-30	32	32.7	
	30 or more	45	45.9	
Education degree	Diploma	10	10.2	
	Bachelors	82	83.7	
	Postgraduate	6	6.1	
Marital status	Single	25	25.5	
	Married	73	74.5	
Number of children	2 or less	38	52.1	2.5±1.9
	More than 2	35	47.9	
Place of working	Al-Shifa medical complex	31	31.6	
	European hospital	13	13.3	
	Naser medical complex	26	26.5	
	Alaqsa hospital	10	10.2	
	Indonesian hospital	18	18.4	
Duration of Nursing experience (years)	5 or less	36	36.7	9.2±7.3
	6-10	28	28.6	
	More than 10	34	34.7	
Duration of Nursing experience in CCU	3 or less	45	45.9	5.7±5.5
	4-6	24	24.5	
	More than 6	29	29.6	
The current salary	Less than 1500	37	37.8	1666±722.2
	1500 or more	61	62.2	
Address	North Gaza	15	15.3	
	Gaza	24	24.5	
	Middle Gaza	21	21.4	
	Khan Younes	25	25.5	
	Rafah	13	13.3	
Work duty	Fixed morning shifts	26	26.5	
	Fixed shifts	5	5.1	
	Changing shifts	67	68.4	

Table (4.1) Study conducted by Birhanu, Minyichil, et al. (2018). That shows results not conducted with Vangelova., et al. (2019) Shift Work and Occupational Stress. The result conducted studied related health care professionals in hospitals, but the result was not conducted related to sample working in the morning services department.

4.2 Distribution of the study participants according to their responses about a type of the physiological aspects

Table(4.2) summarized the distribution of the study participants according to their responses about the physiological aspects. By using a one-sample t-test this table shows that the weighted mean for the physiological aspects was 61.08%. According to the results, the highest paragraph was the number (6) " I feel lower back pain while working " with a weighted mean of 71.02%, followed by the paragraph number (4) " I feel pain in the joints " with a weighted mean 65.51%. While the lowest paragraph (11) " I feel the sweat on my hands" with a weighted mean of 51.22%, followed by paragraph was the number (10) "Suffering of increase acid in stomach " with a weighted mean of 56.53%.

Table (4.2). The distribution of the participants according to responses about their types of the physiological aspects

Q #	The physiological aspects	Mean	SD	WM	t	P-value	Rank
1	I feel short of breath while working	2.89	1.25	57.76	-0.888	0.377	9
2	I get headaches while working	3.26	1.12	65.10	2.265	0.026	3
3	I feel fatigued and exhausted due to any working	3.14	1.09	62.86	1.293	0.199	5
4	I feel pain in the joints	3.28	1.15	65.51	2.378	0.019	2
5	I suffer from muscular cramps	3.23	1.16	64.69	2.010	0.047*	4
6	I feel lower back pain while working	3.55	1.10	71.02	4.941	0.000*	1
7	I feel heart palpitations while working	3.02	1.15	60.41	0.176	0.861	6
8	I feel distended and irritable bowel and colon	2.91	1.31	58.16	-0.695	0.489	8
9	I have an upset stomach that makes me unable to enjoy food	2.93	1.34	58.57	-0.527	0.599	7
10	Suffering of increase acid in stomach	2.83	1.34	56.53	-1.282	0.203	10
11	I feel sweat on my hands	2.56	1.27	51.22	-3.424	0.001*	11
	Total	**3.05**	**0.93**	**61.08**	**0.574**	**0.567**	

*Significant at P≤0.05; P>0 05: Not significant; **SD**: standard deviation & **t:** One sample t-test.

Comment in the results in table(4.2) physiological aspects was 61.08%. this result was conducted with Hamaideh, (2011).

According to the results, the highest paragraph was the number (6) " *I feel lower back pain while working* " with a weighted mean of 71.02%. this work problem and feeling stress, this result conducted with multi studied, first Gaowgzeh, (2019). Low back pain among nursing professionals in Saudi Arabia. The second study to Suliman, (2018). low back pain among nurses in Jordan. While the lowest paragraph (11) " *I feel the sweat on my hands*" with a weighted mean of 51.22%, this result was conducted with Pragholapati., et al. (2020). Nurses work stress in emergency unit results shows sweat more than normal, lead to difficult concentration.

4.3 Distribution of the study participants according to their responses about a type of the psychological aspects

Distribution of the study participants according to their responses about the psychological aspects pointed out in Table (4.3). By using a one-sample t-test this table shows that the weighted mean for the psychological aspects was 60.15%. According to the results, the highest paragraph was the number (12) " I suffer from insomnia and difficulty sleeping " with a weighted mean of 68.98%, followed by the paragraph number (13) " I get the feeling of not coming to work " with a weighted mean 67.96%. While the lowest paragraph (16) " I want to cry frequently " with a weighted mean of 50.20% followed by paragraph was the number (18) “I have nightmares about work " with a weighted mean of 52.65%.

Table (4.3): The distribution of the participants according to responses about their types of the Psychological aspects

Q #	The Psychological aspects	Mean	SD	WM	t	P-value	Rank
12	I suffer from insomnia and difficulty sleeping	3.45	1.24	68.98	3.595	0.001*	1
13	I get the feeling of not coming to work	3.40	1.26	67.96	3.132	0.002*	2
14	I feel sluggish while working	2.85	1.21	56.94	-1.249	0.215	9
15	Act quickly for the simplest reason	2.98	1.20	59.59	-0.168	0.867	6
16	I want to cry frequently	2.51	1.23	50.20	-3.946	0.000*	12
17	I blame myself too much for the simplest things	2.93	1.22	58.57	-0.579	0.564	7
18	I have nightmares about work	2.63	1.21	52.65	-2.997	0.003*	11
19	I feel depressed for without reason	3.04	1.25	60.82	0.323	0.747	5
20	I suffer from forgetfulness	3.35	1.18	66.94	2.898	0.005*	3
21	I feel shortness of breath for no apparent reason	2.84	1.27	56.73	-1.277	0.205	10
22	I have trouble sleeping	3.27	1.32	65.31	1.989	0.049*	4
23	I became less interested in my sexual desires	2.86	1.19	57.14	-1.186	0.239	8
	Total	**3.01**	**0.95**	**60.15**	**0.080**	**0.936**	

*Significant at P≤0.05; P>0 05: Not significant; **SD**: standard deviation & **t:** One sample t-test.

In Table (4.3). psychological aspects were 60.15%. this result is similar to Shahrour, & Dardas, (2020). The result cannot have been conducted with Shechter, et al. (2020).

According to the results, the highest paragraph was the number (12) " I suffer from insomnia and difficulty sleeping " with a weighted mean of 68.98%. the result was conducted with Abdulah, & Musa, (2020). Insomnia and stress among health care workers 68.3% sleep disorder in doctors. Another study conducted with our result but percentage less than me, study to Zhan., et al. (2020). Insomnia among Chinese front-line nurses in Wuhan resulted in 52.8% suffering from insomnia. Opinion insomnia depends on the level of stress, eating habits, and weather.

While the lowest paragraph (16) " I want to cry frequently " with a weighted mean of 50.20%. the result was conducted with Shen., et al. (2020) "Psychological stress of ICU nurses working in COVID 19. 26% frequent cry sample 85 ICU nurses in China. The percent real cry, our study trial cry, present another psychological symptom of stress.

4.4 Distribution of the study participants according to their responses about a type of the practical aspects

Distribution of the study participants according to their responses about the practical aspects illustrated in Table (4.4). By using a one-sample t-test this table shows that the weighted mean for the Practical aspects was 70.96%. According to the results, the highest paragraph was the number (28) " Shift work annoys me " with a weighted mean of 79.39%, followed by the paragraph number (25) " I feel that the work pressure in the department is great " with a weighted mean 77.35%. While the lowest paragraph (33) " I distinguish between patients according to how I feel about them " with a weighted mean of 47.35%, followed by paragraph was the number (29) "The department design is not suitable for nursing work " with a weighted mean of 69.39%.

Table (4.4): The distribution of the participants according to responses about their types of the practical aspects

Q#	The practical aspects	Mean	SD	WM	t	P-value	Rank
24	Work pressure pushes me to put the interest of the work over my interest	3.61	1.10	72.24	5.512	0.000*	6
25	I feel that the work pressure in the department is great	3.87	1.02	77.35	8.403	0.000*	2
26	I suffer from a lot of burdens on myself	3.64	0.97	72.86	6.589	0.000*	5
27	I get nervous whenever the phone rings or the doorbell rings	3.49	1.14	69.80	4.246	0.000*	8
28	Shift work annoys me	3.97	1.06	79.39	9.057	0.000*	1
29	The department design is not suitable for nursing work	3.47	1.10	69.39	4.242	0.000*	9
30	I am bothered by the many alarms within the section	3.77	0.98	75.31	7.712	0.000*	3
31	The bright lights in the department, which are continuous every time, annoy me	3.53	1.06	70.61	4.969	0.000*	7
32	I am afraid of the possibility of contracting an infectious disease	3.77	1.06	75.31	7.127	0.000*	3
33	I distinguish between patients according to how I feel about them	2.37	1.25	47.35	-4.990	0.000*	10
	Total	**3.55**	**0.72**	**70.96**	**7.528**	**0.000***	

*Significant at P≤0.05; P>0 05: Not significant; **SD**: standard deviation & **t:** One sample t-test.

In the table (4.4). Practical aspects were 70.96%. This result is similar to Madadzadeh., et al. (2018). The percentage was 71.69% with job stress and workload. In another study job stress is higher than our study Gheshlagh., et al. (2017). Percent 90% in major hospitals, and 70% in specific hospitals.

The highest paragraph was the number (28) " Shift work annoys me " with a weighted mean of 79.39%. The result was conducted with Wu., et al. (2018). Job satisfaction among nurses in China. Work shifts annoys 69.04%, this sample large and more representative. The result was also conducted with Bagheri., et al. (2019). Practical issues affect nurse personality and nurse communications.

The lowest paragraph (33) " I distinguish between patients according to how I feel about them " with a weighted mean of 47.35%. the result is high more than our study to Rababa., et al. (2020). Another hand to Thanoon, & Ali, (2021). Also conducted with the result.

4.5 Distribution of the study participants according to their responses about a type of the economic aspects

Distribution of the study participants according to their responses about the economic aspects detected in Table (4.5). By using a one-sample t-test this table shows that the weighted mean for the Economic aspects was 79.16%. According to the results, the highest paragraph was the number (36) "I am bothered by the lack of financial incentives" with a weighted mean of 88.6%, followed by the paragraph number (40) "It bothers me that the salary is not commensurate with the amount of effort expended" with a weighted mean 85.92%. While the lowest paragraph as paragraph (37) "lack of financial returns prevents me from doing my duty to work towards patients" with a weighted mean of 55.51%, followed by the number (38) “It bothers me that there are no moral incentives such as a letter of thanks or praise from my direct officials" with a weighted mean of 78.98%.

Table (4.5): The distribution of the participants according to responses about their types of the Economic aspects

Q#	The economic aspects	Mean	SD	WM	t	P-value	Rank
34	I feel that the lack of salary threatens me and pressures me constantly	3.99	1.02	79.80	9.603	0.000*	5
35	The monthly salary barely meets my monthly needs	4.14	0.93	82.86	12.158	0.000*	3
36	I am bothered by the lack of financial incentives	4.41	0.74	88.16	18.740	0.000*	1
37	lack of financial returns prevents me from doing my duty to work towards patients	2.78	1.49	55.51	-1.493	0.139	8
38	It bothers me that there are no moral incentives such as a letter of thanks or praise from my direct officials	3.95	1.12	78.98	8.420	0.000*	7
39	It bothers me that the law of reward and punishment is not applied in the department	3.96	1.03	79.18	9.178	0.000*	6
40	It bothers me that the salary is not commensurate with the amount of effort expended	4.30	0.85	85.92	15.057	0.000*	2
41	Lack of clear criteria for promotions negatively affects	4.14	0.89	82.86	12.782	0.000*	3
	Total	**3.96**	**0.69**	**79.16**	**13.789**	**0.000***	

*Significant at P≤0.05; P>0 05: Not significant; **SD**: standard deviation & **t:** One sample t-test.

Comment in Table (4.5). Economic aspects were 79.16%. The result was conducted with Llop-Gironés., et al. (2021). The study result is not similar Babore., et al. (2020). No relationship between stress and economic aspects, sample 595 healthcare provider, and salary income over 28,000 euros per year.

According to the results, the highest paragraph was the number (36) " I am bothered by the lack of financial incentives " with a weighted mean of 88.6%. The result was conducted with George, & Rhodes, (2017). Other handed not conducted with our result to Aljohani, & Alomari, (2018). Filipino nurses in Ministry of Health hospitals in Saudi Arabia. Decrease monthly income by 18.3%. Observe salary income in advanced countries such as America, Canada, United Kingdom, and AL Emirate Arabia, higher than developing countries such as Palestine, Egypt, and India.

The lowest paragraph is paragraph (37) "lack of financial returns prevents me from doing my duty to work towards patients" with a weighted mean of 55.51%. The study was conducted with Liu., et al. (2018). Other studies cannot agree with

Blackwood., et al.(2019). Barriers to advance care plans with patients by nurses. Hospital nursing organizational factors show direct workload, indirect burnout, financial, a connection to patient safety, and quality of nursing care recommended improve providing sufficient support for nurses.

4.6 Distribution of the study participants according to their responses about a type of the administrative aspects and work stress aspects

Table (4.6) demonstrated the distribution of the study participants according to their responses about the administrative aspects and work stress aspects. By using a one-sample t-test this table shows that the weighted mean for the administrative aspects and work stress aspects was 70.28%. According to the results, the highest paragraph was the number (52) " The lack of security personnel during visiting hours causes me to have unpleasant confrontations with the visitors " with a weighted mean of 85.10%, followed by the paragraph number (51) " Failure to respect the department's policy for visiting times affects work performance " with a weighted mean 83.47%. While the lowest paragraph was the paragraph (55) " I feel that my relationship with my direct manager is not good " with a weighted mean of 55.51%. followed by the paragraph number (42) " Sometimes my relationship with some colleagues is tense " with a weighted mean of 56.94%.

Table (4.6): The distribution of the participants according to responses about their types of the administrative aspects and work stress aspects

Q #	The Administrative aspects and work stress	Mean	SD	WM	t	P-value	Rank
42	Sometimes my relationship with some colleagues is tense	2.85	1.30	56.94	-1.170	0.245	17
43	I get nervous whenever my colleague is late to pick up work at the end of my shift	3.47	1.11	69.39	4.171	0.000*	10
44	The promotion of some colleagues who are of the same level as me stresses me psychologically	3.45	1.07	68.98	4.169	0.000*	12
45	My relationship with colleagues is limited to work time only	2.91	1.29	58.16	-0.703	0.484	16
46	It bothers me that doctors have exceeded the protocol for admitting patients to the department	4.08	0.96	81.63	11.157	0.000*	3
47	I get upset about the lack of doctors in the department all the time	3.90	1.00	77.96	8.890	0.000*	5
48	I avoid working with some medical conditions	3.31	1.16	66.12	2.610	0.011*	14
49	I feel that my effort is thankful to others	3.42	1.10	68.37	3.757	0.000*	13
50	It confuses me for visitors to enter to ask about their conditions outside the time of the visit	3.97	0.89	79.39	10.777	0.000*	4
51	Failure to respect the department's policy for visiting times affects work performance	4.17	0.87	83.47	13.296	0.000*	2
52	The lack of security personnel during visiting hours causes me to have unpleasant confrontations with the visitors	4.26	0.83	85.10	14.992	0.000*	1
53	I am bothered by the many instructions and directions from my superior	3.52	1.11	70.41	4.623	0.000*	9
54	I get nervous whenever I want to change my shift schedule after I put it in	3.47	1.05	69.39	4.437	0.000*	10
55	I feel that my relationship with my direct manager is not good	2.78	1.26	55.51	-1.769	0.080	18
56	I feel clear discrimination among my colleagues by my immediate supervisor	3.07	1.25	61.43	0.564	0.574	15
57	Wasting a lot of work in searching for the right equipment works hard	3.53	1.11	70.61	4.715	0.000*	7
58	Not have enough necessary medical supplies makes me confused	3.53	1.13	70.61	4.638	0.000*	7
59	The pile of broken medical equipment in the department bothers me	3.58	1.12	71.63	5.137	0.000*	6
	Total	**3.51**	**0.70**	**70.28**	**7.256**	**0.000***	

*Significant at P≤0.05; P>0 05: Not significant; **SD**: standard deviation & **t:** One sample t-test.

In table (4.6) Administrative aspects and work stress aspects were 70.28%. show result conducted with Zhou., et al. (2021). Found in other hands less than our result to Rajabi., et al. (2018) Occupational stress among nurses. According to the results, the highest paragraph was the number (52) " The lack of security personnel during visiting hours causes me to have unpleasant confrontations with the visitors " with a weighted mean of 85.10%. Results were conducted with Sisawo., et al. (2017). This result is more specific for 219 nurses. Another founding relationship in our result to Jakobsson., et al. (2021). In study four results face workplace violence, assignment positive or negative, strive towards readiness to action, and managing incidents. most common acts of workplace violence are patients' medical conditions, dissatisfied visitors, and hospital organizations. Management job safe work environment every day.

The lowest paragraph was the paragraph (55) " I feel that my relationship with my direct manager is not good " with a weighted mean of 55.51%. this result was conducted with Feather., et al.(2015). Other handed not conducted to our result to Saleh., et al. (2018). Not conducted sample small size 35 nurse.

4.7 Distribution of the study participants according to their responses about a type of Method used to relieve stress.

The distribution of the study participants according to their responses about the ad Methods used to relieve stress is pointed out in Table (4.7). By using a one-sample t-test this table shows that the weighted mean for the methods used to relieve stress was 74.13%. According to the results, the highest paragraph was the number (1) " I practice religious rites " with a weighted mean of 87.35%, followed by the paragraph number (3) " I can my own problems solving " with a weighted mean 80.82%. While the lowest paragraph was the paragraph (5) " Listen to relax music " with a weighted mean 66.33%. followed by paragraph number (8) " I go to psychological counsellor " with a weighted mean of 51.02%.

Table (4.7): The distribution of the participants according to responses about their types of the methods used to relieve stress.

Q #	Methods used to relieve stress	Mean	SD	WM	t	P-value	Rank
1	I practice religious rites	4.37	0.77	87.35	17.693	0.000*	1
2	Enjoy daily activities	3.98	0.87	79.59	11.106	0.000*	3
3	I can my own problems solving	4.04	0.82	80.82	12.507	0.000*	2
4	Do relaxation exercises	3.53	1.09	70.61	4.837	0.000*	7
5	Listen to relax music	3.32	1.16	66.33	2.693	0.008*	8
6	Leave what's on my mind to someone I trust	3.84	1.03	76.73	8.023	0.000*	5
7	Talking with co-workers	3.84	0.95	76.73	8.727	0.000*	5
8	I go to psychological counsellor	2.55	1.09	51.02	-4.096	0.000*	9
9	Drink warm drinks like herbs while working	3.90	0.96	77.96	9.281	0.000*	4
	Total	**3.71**	**0.59**	**74.13**	**11.879**	**0.000***	

*Significant at P≤0.05; P>0 05: Not significant; **SD**: standard deviation & **t:** One sample t-test.

Comment in Table (4.7). Methods used to relieve stress was 74.13%. the result was conducted 73.7% with Zhou., et al. (2019). Besides other handed to Grabbe., et al. (2020). Use control groups before and after stress relive programs.

The highest paragraph was the number (1) " I practice religious rites " with a weighted mean of 87.35%. the result was conducted with Alshehry., et al. (2020). another handed not similar our result to Graham., et al. (2016). Conclusion in Islamic countries use religious aspects, but in other countries, more than one for stress relieve.

The lowest paragraph was paragraph (5) " Listen to relax music " with a weighted mean of 66.33%. the result similar Graham., et al. (2016). And similar with Ozgundondu, & Metin, (2019). Depend on nurse culture to relive stress.

4.8 Distribution of the study participants according to their responses about a studied domain

Table(4.8) pointed out the distribution of the study participants according to their responses about the studied domain. By using a one-sample t-test this table shows that the weighted mean for the studied domain was 68.66%. According to the results, the highest domain was the number (4) " Economic aspects " with a weighted mean of 7916%, followed by the domain number (6) " Methods used to relieve stress " with a weighted mean of 74.13%. While the lowest domain was domain (2) " the

psychological aspects " with a weighted mean of 60.15%. followed by domain number (1) " the physiological aspects " with a weighted mean of 61.08%.

Table (4.8): The Distribution of the study participants according to their responses about a studied domain

Studied domain	Mean	SD	WM	t	P-value	Rank
First axis is the physiological aspects	3.05	0.93	61.08	0.574	0.567	5
Second axis is the psychological aspects	3.01	0.95	60.15	0.080	0.936	6
Third axis is the practical aspects	3.55	0.72	70.96	7.528	0.000*	3
The fourth axis is the Economic aspects	3.96	0.69	79.16	13.789	0.000*	1
The fifth axis: administrative aspects and work stress	3.51	0.70	70.28	7.256	0.000*	4
Sixth Axis: Methods used to relieve stress	3.71	0.59	74.13	11.879	0.000*	2
Total	**3.43**	**0.62**	**68.66**	**6.927**	**0.000***	

*Significant at P≤0.05; P>0 05: Not significant; **SD**: standard deviation & **t:** One sample t-test.

4.9 Mean difference of studied domains related to the gender

Table(4.9) showed the mean difference of studied domains related to gender. The results showed there is no statistically significant difference in the mean of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total between males and females (P>0.05). Results were similar to Gao., et al. (2020). No difference in gender in depression, sample 35 male and 35 females.

Table (4.9): Mean difference of studied domains related to the gender

Domains	Gender	N	Mean	SD	t	P-value
The physiological aspects	Male	61	3.08	0.98	0.405	0.687
	Female	37	3.00	0.84		
The psychological aspects	Male	61	3.05	0.98	0.556	0.580
	Female	37	2.94	0.90		
The practical aspects	Male	61	3.63	0.66	1.387	0.169
	Female	37	3.42	0.80		
The economic aspects	Male	61	4.02	0.66	1.120	0.265
	Female	37	3.86	0.73		
Administrative aspects and work stress	Male	61	3.58	0.68	1.248	0.215
	Female	37	3.40	0.73		
Methods used to relieve stress	Male	61	3.74	0.65	0.715	0.477
	Female	37	3.65	0.48		
Total	Male	61	3.49	0.61	1.097	0.275
	Female	37	3.34	0.63		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation; & **t:** independent t-test.

4.10 Mean difference of studied domains related to their age groups

The mean difference of studied domains related to age groups is pointed out in table (4.10) The one-way ANOVA test showed there is no statistically significant difference between means of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total related to the age groups (P>0.05). Results were conducted with Dagget., et al. (2016). Sample size 360 nurses in multi departments in hospital. The result shows not similar result to Stelnicki, & Carleton. (2021). Significant for age, type of nurse, address. Sample 4267 participants. In age-related needs more samples and more groups of nurses.

Table (4.10): Mean difference of studied domains related to their age groups

Domains	Age (years)	N	Mean	SD	F	P-value
The physiological aspects	25 or less	21	3.02	1.08	0.028	0.973
	26-30	32	3.05	0.79		
	30 or more	45	3.07	0.96		
	Total	98	3.05	0.93		
The psychological aspects	25 or less	21	3.06	0.97	0.039	0.961
	26-30	32	2.99	0.91		
	30 or more	45	2.99	0.98		
	Total	98	3.01	0.95		
The practical aspects	25 or less	21	3.51	0.82	0.162	0.851
	26-30	32	3.51	0.59		
	30 or more	45	3.59	0.77		
	Total	98	3.55	0.72		
The economic aspects	25 or less	21	3.98	0.68	0.460	0.633
	26-30	32	3.86	0.70		
	30 or more	45	4.01	0.69		
	Total	98	3.96	0.69		
Administrative aspects and work stress	25 or less	21	3.46	0.78	0.596	0.553
	26-30	32	3.43	0.69		
	30 or more	45	3.60	0.68		
	Total	98	3.51	0.70		
Methods used to relieve stress	25 or less	21	3.70	0.60	0.834	0.437
	26-30	32	3.60	0.58		
	30 or more	45	3.78	0.59		
	Total	98	3.71	0.59		
Total Total	25 or less	21	3.42	0.72	0.258	0.773
	26-30	32	3.38	0.57		
	30 or more	45	3.48	0.61		
	Total	98	3.43	0.62		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation & **F**: one-way ANOVA.

4.11 Mean difference of studied domains related to their education levels

The mean difference of studied domains related to education levels is pointed out in table (4.11) The one-way ANOVA test showed there is no statistically significant difference between means of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total related to the education levels (P>0.05). Results were conducted with Brown., et al. (2016). Another hand not conducted with our result to Labrague., et al. (2018). Depending on countries cultures high-level educations more job load than low level of education, verse versa, according responsibilities.

Table (5.11): Mean difference of studied domains related to their education levels

Domains	Education Levels	N	Mean	SD	F	P-value
The physiological aspects	Diploma	10	3.07	1.23	0.094	0.911
	Bachelors	82	3.06	0.87		
	Postgraduate	6	2.89	1.25		
	Total	98	3.05	0.93		
The psychological aspects	Diploma	10	3.16	1.18	0.260	0.772
	Bachelors	82	3.00	0.91		
	Postgraduate	6	2.81	1.19		
	Total	98	3.01	0.95		
The practical aspects	Diploma	10	3.30	1.11	1.127	0.328
	Bachelors	82	3.56	0.67		
	Postgraduate	6	3.85	0.58		
	Total	98	3.55	0.72		
The economic aspects	Diploma	10	3.66	0.79	1.152	0.320
	Bachelors	82	3.98	0.69		
	Postgraduate	6	4.13	0.45		
	Total	98	3.96	0.69		
Administrative aspects and work stress	Diploma	10	3.13	0.70	1.776	0.175
	Bachelors	82	3.57	0.70		
	Postgraduate	6	3.46	0.55		
	Total	98	3.51	0.70		
Methods used to relieve stress	Diploma	10	3.93	0.64	2.052	0.134
	Bachelors	82	3.65	0.58		
	Postgraduate	6	4.04	0.57		
	Total	98	3.71	0.59		
Total Total	Diploma	10	3.32	0.78	0.188	0.829
	Bachelors	82	3.44	0.60		
	Postgraduate	6	3.47	0.62		
	Total	98	3.43	0.62		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation & **F**: one-way ANOVA.

4.12 Mean difference of studied domains related to their hospitals

The mean difference of studied domains related to hospitals is pointed out in table (4.12) The one-way ANOVA test showed there is no statistically significant difference between means of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total related to the hospitals (P>0.05).

Table (5.12): Mean difference of studied domains related to their hospitals

Domains	Hospitals	N	Mean	SD	F	P-value
The physiological aspects	Alshifa medical complex	31	3.24	0.83	1.614	0.177
	European hospital	13	3.01	0.94		
	Naser medical complex	26	2.72	1.10		
	Alaqsa hospital	10	2.93	0.94		
	Indonesian hospital	18	3.32	0.71		
	Total	98	3.05	0.93		
The psychological aspects	Alshifa medical complex	31	3.24	0.94	1.870	0.122
	European hospital	13	2.90	0.99		
	Naser medical complex	26	2.62	1.03		
	Alaqsa hospital	10	3.06	0.74		
	Indonesian hospital	18	3.20	0.78		
	Total	98	3.01	0.95		
The practical aspects	Alshifa medical complex	31	3.62	0.73	1.164	0.332
	European hospital	13	3.38	0.85		
	Naser medical complex	26	3.49	0.82		
	Alaqsa hospital	10	3.27	0.47		
	Indonesian hospital	18	3.79	0.51		
	Total	98	3.55	0.72		
The economic aspects	Alshifa medical complex	31	3.89	0.70	0.680	0.607
	European hospital	13	3.94	0.58		
	Naser medical complex	26	3.88	0.75		
	Alaqsa hospital	10	4.00	0.65		
	Indonesian hospital	18	4.19	0.68		
	Total	98	3.96	0.69		
Administrative aspects and work stress	Alshifa medical complex	31	3.56	0.74	0.560	0.692
	European hospital	13	3.50	0.78		
	Naser medical complex	26	3.42	0.83		
	Alaqsa hospital	10	3.34	0.40		
	Indonesian hospital	18	3.68	0.49		
	Total	98	3.51	0.70		
Methods used to relieve stress	Alshifa medical complex	31	3.83	0.49	0.887	0.475
	European hospital	13	3.55	0.42		
	Naser medical complex	26	3.66	0.88		
	Alaqsa hospital	10	3.83	0.29		
	Indonesian hospital	18	3.60	0.42		
	Total	98	3.71	0.59		
Total	Alshifa medical complex	31	3.54	0.62	1.150	0.338
	European hospital	13	3.36	0.65		
	Naser medical complex	26	3.26	0.73		
	Alaqsa hospital	10	3.36	0.45		
	Indonesian hospital	18	3.60	0.46		
	Total	98	3.43	0.62		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation & **F**: one-way ANOVA.

4.13 Mean difference of studied domains related to their address

The mean difference of studied domains related to address is pointed out in table (4.13)The one-way ANOVA test showed there is no statistically significant difference between means of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total related to the address (P>0.05). Result not similar Elsous., et al. (2021). GS is different to any area, small, work culture the same characters.

Table (4.13): Mean difference of studied domains related to their Address

Domains	Address	N	Mean	SD	F	P-value
The physiological aspects	North Gaza	15	3.25	0.79	1.048	0.387
	Gaza	24	3.16	0.82		
	Middle Gaza	21	3.12	0.90		
	Khanyounes	25	2.73	1.14		
	Rafah	13	3.13	0.84		
	Total	98	3.05	0.93		
The psychological aspects	North Gaza	15	3.19	0.74	1.122	0.351
	Gaza	24	3.14	0.93		
	Middle Gaza	21	3.17	0.81		
	Khanyounes	25	2.70	1.08		
	Rafah	13	2.88	1.08		
	Total	98	3.01	0.95		
The practical aspects	North Gaza	15	3.81	0.52	0.929	0.451
	Gaza	24	3.61	0.73		
	Middle Gaza	21	3.46	0.57		
	Khanyounes	25	3.39	0.92		
	Rafah	13	3.58	0.69		
	Total	98	3.55	0.72		
The economic aspects	North Gaza	15	4.25	0.62	1.839	0.128
	Gaza	24	3.77	0.72		
	Middle Gaza	21	4.11	0.59		
	Khanyounes	25	3.80	0.77		
	Rafah	13	4.03	0.60		
	Total	98	3.96	0.69		
Administrative aspects and work stress	North Gaza	15	3.58	0.63	0.350	0.844
	Gaza	24	3.53	0.73		
	Middle Gaza	21	3.61	0.55		
	Khanyounes	25	3.38	0.84		
	Rafah	13	3.51	0.72		
	Total	98	3.51	0.70		
Methods used to relieve stress	North Gaza	15	3.42	0.65	1.692	0.158
	Gaza	24	3.67	0.54		
	Middle Gaza	21	3.93	0.45		
	Khanyounes	25	3.71	0.71		
	Rafah	13	3.74	0.45		
	Total	98	3.71	0.59		
Total	North Gaza	15	3.55	0.51	0.813	0.520
	Gaza	24	3.46	0.59		
	Middle Gaza	21	3.53	0.52		
	Khanyounes	25	3.25	0.78		
	Rafah	13	3.44	0.60		
	Total	98	3.43	0.62		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation & **F**: one-way ANOVA.

4.14 Mean difference of studied domains related to the marital status

Table (4.14) showed the mean difference of studied domains related to marital status. The results showed there is no statistically significant difference in the mean of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total between single and married (P>0.05). Results were conducted with Dagget., et al. (2016). Sample 341 nurses in hospital departments. Other hands not similar our study to Di., et al. (2020). Sample 145 health care workers. Different related to comparison stress with other factors.

Table (4.14): Mean difference of studied domains related to the marital status

Domains	Marital status	N	Mean	SD	t	P-value
The physiological aspects	Single	25	3.12	1.00	0.389	0.698
	Married	73	3.03	0.91		
The psychological aspects	Single	25	3.15	0.98	0.870	0.386
	Married	73	2.96	0.94		
The practical aspects	Single	25	3.54	0.76	-0.064	0.949
	Married	73	3.55	0.71		
The economic aspects	Single	25	3.96	0.68	-0.024	0.981
	Married	73	3.96	0.70		
Administrative aspects and work stress	Single	25	3.40	0.80	-0.924	0.358
	Married	73	3.55	0.67		
Methods used to relieve stress	Single	25	3.78	0.64	0.701	0.485
	Married	73	3.68	0.57		
Total	Single	25	3.45	0.72	0.126	0.900
	Married	73	3.43	0.59		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation; & **t:** independent t-test.

4.15 Mean difference of studied domains related to the number of children

Table (4.15) showed the mean difference of studied domains related to the number of children. The results showed there is no statistically significant difference in the mean of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total between who have 2 children or less and who have more than 2 children (P>0.05). The result was conducted with Oh., et al. (2015). The result was not conducted with Mo., et al. (2020). Good

significant relationship, and family effect on stress with children. Nature of nursing work always an anxiety in the near environment, the role of the family to increase or decrease children stress.

Table (4.15): Mean difference of studied domains related to number of children

Domains	Gender	N	Mean	SD	t	P-value
The physiological aspects	2 or less	38	3.16	0.95	1.234	0.221
	More than 2	35	2.90	0.85		
The psychological aspects	2 or less	38	3.10	0.94	1.357	0.179
	More than 2	35	2.80	0.93		
The practical aspects	2 or less	38	3.68	0.66	1.654	0.102
	More than 2	35	3.41	0.75		
The economic aspects	2 or less	38	3.90	0.71	-0.735	0.465
	More than 2	35	4.02	0.68		
Administrative aspects and work stress	2 or less	38	3.52	0.69	-0.426	0.672
	More than 2	35	3.59	0.65		
Methods used to relieve stress	2 or less	38	3.74	0.47	0.946	0.347
	More than 2	35	3.62	0.66		
Total	2 or less	38	3.49	0.60	0.870	0.387
	More than 2	35	3.37	0.57		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation; & **t:** independent t-test.

4.16 Mean difference of studied domains related to the current salary

Table (4.16) showed the mean difference of studied domains related to the current salary. The results showed there is no statistically significant difference in the mean of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total between who have current salary less than 1500 NIS and who have 1500 or more (P>0.05). Result conducted with Kwiecien., et al. (2018). Studied in Poland nurses satisfied in monthly income. Other hands not conducted our result to Ibrahim, Nahla., et al. (2015) in Jeddah, Saudi Arabia. Opinion regular salary and motivation improve quality of care and job satisfaction.

Table (4.16): Mean difference of studied domains related to the current salary

Domains	Current salary	N	Mean	SD	t	P-value
The physiological aspects	Less than 1500	37	3.12	1.00	0.572	0.569
	1500 or more	61	3.01	0.89		
The psychological aspects	Less than 1500	37	3.11	1.07	0.798	0.427
	1500 or more	61	2.95	0.87		
The practical aspects	Less than 1500	37	3.46	0.80	-0.946	0.346
	1500 or more	61	3.60	0.67		
The economic aspects	Less than 1500	37	3.91	0.75	-0.549	0.584
	1500 or more	61	3.99	0.65		
Administrative aspects and work stress	Less than 1500	37	3.43	0.81	-0.897	0.372
	1500 or more	61	3.56	0.63		
Methods used to relieve stress	Less than 1500	37	3.82	0.54	1.496	0.138
	1500 or more	61	3.64	0.61		
Total	Less than 1500	37	3.44	0.74	0.038	0.970
	1500 or more	61	3.43	0.54		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation; & **t:** independent t-test.

4.17 Mean difference of studied domains related to their duration of nursing experience

The mean difference of studied domains related to the duration of nursing experience is pointed out in table (4.17) The one-way ANOVA test showed there is no statistically significant difference between means of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total related to the duration of nursing experience groups (P>0.05). Results were conducted with Dagget., et al. (2016). Result show not similar Kutluturkan., et al. (2016). Work experience low stress than new employing, nurses in master degree interested in resilience than less experience.

Table (4.17): Mean difference of studied domains related to their duration of nursing experience

Domains	duration of nursing experience (years)	N	Mean	SD	F	P-value
The physiological aspects	5 or less	36	3.06	0.93	2.480	0.089
	6-10	28	3.34	0.98		
	More than 10	34	2.82	0.84		
	Total	98	3.05	0.93		
The psychological aspects	5 or less	36	3.07	0.88	1.700	0.188
	6-10	28	3.21	1.00		
	More than 10	34	2.78	0.95		
	Total	98	3.01	0.95		
The practical aspects	5 or less	36	3.54	0.65	1.469	0.235
	6-10	28	3.73	0.79		
	More than 10	34	3.41	0.72		
	Total	98	3.55	0.72		
The economic aspects	5 or less	36	3.88	0.65	2.343	0.102
	6-10	28	4.19	0.75		
	More than 10	34	3.85	0.64		
	Total	98	3.96	0.69		
Administrative aspects and work stress	5 or less	36	3.47	0.71	0.538	0.586
	6-10	28	3.63	0.82		
	More than 10	34	3.47	0.59		
	Total	98	3.51	0.70		
Methods used to relieve stress	5 or less	36	3.69	0.52	0.034	0.966
	6-10	28	3.71	0.73		
	More than 10	34	3.73	0.54		
	Total	98	3.71	0.59		
Total Total	5 or less	36	3.42	0.62	1.674	0.193
	6-10	28	3.60	0.70		
	More than 10	34	3.31	0.52		
	Total	98	3.43	0.62		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation & **F**: one-way ANOVA.

4.18 Mean difference of studied domains related to their duration of nursing experience in CCU

The mean difference of studied domains related to the duration of nursing experience in CCU is pointed out in table (4.18) The one-way ANOVA test showed there is no statistically significant difference between means of the studied domain as the physiological aspects, the psychological aspects, the practical aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total related to the duration of nursing experience in CCU groups (P>0.05). work experience and CCU experience some data.

Table (4.18): Mean difference of studied domains related to their duration of nursing experience in CCU

Domains	duration of nursing experience in CCU (years)	N	Mean	SD	F	P-value
The physiological aspects	3 or less	45	3.08	0.86	0.041	0.960
	4-6	24	3.02	1.12		
	More than 6	29	3.03	0.88		
	Total	98	3.05	0.93		
The psychological aspects	3 or less	45	3.06	0.85	0.132	0.877
	4-6	24	2.94	1.07		
	More than 6	29	2.99	1.01		
	Total	98	3.01	0.95		
The practical aspects	3 or less	45	3.59	0.64	0.280	0.757
	4-6	24	3.56	0.77		
	More than 6	29	3.47	0.80		
	Total	98	3.55	0.72		
The economic aspects	3 or less	45	4.01	0.63	0.294	0.746
	4-6	24	3.93	0.78		
	More than 6	29	3.89	0.71		
	Total	98	3.96	0.69		
Administrative aspects and work stress	3 or less	45	3.50	0.69	0.030	0.970
	4-6	24	3.51	0.82		
	More than 6	29	3.54	0.62		
	Total	98	3.51	0.70		
Methods used to relieve stress	3 or less	45	3.69	0.65	0.127	0.881
	4-6	24	3.76	0.48		
	More than 6	29	3.69	0.59		
	Total	98	3.71	0.59		
Total Total	3 or less	45	3.45	0.58	0.044	0.957
	4-6	24	3.42	0.75		
	More than 6	29	3.41	0.58		
	Total	98	3.43	0.62		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation & **F**: one-way ANOVA.

4.19 Mean difference of studied domains related to their work duty

The mean difference of studied domains related to work duties is pointed out in table (4.19) The one-way ANOVA test showed there is a statistically significant difference in means of the practical aspects among the work duty groups (P<0.05). The one-way ANOVA test showed there is no statistically significant difference between means of the studied domain as the physiological aspects, the psychological aspects, the economic aspects, administrative aspects, and work stress, methods used to relieve stress and domains as a total related to the work duty in changing shifts (P>0.05). that show similar Kumar., et al. (2015). Other hands were not similar to our study Beltran.,

et al. (2019). Can regulate work duty in experimental with job description, nurse lifestyle needs to fixed time to self-actualization.

Table (4.19): Mean difference of studied domains related to their work duty

Domains	Work duty	N	Mean	SD	F	P-value
The physiological aspects	Fixed morning shift	26	2.78	0.72	1.521	0.224
	Fixed shifts	5	3.15	1.00		
	Changing shifts	67	3.15	0.99		
	Total	98	3.05	0.93		
The psychological aspects	Fixed morning shift	26	2.71	0.92	1.966	0.146
	Fixed shifts	5	2.92	0.75		
	Changing shifts	67	3.13	0.95		
	Total	98	3.01	0.95		
The practical aspects	Fixed morning shift	26	3.24	0.73	3.373	0.038*
	Fixed shifts	5	3.58	0.74		
	Changing shifts	67	3.66	0.69		
	Total	98	3.55	0.72		
The economic aspects	Fixed morning shift	26	3.71	0.72	2.466	0.090
	Fixed shifts	5	4.13	0.59		
	Changing shifts	67	4.04	0.66		
	Total	98	3.96	0.69		
Administrative aspects and work stress	Fixed morning shift	26	3.29	0.69	1.778	0.174
	Fixed shifts	5	3.66	0.84		
	Changing shifts	67	3.59	0.69		
	Total	98	3.51	0.70		
Methods used to relieve stress	Fixed morning shift	26	3.73	0.50	1.644	0.199
	Fixed shifts	5	3.24	0.95		
	Changing shifts	67	3.73	0.58		
	Total	98	3.71	0.59		
Total	Fixed morning shift	26	3.21	0.58	2.493	0.088
	Fixed shifts	5	3.43	0.58		
	Changing shifts	67	3.52	0.62		
	Total	98	3.43	0.62		

*P≤0.05: Significant, P>0.05: Not significant; **n**: number of the subjects; **SD:** standard deviation & **F**: one-way ANOVA.

4.20 Mean difference of the practical aspects among studied domains

The results showed that there are statistically significant differences in the average of the practical aspects among work duty groups (P<0.05). The post hoc test in Table (4.20) showed that the average of the practical aspects among changing shifts is higher statistically significant than the fixed morning shift (P<0.05). In contrast, the results showed that there is no statistically significant difference between the average of practical aspects domains among work duty (P>0.05).

Table (4.20): Post Hoc test of mean difference of the practical aspects related to their work duty groups

Dependent Variable			Mean Difference (I-J)	Std. Error	P-value	95% Confidence Interval	
						Lower Bound	Upper Bound
The practical aspects	Fixed morning shift	Fixed shifts	-0.34	0.34	0.328	-1.02	0.34
		Changing shifts	-0.42	0.16	0.011*	-0.74	-0.10
	Fixed shifts	Fixed morning shift	0.34	0.34	0.328	-0.34	1.02
		Changing shifts	-0.08	0.33	0.797	-0.73	0.56
	Changing shifts	Fixed morning shift	0.42	0.16	0.011	0.10	0.74
		Fixed shifts	0.08	0.33	0.797	-0.56	0.73

4.21 Correlation between the studied domains among the study population

Table (4.21) showed the correlation between the studied domains among the study population. Pearson correlation showed that there is a positive significant correlation between the total score of domains and studied domains' ($P < 0.001$). Also, the results showed that there is a positive significant correlation between the studied domains' ($P < 0.05$). The result of domains connected with others in p-value, effective high level of stress.

Table (4.21): Correlation between the studied domains among the study population

		The physiological aspects	The psychological aspects	The practical aspects	The economic aspects	Administrative aspects and work stress	Methods used to relieve stress	Total
The physiological aspects	r		0.843	0.645	0.547	0.683	0.194	0.881
	P-value		0.000*	0.000*	0.000*	0.000*	0.055	0.000*
The psychological aspects	r	0.843		0.697	0.559	0.711	0.121	0.896
	P-value	0.000*		0.000*	0.000*	0.000*	0.234	0.000*
The practical aspects	r	0.645	0.697		0.609	0.712	0.238	0.839
	P-value	0.000*	0.000*		0.000*	0.000*	0.018	0.000*
The economic aspects	r	0.547	0.559	0.609		0.704	0.073	0.739
	P-value	0.000*	0.000*	0.000*		0.000*	0.472	0.000*
Administrative aspects and work stress	r	0.683	0.711	0.712	0.704		0.135	0.889
	P-value	0.000*	0.000*	0.000*	0.000*		0.185	0.000*
Methods used to relieve stress	r	0.194	0.121	0.238	0.073	0.135		0.297
	P-value	0.055	0.234	0.018	0.472	0.185		
Total	r	.881**	.896**	.839**	.739**	.889**	.297**	1
	P-value	0.000	0.000	0.000	0.000	0.000	0.003	

*Significant at P≤0.05; P>0 05: Not significant; & **r:** Pearson correlation.

4.22 Others coping levels of strategies that people use in response to stressful life events

In open-ended question one to coping levels of strategies that people use in response to stressful life events. The results showed that there are others coping levels of strategies include of the Internet, parents visiting, traveling, eating, favorite foods, positive thinking, convenience during the shift & swimming. Written results were conducted with Marleise., et al. (2016), and Ko, & Kiser. (2016).

4.23 Suggested strategies to decision maker reduce stress

In open-ended questions, two suggested strategies to the decision maker to reduce stress. The results showed that motivation, reducing workload, organizing trips, promotions, training courses, nursing specialization & Justice will reduce stress. The result was supported and conducted with Mudallal., et al. (2017). Nurses' burnout: the influence of leader empowering behaviors. Sample of 407 nurses in Jordon, conclude nurses autonomy, positive role of supervision, sharing in decision making, improve facilities to recognized goal, and increase employee nurses with decrease workload. Another result to Wald, (2020). Optimizing resilience and wellbeing for healthcare professions trainees. flexibility wellbeing interventions for education, and training programs. Another hand conducted to Benge., et al. (2015). Solutions to burnout and retention. Strategies include compensation, hiring practices, promotion and advancement within Extension, organizational support regarding agent development, organizational support regarding administration, organizational support regarding colleagues, reporting, recognition, resources, personnel, and staffing.

Chapter 5

Conclusion

and

Recommendations

Chapter 5
Summary of Findings and Recommendations

5.1 The Results

Common stressors among CCU nurses in five major governmental hospitals in Gaza strip. Sample 98 nurse responded to the questionnaire, include: -

- Most of nurse's male 62.2%.
- Most of nurses more than 30 years, percent 45.9%.
- Most of nurse's education level bachelor's degree, percent 83.7%.
- No statistically significant relationship between stress and gender, age, education level, marital status, number of children, experience, salary income, and address.
- There is a statistically significant relationship between stress and work duty, in changing shifts 68.4%.

In domain highest percentage to lowest percentage supported with a high item in each domain.

- Economic domain weighted mean 79.16%, a higher item I am bothered by the lack of financial incentives weighted mean of 88.6%, lowest item lack of financial returns prevents me from doing my duty to work towards patients 55.51%.
- Practical domain weighted mean 70.96%, higher item work shifts annoys me 79.39%, the lowest item I distinguish between patients according to how I feel about them 47.35%.
- Administrative and work stress domain weighted mean 70.82%, higher item The lack of security personnel during visiting hours causes me to have unpleasant confrontations with the visitors " with a weighted mean of 85.10%, lowest item I feel that my relationship with my direct manager is not good 55.51%.
- Physiological domain weighted mean 61.08%, a higher item I feel lower back pain while working 71.02%, the lowest item I feel the sweat on my hands 51.22%.

- Psychological domain weighted mean 60.15%, a higher item I suffer from insomnia and difficulty sleeping 68.98%, the lowest item I want to cry frequently 50.20%.
- Methods used to relieve stress domain weighted mean 74.13%, a higher item I practice religious rites 87.35%, lowest item Listen to relax music 66.33%.

Through domain and item show We realized nurses in cardiac care units between moderate, and high levels of stress.

5.2 Recommendations

Based on study results recommended nurses need to make all efforts that would relieve tension by managers and supervisors, in addition, to set up improve economic situations, following permanent psychological programs, depending on low-stress high success, to decrease stress toward nurses, achieve the goal of nursing high quality of nursing care.

5.2.1 Recommendations for Managers and Supervisions

- Make efforts to improve the economic situation, during other works or decrease workload.
- The flexibility of work schedules, especially rotating shifts.
- Employing more nurses to reduce workload.
- Assessing the causes of insomnia in CCUs and how to reduce sleeping difficulty among nurses working in CCUs, by researching causes and treating it.
- The role of the supervisors and managers is to relieve stress and problems solving.
- Create an atmosphere of cooperation during shifts, research role model person, release nursing problems.
- Providing a psychological counselor who monitors and relieves the nurses' stress.
- Use of stress relive methods as strategies in dealing with nurses.

5.2.2 Recommendations for Nurses

- Providing comfortable shoes that relieve low back pain.

- decrease stress by using the stress relive method, and use more than one method.
- counseling psychotherapy when discomfort.
- Make time to exercise routinely.
- In a time of danger, call for help from someone you trust.

5.3 Conclusion

Nurses severe stress in economic aspects 79.16%.

5.4 Future Studies

- Violence on nurses working in critical care units at governmental hospitals.
- Dietary habit among nurses in evening and night shift at governmental hospitals.
- Level of stress among nurses working in critical care units at governmental hospitals (comparison study)
- Effect of stress relive program on stress level among nurses.
- Assessment of communication skills among nurses working in critical care units.
- Role of psychologists in hospitals for health care providers at governmental hospitals.

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Annexes

Annexes

Annex (1): Helsinki Approval

المجلس الفلسطيني للبحث الصحي

Palestinian Health Research Council

تعزيز النظام الصحي الفلسطيني من خلال مأسسة استخدام المعلومات البحثية في صنع القرار

Developing the Palestinian health system through institutionalizing the use of information in decision making

Helsinki Committee

For Ethical Approval

Date: 2021/06/07 **Number:** PHRC/HC/926/21

Name: mohammed sabri al shanti الاسم:

We would like to inform you that the committee had discussed the proposal of your study about: نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم حول:

Level of Stress among Nurses Working in Cardiac Care Units at Governmental Hospitals in Gaza Strip

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/926/21 in its meeting on 2021/06/07 و قد قررت الموافقة على البحث المذكور عاليه بالرقم والتاريخ المذكوران عاليه

Dr. Yehia Abed

Signature

Member **Member**

Nader R. Abu Shehadeh

For

Chairman

Genral Conditions:-

1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

Specific Conditions:-

E-Mail:pal.phrc@gmail.com

Gaza - Palestine غزة - فلسطين

شارع النصر - مفترق العيون

Annex (2): The questionnaire is in Arabic and English

Islamic University of Gaza
Deanship of Research and Graduate Studies
Nursing Faculty
Critical Care Master

الجامعة الإسلامية – غزة
عمادة الدراسات العليا والبحث العلمي
كلية التمريض
ماجستير الرعاية الحثيثة

موافقة مسبقة (استبيان)

أخي الممرض/ أختي الممرضة

أدعوكم للمشاركة الطوعية في الدراسة البحثية بعنوان مستوى التوتر لدى الممرضين العاملين في أقسام عناية القلب في المستشفيات الحكومية بقطاع غزة (دراسة وصفية تحليله).

Level of Stress among Nurses Working in cardiac Care Units at Governmental Hospitals in Gaza Strip

تعتبر هذه الدراسة كمتطلب أساسي لنيل درجة الماجستير من كلية التمريض بالجامعة الاسلامية تخصص الرعاية الحثيثة'للتعرف على مستوى التوتر.

إن مشاركتك في هذه الدراسة طوعية.

ستبقى الردود على الاسئلة سرية تامة بغرض البحث العلمي فقط، مع الحفاظ على عدم نشر أي بيانات شخصية خاصة بالمشارك.

أشكركم مسبقا على تعبئة هذه الاستبانة واتمنى أن تخدم العلم والمسيرة التعليمية، ويرجى الاجابة على جميع الاسئلة في هذه الاستبانة.

إذا كان لديك أي أسئلة حول هذا البحث، يرجى الاتصال على الباحث محمد صبري الشنطي، جوال رقم: 0599176039

او البريد الالكتروني : sabrialshanti@hotmail.com

الباحث/ محمد صبري الشنطي

الجامعة الاسلامية – غزة

البيانات الشخصية:

الجنس: □ ذكر □ أنثى

العمر بالسنوات: ☐

الحالة الاجتماعية: □ أعزب/ انسة □ متزوج/ة □ مطلق/ة □ أرمل/ة

عدد الابناء: .....

مكان العمل: □ مجمع الشفاء الطبي □ مستشفى غزة الاوروبي □مجمع ناصر الطبي

□ مستشفى الأقصى □ مستشفى الإندونيسي.

الدرجة العلمية: ☐ **دبلوم** ☐ **بكالوريوس** ☐ **دراسات عليا** ☐

عدد سنوات الخبرة العملية في مجال التمريض ☐

عدد سنوات الخبرة في وحدة القلب: ☐

الراتب الشهري الحالي: ☐

مكان السكن: ☐ **الشمال** ☐ **غزة** ☐ **الوسطى** ☐

☐ **خانيونس** ☐ **رفح** ☐

طبيعة العمل :- ☐ **دوام صباحي ثابت** ☐ **مناوبات ثابتة** ☐

☐ **مناوبات متقلبة**

م.	العبارة	أوافق بشدة	أوافق	محايد	غير موافق	غير موافق بشدة
المحور الأول النواحي الفسيولوجية:						
1	يزداد شعوري بضيق التنفس اثناء العمل					
2	أعاني من الصداع اثناء العمل					
3	اشعر بالتعب والإرهاق عقب أي نشاط					
4	اشعر بآلام في مفاصلي					
5	أعاني من تقلصات في عضلاتي					
6	اشعر بآلام أسفل الظهر أثناء العمل					
7	اشعر بزيادة خفقان القلب أثناء العمل					
8	أشعر بغازات ونفخة بالقولون					
9	أعاني من اضطرابات في المعدة تفقدني الاستمتاع بالطعام					
10	أعاني من حموضة في المعدة					
11	اشعر بتصبب العرق من يدي					
المحور الثاني النواحي النفسية:						
12	أعاني من الأرق وصعوبة النوم					
13	ينتابني شعور بعدم الرغبة في القدوم للعمل					
14	أشعر بالخمول أثناء العمل					
15	أنفعل بسرعة لأبسط الأسباب					
16	ارغب في البكاء بشكل متكرر					
17	ألوم نفسي بشدة على ابسط الأشياء					
18	تراودني أحلام مزعجة تتعلق بالعمل					
19	ينتابني شعور بالكآبة بدون مبرر					
20	أصبحت أعاني من النسيان					
21	اشعر بضيق في التنفس دون سبب واضح					
22	أعاني من مشاكل في النوم					
23	أصبحت أقل اهتماما برغبتي الجنسية					

م.	العبارة	أوافق بشدة	أوافق	محايد	غير موافق	غير موافق بشدة
المحور الثالث النواحي العملية :						
24	ضغط العمل يدفعني لتقديم مصلحة العمل على مصلحتي الخاصة					
25	اشعر أن ضغط العمل في القسم كبير					
26	أعاني من كثرة الأعباء الملقاة على عاتقي في القسم					
27	اشعر بالتوتر كلما رن جرس الهاتف أو جرس الباب					
28	يزعجني العمل بنظام المناوبات المتقلبة					
29	تصميم القسم غير ملائم لعمل التمريض					
30	يزعجني كثرة أصوات التنبيهات داخل القسم					
31	تزعجني الأضواء الساطعة في القسم و المستمرة على مدار الساعة					
32	اشعر بالخوف لاحتمال إصابتي بأمراض معدية					
33	اقوم بالتميز بين المرضي حسب شعوري تجاههم					
	المحور الرابع النواحي الاقتصادية:					
34	اشعر أن قلة الراتب تهددني و تضغط على باستمرار					
35	الراتب الشهري بالكاد يلبي احتياجاتي الأساسية					
36	يزعجني عدم توفير حوافز مالية					
37	قلة العائد المادي تمنعني من القيام بواجبي في العمل تجاه المرضى					
38	يزعجني عدم وجود حوافز معنوية ككتاب شكر أو الثناء من قبل مسؤولي المباشر					
39	يزعجني عدم تطبيق قانون الثواب والعقاب في القسم					

م.	العبارة	أوافق بشدة	أوافق	محايد	غير موافق	غير موافق بشدة
40	يزعجني عدم مكافئة الراتب لمقدار الجهد المبذول					
41	عدم وجود معايير واضحة للترقيات يؤثر سلبا					
	المحور الخامس النواحي الادارية وضغط العمل:					
42	علاقتي مع بعض الزملاء لا يوجد بها انسجام					
43	اشعر بالتوتر كلما تأخر زميلي لاستلام العمل في نهاية الدوام					
44	ترقية بعض الزملاء والذين هم في نفس مستواي يضغطني نفسيا					
45	علاقتي مع الزملاء تقتصر على وقت الدوام فقط					
46	تجاوز الأطباء بروتوكول إدخال المرضى للقسم يزيد من ضغط العمل					
47	قلة تواجد الأطباء في القسم طوال الوقت تهدد حياة المرضى					
48	العمل مع بعض الحالات المرضية سبب لي الانزعاج					
49	اشعر أن جهدي مع المرضى يُشكر عليه غيري					
50	يربكني دخول الزوار للسؤال عن حالاتهم في غير وقت الزيارة					
51	عدم احترام سياسة القسم لأوقات الزيارة تؤثر على أداء العمل					
52	عدم وجود رجال امن أثناء الزيارة يجعلني في مواجهة مع الزوار					
53	كثرة التعليمات و التوجيهات من رئيسي في العمل ترهق ذهني وتركيزي					
54	أتوتر كلما أردت تغيير جدول مناوبتي بعد وضعه					

م.	العبارة	أوافق بشدة	أوافق	محايد	غير موافق	غير موافق بشدة
55	اشعر أن علاقة مسئولي المباشر بي ليست على ما يرام					
56	اشعر بالتمييز الواضح بين زملائي من قبل مسئولي المباشر					
57	ضياع وقت كبير من العمل في البحث عن الأجهزة السليمة يعمل مشقة					
58	عدم توفر المستلزمات الطبية الضرورية للعمل بشكل كاف يشعرني بالإرباك					
59	يزعجني تكدس الأجهزة الطبية المعطلة في القسم					
المحور السادس طرق تستخدم في تخفيف التوتر:						
1	أمارس الشعائر الدينية					
2	الاستمتاع بنشاطات يومية					
3	استطيع مواجهة مشاكلي بنفسي					
4	أمارس تمارين الاسترخاء					
5	استمع الى موسيقى هادئة					
6	أفرغ ما بخاطري الى من أثق به					
7	الحديث الى زملاء العمل					
8	أتوجه الى مرشد نفسي					
9	تناول المشروبات الدافئة مثل الاعشاب أثناء العمل					

برأيك ما هي الإجراءات المتبعة لتخفيف التوتر في حياتك؟

.....
.....
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.....

من وجهة نظرك ما هي توصياتك للمسؤولين وإدارة المستشفى لتخفيف التوتر؟

.....
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.....
.....

Consent Form

My nurse brother/ my nurse sister

I invite you to voluntarily participate in the research study entitled The level of stress among nurses working in cardiac care departments in government hospitals in the Gaza Strip (descriptive study and its analysis).

Level of Stress among Nurses Working in cardiac Care Units at Governmental Hospitals in Gaza Strip

This study is considered as a prerequisite for obtaining a master's degree from the Faculty of Nursing at the Islamic University, specializing in critical care, to identify the level of stress.

Your participation in this study is voluntary.

The answers to the questions will remain strictly confidential for the purpose of scientific research only, while maintaining that no personal data of the participant is published.

I thank you in advance for filling out this questionnaire, and I hope that it serves science and the educational process, and please answer all the questions in this questionnaire.

If you have any questions about this research, please contact the researcher, Mohammed Sabri Al-Shanti, mobile number: 0599176039

Or e-mail: sabrialshanti@hotmail.com

Researcher: - Mohammed Sabri al shanti

Islamic university of Gaza

Personal Data:

Gender: ☐ male ☐ female

Age in years: ……..

Marital status: ☐ single ☐ married ☐ divorced ☐ widowed

Number of children: ……

Place of working: ☐ Alshifa medical complex ☐ European hospital

☐ Naser medical complex ☐ Alaqsa hospital

☐ Indonesian hospital.

Education degree: ☐ Diploma ☐ Bachelors ☐ Postgraduate

Duration of Nursing experience (years): ……..,
of which in CCU: ……

The current salary: ☐

Address area:- North Gaza ☐ **Gaza** ☐ **Middle Gaza** ☐

Khanyounes ☐ **Rafah** ☐

Work duty:- Fixed morning shift ☐ **fixed shifts** ☐

changing shifts ☐

No.	Phrase	Strongly agree	agree	Neither	disagree	Strongly disagree
First axis is the physiological aspects						
1.	I feel short of breath while working					
2.	I get headaches while working					
3.	I feel fatigued and exhausted due to any working					
4.	I feel pain in the joints					
5.	I suffer from muscular cramps					
6.	I feel lower back pain while working					
7.	I feel heart palpitations while working					
8.	I feel distended and irritable bowel and colon					
9.	I have an upset stomach that makes me unable to enjoy food					
10.	Suffering of increase acid in stomach					
11.	I feel sweat on my hands					
Second axis is the Psychological aspects						
12.	I suffer from insomnia and difficulty sleeping					
13.	I get the feeling of not coming to work					
14.	I feel sluggish while working					
15.	Act quickly for the simplest reason					
16.	I want to cry frequently					
17.	I blame myself too much for the simplest things					
18.	I have nightmares about work					
19.	I feel depressed for without reason					
20.	I suffer from forgetfulness					
21.	I feel shortness of breath for no apparent reason					
22.	I have trouble sleeping					

No.	Phrase	Strongly agree	agree	Neither	disagree	Strongly disagree
23.	I became less interested in my sexual desires					
Third axis is the practical aspects						
24.	Work pressure pushes me to put the interest of the work over my own interest					
25.	I feel that the work pressure in the department is great					
26.	I suffer from a lot of burdens on myself					
27.	I get nervous whenever the phone rings or the doorbell rings					
28.	Shift work annoys me					
29.	The department design is not suitable for nursing work					
30.	I am bothered by the many alarms within the section					
31.	The bright lights in the department, which are continuous every time, annoy me					
32.	I am afraid of the possibility of contracting an infectious disease					
33.	I distinguish between patients according to how I feel about them					
The fourth axis is the Economic aspects						
34.	I feel that the lack of salary threatens me and pressures me constantly					
35.	The monthly salary barely meets my monthly needs					
36.	I am bothered by the lack of financial incentives					
37.	lack of financial returns prevents me from doing my duty to work towards patients					

No.	Phrase	Strongly agree	agree	Neither	disagree	Strongly disagree
38.	It bothers me that there are no moral incentives such as a letter of thanks or praise from my direct officials					
39.	It bothers me that the law of reward and punishment is not applied in the department					
40.	It bothers me that the salary is not commensurate with the amount of effort expended					
41.	Lack of clear criteria for promotions negatively affects					
The fifth axis: administrative aspects and work stress						
42.	Sometimes my relationship with some colleagues is tense					
43.	I get nervous whenever my colleague is late to pick up work at the end of my shift					
44.	The promotion of some colleagues who are of the same level as me stresses me psychologically					
45.	My relationship with colleagues is limited to work time only					
46.	It bothers me that doctors have exceeded the protocol for admitting patients to the department					
47.	I get upset about the lack of doctors in the department all the time					
48.	I avoid working with some medical conditions					
49.	I feel that my effort is thankful to others					

No.	Phrase	Strongly agree	agree	Neither	disagree	Strongly disagree
50.	It confuses me for visitors to enter to ask about their conditions outside the time of the visit					
51.	Failure to respect the department's policy for visiting times affects work performance					
52.	The lack of security personnel during visiting hours causes me to have unpleasant confrontations with the visitors					
53.	I am bothered by the many instructions and directions from my superior					
54.	I get nervous whenever I want to change my shift schedule after I put it in					
55.	I feel that my relationship with my direct manager is not good					
56.	I feel clear discrimination among my colleagues by my immediate supervisor					
57.	Wasting a lot of work in searching for the right equipment works hard					
58.	Not have enough necessary medical supplies makes me confused					
59.	The pile of broken medical equipment in the department bothers me					
Sixth Axis: Methods used to relieve stress						
1	I practice religious rites					
2	Enjoy daily activities					
3	I can my own problems solving					

No.	Phrase	Strongly agree	agree	Neither	disagree	Strongly disagree
4	Do relaxation exercises					
5	Listen to relax music					
6	Leave what's on my mind to someone I trust					
7	Talking with co-workers					
8	I go to psychological counsellor					
9	Drink warm drinks like herbs while working					

What do you think are the measures taken to relieve stress in your life?

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In your opinion, what are your recommendations to officials and hospital management to relieve stress?

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Annex (3): Facilitating the task of a master's student

بسم الله الرحمن الرحيم

الجامعة الإسلامية – غزة
The Islamic University - Gaza
كلية التمريض
Faculty of Nursing
هاتف داخلي: 2700

ع س غ/2021/7 الرقم Ref.
التاريخ 29 مايو 2021 Date

الأخ الفاضل / د. رامي العبادلة حفظه الله ،
مدير عام تنمية القوى البشرية بوزارة الصحة
السلام عليكم ورحمة الله وبركاته،،،

الموضوع/ تسهيل مهمة طالب ماجستير

تهديكم عمادة كلية التمريض بالجامعة الإسلامية أطيب التحيات، وترجو من سيادتكم التكرم بتسهيل مهمة الباحث/ محمد صبري خالد الشنطي تخصص ماجستير (العناية الحثيثة) في الحصول على المعلومات اللازمة لإتمام رسالة الماجستير؛ وذلك لغرض البحث العلمي.

شاكرين لكم حسن تعاونكم،،،

عميد كلية التمريض

أ.د. أشرف يعقوب الجدي

P.O. Box 108, Rimal, Gaza, Palestine fax: +970 (8) 286 0800 فاكس tel: +970 (8) 286 0700 تلفون ص.ب 108 الرمال غزة فلسطين
public@iugaza.edu.ps www.iugaza.edu.ps

Annex (4): Facilitating the task of a researcher from the Ministry of Health

State of Palestine
Ministry of health

دولة فلسطين
وزارة الصحة

السيد : رامي عبد العبادله المحترم

التاريخ:03/08/2021
رقم المراسلة 739362

مدير عام بالوزارة /الإدارة العامة لتنمية القوى البشرية/وزارة الصحة

السلام عليكم ...

الموضوع/ تسهيل مهمة الباحث// محمد الشنطي

التفاصيل //
بخصوص الموضوع أعلاه، نرجى تسهيل مهمة الباحث/ محمد صبري الشنطي
الملتحق ببرنامج ماجستير تمريض الرعاية الحثيثة – كلية التمريض – الجامعة الاسلامية بغزة في إجراء بحث بعنوان:-
Level of Stress among Nurses Working in Cardiac Care Units at Governmental Hospitals" "in Gaza Strip
حيث الباحث بحاجة لتعبئة استبانه من عدد من الممرضين العاملين في أقسام عناية القلب في المستشفيات الحكومية (مجمع ناصر مستشفى غزة الأوروبي – مستشفى الاقصى– مجمع الشفاء الطبي – مستشفى الاندونيسي)، بما لا يتعارض مع مسئولية العمل وبشمن أخلاقيات البحث العلمي، ودون تحمل الوزارة أي أعباء أو مسئولية.
وتفضلوا بقبول التحية والتقدير،،،
ملاحظة /
البحث المذكور حاصل على موافقه لجنه اخلاقيات البحث السحي (لجنه هلسنكي)
تسهيل المهمة الخاص بالدراسة أعلاه صالح لمدة 3 اشهر من تاريخه.

محمد ابراهيم السرساوي
مدير دائرة/الإدارة العامة لتنمية القوى البشرية

التحويلات

■ محمد ابراهيم محمد السرساوي(مدير دائرة)	← رامي عبد سليمان العبادله(مدير عام بالوزارة)	إجراءاتكم بالخصوص(03/08/2021)
■ رامي عبد سليمان العبادله(مدير عام بالوزارة)	← عبد السلام محمد عبد صباح(مدير عام بالوزارة)	إجراءاتكم بالخصوص(03/08/2021)
■ عبد السلام محمد عبد صباح(مدير عام بالوزارة)	← محمد خليل محمد زقوت(مدير)	إجراءاتكم بالخصوص(04/08/2021)
■ عبد السلام محمد عبد صباح(مدير عام بالوزارة)	← شوقي ابراهيم عبد القادر سالم(مدير مستشفى)	إجراءاتكم بالخصوص(04/08/2021)
■ عبد السلام محمد عبد صباح(مدير عام بالوزارة)	← محمد محمد عبد الحليم ابوسلمية(مدير عام بالوزارة)	إجراءاتكم بالخصوص(04/08/2021)
■ عبد السلام محمد عبد صباح(مدير عام بالوزارة)	← كمال عواد محمد خطاب(مدير مستشفى)	إجراءاتكم بالخصوص(04/08/2021)

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Annex (5): Expert group to judgement of the questionnaire

	أسماء لجنة تحكيم الاستبيان	المؤسسة التي يعمل بها
1	أ.د يوسف الجيش	الجامعة الاسلامية بغزة
2	أ.د أشرف الجدي	الجامعة الاسلامية بغزة
3	د. احمد الشاعر	الجامعة الاسلامية بغزة
4	د. علي الخطيب	الكلية الجامعية للعلوم التطبيقية
5	د. أيمن ابو مصطفى	كلية فلسطين للتمريض
6	د. جمال القدومي	جامعة النجاح
7	د. أحمد نجم	جامعة الازهر
8	د. هالة عياش	جامعة الازهر
9	د. يوسف فحجان	وزارة الصحة
10	د. أكرم سلامة	وزارة الصحة