

# PRESSURES ON NURSING STAFF IN HEALTH CENTERS AND HOSPITALS IN RIYADH CITY IN LIGHT OF "COVID 19" PANDEMIC

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## **Abstract**

This study aimed to identify the level of Pressures on nursing Staff in Health Centers and Hospitals in Riyadh City in Light of "Covid 19" Pandemic from their point of view. The descriptive approach was used on a sample consisting of (122) individuals who work in health care homes during the period of Covid 19 in Al-Riyadh city, a questionnaire was prepared consisting of (21) indicators distributed on three dimensions of psychological stress (the psychological dimension, the family dimension, and the professional dimension). The results of the study showed that the general level of the study sample's estimates on the dimensions of psychological stress was (3.68), with a high degree of agreement, family dimension came with a mean of (3.68) and in a high degree of agreement, and finally the professional dimension with a mean of (3.67) and in a high degree of estimate. The researchers recommends the importance of establishing educational awareness programs for health practitioners to relieve work pressure, creating appropriate working conditions, and allocating specialized counselors by the Ministry of Health in hospitals and health centers to support health practitioners psychologically during the pandemic period.

**Keywords**: Pressures, Nursing Staff, Health Centers, Hospitals, "Covid 19" Pandemic.

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#### I. introduction

The coronavirus disease 2019 (COVID-19) outbreak has caused a significant burden globally. Several countries that first faced the COVID-19 shed light on the effects of the pandemic on the health care system and health care providers (Alfieri et al., 2020). Psychological distress, burnout, and psychosomatic symptoms were reported by health care providers especially those physicians, nurses, and other health care providers that are at the forefront of defense against COVID-19 (Barello et al., 2020). The increasing number of patients with COVID-19 had posed a great impact on health care providers particularly nurses who comprise the largest group of health professionals (Fernandez et al., 2020). Nurses have multiple roles in this outbreak such as dealing with suspected patients, triaging patients, detecting suspected cases with infections, and providing essential treatment to patients with COVID-19 (Baskin & Bartlett, 2021). Moreover, the long working hours and extra-shift to meet the patients with COVID-19 and the unique needs of the family pose a huge health risk to nurses (Nie et al., 2020). Nurses who are directly involved in treating patients with COVID-19 work under great pressure and stress.

Nursling must face this critical situation and unfav conditions that increase their risk of negative consequences such as psychological distress. The challenges experienced by the nurses in this crisis might not only affect them but also compromise their work and the quality of providing care to their patients (Penwell-Waines et al., 2018). The multiple roles played by the nurses are crucial in this fight against the COVID-19 pandemic. In this sense, preserving the health and well-being of nurses during the COVID-19 pandemic is a significant challenge both in the hospital administrators and policy-makers.

Previous studies showed that the psychological health of nurses is significantly associated with their work performance (Alfieri et al., 2020). Psychological distress including fear and anxiety has been reported among health care workers during the COVID-19 outbreak (Nie et al., 2020). This psychological burden of fear, anxiety, and burnout is likely to result in poor clinical decisions and poor clinical outcomes. The high occurrence of medical errors has been linked to nurses impair cognitive functioning and clinical decision which can put patients at great risk (Penwell-Waines et al., 201). Additionally, acute stress can lead to resignation thoughts that may aggravate shortages of nurses. To alleviate the negative outcome, health authorities must assess the psychological pressure of the impact of the COVID-19 pandemic on nurses.

To effectively provide high-quality care and play their role during an outbreak, nurses need to maintain their psychological and mental health. The psychological effect of the COVID-19 outbreak on nurses should be assessed and monitored. Understanding and assessing these effects are essential to the protection of wellbeing and emotional resilience of nurses, which directly affect the quality of health care services. To date, there is still a scarcity of epidemiological data on the psychological health of nurses and its associated factors. Thus, the main purpose of this study was to assess the level of fear among nurses in Saudi Arabia during the COVID-19 outbreak. Therefore, the result of this study would contribute to expanding the knowledge on the impact of an outbreak on nurses and at a time of heightened need. This will also assist hospital administrators in developing future workforce policy and institutional response to other waves of this pandemic.

Life changes, job or family responsibilities, and life's ups and downs are all causes that lead to feelings of distress and psychological pressure. mentions that the more severe the emergency events in life, the more violent stress we suffer on the psychological and physical levels, and this means that the strength of the stress response is related to the importance of the stressful event (Ahola, 2020).

Psychological stress is one of the things that exhaust a person and make him not adapt to his environment. It is also considered one of the common problems that a person suffered from during the different periods of his life. Just as he passes times of joy, happiness and joy, he passes difficult times that affect his psyche, his work performance, and his health. His family (Al Sulais, & AlAmeel 2020).

Through previous literature, it was found that psychological stress is a common occurrence with those who deal with others, such as nurses and workers in the health sector, especially if they have excessive work demands. In general, working in the health sector is stressful. Because it requires dealing with different ages, cultures, and health conditions (Aiyar & Surani, 2020).

And through the results of the (Khamis, 2020) study, it was found that health practitioners suffer from a high level of psychological stress during work. And he agrees with him (Almalki & Alzahrani, 2921). who believes that health practitioners and medical professionals suffer relatively more than others from psychological

stress because of the troubles, burdens, responsibilities, and continuous demands that this profession entails from society, as it requires a certain amount of physical and psychological energy, to accomplish it, and if the burden exceeds the endurance, making the individual unable to adapt to it and causing him psychological pressure. The new Corona virus (COVID-19) appeared in China in the city of Wuhan in the year (2019) for the first time and spread all over the world, and as a result the world changed in a short period and terror and fear spread among people, and some countries declared states of emergency and quarantine was imposed, Aviation was stopped, and Covid-19 became the talk of the people and the media (Aloufi, 2022).

The virus continues to affect many countries of the world, which led to psychological effects that resulted in dire consequences in all economic, social and psychological fields. As the world was affected in all its layers as a result of this crisis, and according to the World Health Organization and the United Nations, they monitored a large prevalence of mental disorders due to the Corona pandemic, especially among health care workers and medical professions, and it is mentioned that according to a survey carried out by the US Census Bureau in December (2021). He reported that about 42% of the respondents had suffered from some symptoms of anxiety or depression, compared to 11% of those surveyed in the same survey in the previous year (Wu, & Wang, 2021).

Corona pandemic has increased mental health problems for the world's population, in particular health practitioners, and patients with noncommunicable chronic diseases, Health practitioners are among those who had a major role in confronting this pandemic, due to their dealings with infected cases, the possibility of transmission to them, and the possibility that they transmit the infection to their families and relatives at a greater rate than others (Bilal, & Yasmin, 2022).

And by looking at previous studies that were conducted on different environments, the results of their studies concluded that health practitioners suffer from psychological effects from this pandemic. According to a study conducted by (Aiyar & Surani, 2020) the COVID-19 pandemic has led to high levels of stress and mental health conditions, especially among health practitioners and physicians. In Iran, a study (Greenberg, 2020) showed that nurses suffered from various psychological pressures, and a study (Si, 2020)

that was conducted in China agreed with them, and its results showed that negative symptoms are prevalent among health practitioners in light of the pandemic. They were supported by a study (Almaghrabi, 2020) that health practitioners have several fears of this pandemic, including fear for their safety and fear for the health of their families.

The likelihood of developing a psychological injury versus experiencing psychological growth is influenced by the support received before, during, and after a difficult life event. COVID-19 pandemic has been an extraordinary challenge for populations around the world. At the focal center of fighting this disease are healthcare workers (HCWs). Protecting them, therefore, must be a crucial component of public health measures aimed at addressing the out-break (Lai & Wang, 2020).

Several reports have discussed the psychological impact of COVID-19 on frontline HCWs [3-5]. The emotional response of "HCWS" to an outbreak of a disease like COVID-19 is complicated, with potentially long-term mental health implications (HCWs, 2020). Manifestations of psychology cadasters among HCWs include elevated levels of stress, anxiety, severe insomnia. depression. obsessivecompulsive symptoms. somatization. posttraumatic stress disorder, vicarious traumatization, and increased risk of developing other mental health problems and in the most vulnerable cases, suicide Hospitals nationally and globally were struggling with the effects of the pandemic and men tal health crisis, including the general population. Women have been found to report more severe symptoms of depression, anxiety and psychological distress than men (). Although nurses may be more prone to developing unfavorable mental health outcomes, the evidence is mixed, as non-medically trained HCWS may also be at a higher risk for psychological dis tress during the COVID-19 pandemic in comparison to medically trained personnel (Myung, 2020).

Studies attribute the emotional strain experienced by HCWS to various reasons such as intensified perception of experiencing personal danger, widespread media coverage, inadequate support, reluctance to work or contemplating resignation, rising numbers of acutely ill patients, anxiety about assuming unfamiliar clinical roles, expanding workloads caring for COVID-19 patients, caring for affected coworkers, fear of transmitting the virus to fellow HCWS, shortages

of medical equipment [3] such as personal protective equipment, limited testing and treatment options for COVID-19, fear of infecting family members due to workplace exposure, the pressure of making emotional and ethical resource-allocation decisions, work-related burnout, stigmatization and ostracism for displaying physicals suggestive of COVID-19 infection and limited access to mental health services (Si & Jiang, 2020).

It is also important to consider these findings with respect to methodological rigour and quality checks, for instance, one study reported findings drawn from a relatively small sample size with a low response rate from HCWS, and using measures with single-item ratings. Nevertheless, there is a critical need for healthcare organizations and researchers to prioritize the mental health needs of HCWs serving the community during the pandemic globally, there may even be the risk of the COVID-19 outbreak leading to a second pandemic' of mental health crises in health systems and communities (Zhu & Zhang & Wang, 2020).

The implications of this study are needed to develop specialized psychological interventions for HCWS, improve relevant organizational and management policies, strengthen and prepare healthcare personnel to provide psychological support and tackle mental health challenges, and establish prevention strategies such as screening for psychological distress, as well as providing psychoeducation and targeted support to those at most risk (Mohsin & Agwan, 2021).

It should be noted that there are a few number of studies have considered the impact of COVID-19 on the mental health of healthcare workers (HCWs) in the Kingdom of Saudi Arabia (KSA) (Almalki & Alzahrani, 2021). We estimated the prevalence and severity of psychological distress and characterized predisposing risk factors among HCWs in KSA during the COVID-19 pandemic. The prevalence of psychological distress reported by HCWs in KSA was high, ranging from mildmoderate to severe in severity. Younger HCWs, women, those in contact with COVID 19 patients, and those who either had loved ones affected or who were themselves affected by COVID-19 were the most at-risk of psychological distress. Risk factors such as insomnia, loneliness, fear of transmission, and separation from loved ones most significantly predicted elevated levels distress among HCWs. increasing psychological distress was commonly reported by HCWs during the early months of COVID-19 pandemic in KSA. Public health policy makers and men professionals must give special attention to risk factors that predispose HCWs in KSA to psychological distress. Thus, this study came to identify the level of psychological stress among workers in health care institutions in the city of Riyadh during the Covid 19 pandemic (Surrati. & Alihabi, 2022).

Some studies have dealt with psychological stress arising from Covid 19 among health care workers at the local and global levels. The study (Al-AL-oufi, 2022) aimed to identify the level of psychological stress among health care workers in Medina during the Covid 19 pandemic, and the results showed that there was a high level psychological stress among the study sample.

As shown in the study by (Bilal & Yasmin, 2022) the psychological distress reported by HCWS in KSA was high, ranging from mild-moderate to severe in severity. Younger HCWS, women, those in contact with COVID 19 patients, and those who either had loved ones affected or who were themselves affected by COVID-19 were the most at-risk of psychological distress. Risk factors such as insomnia, loneliness, fear of transmission, and separation from loved ones most significantly predicted elevated levels of distress among HCWS.

The study of (Almaghrabi, 2022) aimed at analyzing the opinions of health care workers in dealing with the Corona virus (Covid-19) pandemic in Prince Sultan Military Medical City, Riyadh, and the study tool was an online questionnaire, and the sample consisted of (1036) workers in the field of health care, and the results showed that workers have a lot of means of prevention and general safety from disease.

Although a study by (Zhu & Zhang, 2020) showed that health workers suffer from psychological distress as a result of their work with COVID-19 patients. A study by (Surrati & Alihabi, 2020) attempted to measure the extent of depression, anxiety, and stress among healthcare workers during the Covid period in Medina, Saudi Arabia. A cross-sectional study was conducted on (122) healthcare workers in Medina, using a questionnaire. An electronic measure of anxiety and depression The study showed that there is a high rate of anxiety, depression, and moderate stress among all health care workers, regardless of the nature of Their occupations differed, and the risk factors for both anxiety and depression were due to inadequate infection control training, and pre-existing medical problems associated with stress.

## II. Statement of the Problem:

The problem of this study appears in its handling of the psychological pressures of health care workers in Riyadh, where professional and psychological pressures fall on them, especially workers in the field of caring for people with Covid 19, whether doctors or nurses, due to the nature of their work and the great role they play. Several studies have found indicates that doctors and nurses are among the groups most exposed to psychological stress resulting from the nature of their work; Because of the multiplicity of sources that make them under pressure, and the response of the nurse or doctor to pressure is what determines if he is under stress.

Psychological stress may increase among healthcare workers in light of the COVID-19 pandemic. Being in direct contact with patients, they are at the forefront of fighting this pandemic. Consequently, their psychological stress may increase, and the results of the (Arafat, 2020) study showed that health practitioners in the Kingdom of Saudi Arabia suffered from depression, anxiety, tension, stress. insufficient sleep. Consequently, the researchers saw the need for a procedure such as the study to the level of psychological experienced by health practitioners during the pandemic. Accordingly, the problem of the study was determined by answering the following question:

1. What is the level of psychological stress among health practitioners in health care homes in ARiyadh city in light of the Covid 19 pandemic?

## III. Significant of the study

The importance of the study lies in its discussion of psychological stress among health practitioners during the Covid 19 period in Riyadh, and it is one of the few studies that dealt with this topic at the local level, and this study may help Psychological counseling workers to prepare support and guidance programs for the category of health practitioners in light of the Corona pandemic in particular, and during crises in general, so that this group of society is at the center of attention and care with regard to their psychological support; For the sacrifices they make for the members of society. It may also contribute to supporting programs that can be prepared and implemented by the Ministry of Health for health practitioners to improve the work environment.

# IV. Purpose of the Study

This study aimed to identify the level of psychological stress among health practitioners in Al-Riyadh city.

## V. The limits of the study

**VI**. Objective limits: limited to knowing the level of psychological stress among health practitioners in light of the Corona pandemic in Riyadh.

Human limits: limited to health practitioners working in health care and nursing in health care homes in Riyadh.

Spatial boundaries: health care homes in Riyadh.

## VII. Research Methodology

Research design: The study adopted the descriptive survey design. This type of design depends basically on the use of questionnaire for data collection. It involves the collection of data to objectively and accurately examine existing phenomenon.

# VIII. Study population and sample

The study population consisted of all health practitioners in health care facilities in Riyadh, and the study sample consisted of (120) health practitioners who work in nursing and caring for Covid 19 patients.

## **Study Instrument: . IX**

The electronic questionnaire was used to collect data from the study sample, which is a questionnaire of psychological stress for health practitioners in health care facilities in Riyadh. The questionnaire consisted of (21) items that measure the level of psychological stress in dimensions of: psychological dimension, family dimension, and professional dimension, The validity and reliability coefficients were calculated for the study Instrument.

#### X. Results

**Results of the first question:** What is the level of psychological stress among health practitioners in health care homes in ARiyadh city in light of the Covid 19 pandemic?

To answer this question, the arithmetic means and standard deviations of the study sample's answers were calculated on the dimensions and indicators of the study instrument, The results are presented on table1

Table 1: the arithmetic means and standard deviations of the study sample's answers were calculated on the dimensions and indicators of the study instrument

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Dimensions	Means	S D	Degree	Rank
Psychological	3.68	0.89	High	1
Family	3.68	0.87	High	2
Professional	3.67	0.87	High	3
Total Mean	3.68	0.87	High	

Table (1) showed that the general level of the study sample's estimates on the dimensions of psychological stress was (3.68), with a high degree of agreement, family dimension came with a mean of (3.68) and in a high degree of agreement, and finally the professional dimension with a mean of (3.67) and in a high degree of estimate. This result indicates that health care workers during the Covid 19 period felt a high level of psychological stress as a result of their dealings with Covid 19 patients, and because of the long working hours, which was reflected on

their psychological, family and professional status. This result is consistent with most studies that dealt with the psychological status of workers. health workers during the Covid-19 period.

For further clarification, the following is a presentation and discussion of the degree of agreement of the study sample within each dimension of psychological stress. The arithmetic means and standard deviations for the indicators of each dimension were calculated separately, as shown in Tables (2,3,4).

# Psychological dimension 1)

Table (2): The arithmetic means and standard deviations of the study sample's estimates on the indicators of the psychological dimension of stress

Degree	S D	Means	Indicators	N	Rank
High	0.82	3.78	I feel unwilling to come to work.	3	1
High	0.83	3.77	I feel sluggish most of the time.	6	2
High	0.86	3.72	I get nervous quickly for the simplest of reasons.	4	3
High	0.87	3.70	My fear of catching COVID-19 dominates my thinking.	2	4
Medium	0.92	3.65	I suffer from lack of sleep.	1	5
Medium	0.94	3.62	I worry most of the time.	7	6
Medium	0.98	3.52	I find it difficult to relax.	5	7
Total	0.89	3.68	High		

Table (2) showed that the general level of the study sample's estimates on indicators of the psychological dimension of stress among health practitioners from their point of view amounted to (3.68), with a high degree of appreciation, and the sample's levels of estimates on indicators of the psychological dimension ranged between (3.52-3.78), with standard deviations It ranged between (0.82 - 0.98), and (4) indicators of this dimension were with a high degree of agreement, and (3) indicators with a medium degree of agreement,

and indicator No (3), which reads: "I feel unwilling to come to work.", ranked in first, with a mean of (3.78) and a high degree of agreement, indicator no (5)" I find it difficult to relax " ranked at last with a mean (3.52) in a medium degree of agreement, the total arithmetic mean was The sample's responses on the psychological dimension (3.69), with a high degree of agreement.

# Family dimension 2)

Table (3): The arithmetic means and standard deviations of the study sample's estimates on the indicators of the family dimension of stress

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Degree	S D	Means	Indicators	N	Rank
High	0.78	3.82	I feel bad because of my long absence from my family.	9	1
High	0.80	3.76	Problems happen to me Continuing with my family.	12	2
High	0.84	3.73	I am afraid of infecting my family with the disease.	8	3
High	0.88	3.71	My family complains about the dangers of my work	10	4
High	0.90	3.70	I neglected my family during covid 19.	13	5

Total	0.87	3 68	High			
Medium	0.96	3.45	I find it difficult to relax at home.	14	7	
Medium	0.94	3.60	I worry about my family most of the time.	11	6	

Table (3) showed that the general level of the study sample's estimates on indicators of the family dimension of stress among health practitioners from their point of view amounted to (3.68), with a high degree of appreciation, and the sample's levels of estimates on indicators of the family dimension ranged between (3.45-3.82), with standard deviations It ranged between (0.78 - 0.96), and (5) indicators of this dimension were with a high degree of agreement, and (2)

indicators with a medium degree of agreement, indicator No. (9), which reads: "I feel bad because of my long absence from my family." ranked in first, with a mean of (3.82) and a high degree of agreement, indicator no (14)" I find it difficult to relax at home. "Ranked at last with a mean (3.45) in a medium degree of agreement, the total arithmetic mean of family dimension (3.68), with a high degree of agreement.

# **Professional dimension** 3)

Table (4): The arithmetic means and standard deviations of the study sample's estimates on the indicators of the professional dimension of stress

Degree	SD	Means	Indicators	N	Rank
				11	Rank
High	0.64	3.92	I feel pain of deaths on the job.	17	1
High	0.82	3.78	I feel constant pressure at work.	15	2
High	0.84	3.72	I feel very responsible for my work.	20	3
High	0.88	3.70	I get nervous with colleagues at work.	19	4
Medium	0.92	3.62	I find it difficult to focus on my work.	21	5
Medium	0.97	3.56	The lack of adequate financial incentives bothers me.	18	6
Medium	0.99	3.42	It bothers me that there are few breaks during work.	16	7
Total	0.87	3.67	High		

Table (4) showed that the general level of the study sample's estimates on indicators of the professional dimension of stress among health practitioners from their point of view amounted to (3.67) with a high degree of appreciation, and the sample's levels of estimates on indicators of the professional dimension ranged between (3.42-3.92), with standard deviations It ranged between (0.64 - 0.99), and (4) indicators of this dimension were with a high degree of agreement, and (3) indicators with a medium degree of agreement, indicator No. (17) "I feel pain of deaths on the job" ranked in first, with a mean of (3.92) and a high degree of agreement, indicator no (16)" It bothers me that there are few breaks during work", ranked at last with a mean (3.42) in a medium degree of agreement, the total arithmetic mean of professional dimension (3.67), with a high degree of agreement.

#### XI. Discussion:

The results showed that the general level of the study sample's estimates on the dimensions of psychological stress was (3.68), with a high degree of agreement, family dimension came with a mean of (3.68) and in a high degree of agreement, and finally the professional dimension

with a mean of (3.67) and in a high degree of estimate.

This result indicates that health care workers during the Covid 19 period felt a high level of psychological stress as a result of their dealings with Covid 19 patients, and because of the long working hours, which was reflected on their psychological, family and professional status. This result is consistent with most studies that dealt with the psychological status of workers. health workers during the Covid-19 period. These results indicate that the pressures of the work environment for health practitioners during Covid 19 are by their nature more than in normal days, as the conditions in which health practitioners live require them to deal with Covid-19 patients. Infection, and the medical professions are professions that often face a lot of stress. Therefore, the results showed that health practitioners were feeling high levels of psychological, family and occupational pressure, as a result of the emergency conditions caused by the Covid 19 pandemic, and despite these pressures, all workers in the health sector in the Kingdom of Saudi Arabia were making special efforts to help others and protect them from the disease. These results agree with the study of (Almaghrabi, 2020, Abolfotouh & Bani Mustafa,

2020, AL-\_oufi, 2022). Finely researchers recommends the importance of establishing educational awareness programs for health practitioners to relieve work pressure, creating appropriate working conditions, and allocating specialized counselors by the Ministry of Health in hospitals and health centers to support health practitioners psychologically during the pandemic period.

## XII. References

- 1. Ahola, A. (2020). Burnout and behavior-related health risk factors: results from the population-based Finnish Health 2000 study. *Journal of Occupational and Environmental Medicine*, 54 (1), 17-22.
- Abolfotouh M, & Bani Mustafa, A. (2020). Perception and attitude of healthcare workers in Saudi Arabia with regard to Covid-19 pandemic and potential associated predictors. BMC Infect Dis. 2020; 20: 719. https://doi.org/10.1186/s12879-020-05443-3 PMID: 32993538
- 3. Al Sulais, E & AlAmeel, T.(2020). The psychological impact of COVID-19 pandemic on physicians in Saudi Arabia: A cross-sectional study. *Saudi Journal of Gastroenterology*, 5(6), 249-255.
- 4. Alfieri, N., Manodoro, S., and Marconi, A. M. (2020). COVID-19 does not stop obstetrics: what we need to change to go on safely birthing. The experience of a University obstetrics and gynecology department in Milan. *J. Perinat. Med.* 48, 997–1000. doi: 10.1515/jpm-2020-0218
- 5. Almaghrabi, R. (2020). Healthcare workers experience in dealing with Coronavirus (COVID-19) PANDEMIC. *Saudi Medical Journal*, 41(6), 657-661.
- 6. Arafa, A., & Ewis, A. (2020). Depressed, anxious, and stressed: What have healthcare workers on the frontlines in Egypt and Saudi Arabia experienced during the COVID-19 pandemic?. *Journal of Affective Disorders*, 4(3), 365-371.
- 7. Aiyar, A. & Surani, S. (2020) Mental Health Impact of COVID-19 on Healthcare
- 8. Workers in the USA: A Cross Sectional Web-Based Survey. *Journal of Depression and Anxiety*, 9 (2), 44-61.
- 9. Almalki A, & Alzahrani M. (2021). The psychological impact of COVID-19 on healthcare workers in Saudi Arabia: A year later into the pandemic. https://doi.org/10.3389/fpsyt.2021.797545 PMID: 34975592

- 10.Al-oufi, M. (2022). The Stress on the Medical Practitioners Through the Covid-19 Pandemic in the City of Madina. *Journal of Educational Sciences and Psychological*, 6(26), 148-162.
- 11.AlAteeq D, & Aljhani S. (2020). Mental health among healthcare providers during corona virus disease (COVID-19) outbreak in Saudi Arabia. *J Infect Public Health* 13(7). 322-341.
  - https://doi.org/10.1016/j.jiph.2020.08.013 PMID: 32933881
- 12.Barello, S., Palamenghi, L., and Graffigna, G. (2020). Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic. *Psychiatry Res.* 290:113129. doi: 10.1016/j.psychres. 2020.113129
- 13.Baskin, R. G., and Bartlett, R. (2021). Healthcare worker resilience during the COVID-19 pandemic: an integrative review. *J. Nurs. Manag.* 2021:10.1111/jonm.13395. doi: 10.1111/jonm.13395
- 14.Bilal, L & Yasmin, Y. (2022). Psychological distress reported by healthcare workers in Saudi Arabia during the COVID-19 pandemic. *Plos Journal*, 3(6), 1017. https://doi.org/10.1371
- 15.El Nagar, Z. (2020). Impact of Psychological Stress during COVID 19 Pandemic on Quality of Life of Health Care Workers in Mental Health Hospital in Egypt. *Psychiatry Psychiatric*; 6 (3), 178-195.
- 16.Greenberg N. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. BMJ. 2020; 368: m1211. https://doi.org/10.1136/bmj. m1211 PMID: 32217624
- 17. Fernandez, R., Lord, H., Halcomb, E., Moxham, L., Middleton, R., Alananzeh, I., et al. (2020). Implications for COVID-19: a systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. *Int. J. Nurs. Stud.* 111:103637. doi: 10.1016/j.ijnurstu.2020. 103637
- 18.Khamis, K & Muhammad, S. (2020). Psychological stress among health sector workers, *Journal of Human and Social Sciences*, 13 (4), 285-198.
- 19.Lai J, Ma S, & Wang Y. (2020). Factors associated with mental health outcomes among health care workers exposed to Coronavirus disease 2019. *JAMA Netw Open*. 3(7), 376-389.
  - https://doi.org/10.1001/jamanetworkopen.2020 .3976 PMID: 32202646

- 20. Myung, H. (2020). High Work-related Stress and Anxiety Response to COVID-19 among Healthcare Workers: A Cross Sectional Online Survey Study in South Korea. *JMIR Preprints*, 2(5), 1-12.
- 21.Mohsin S, & Agwan M. (2021). *COVID-19:* Fear and anxiety among healthcare workers in Saudi Arabia. A cross-sectional study. Inquiry. https://doi.org/10.1177/00469580211025225 PMID: 34291693
- 22.Nie, A., Su, X., Zhang, S., Guan, W., and Li, J. (2020). Psychological impact of COVID-19 outbreak on frontline nurses: a cross-sectional survey study. *J. Clin. Nurs.* 29, 4217–4226. doi: 10.1111/jocn.15454
- 23. World Health Organization (2020). The Corona epidemic caused the spread of mental disorders among doctors and health workers.
- 24.Penwell-Waines, L., Ward, W., Kirkpatrick, H., Smith, P., and Abouljoud, M. (2018). Perspectives on healthcare provider well-being: looking back, moving forward. *J. Clin. Psychol. Med. Settings* 25, 295–304. doi: 10.1007/s10880-018-9541-3
- 25.Si, M., Su, X & Jiang, Y. (2020). Psychological impact of COVID-19 on medical care workers in China. *Infectious Diseases, Poverty*, 9 (113) 2-13
- 26. Surrati. A & Alihabi, A. (2020). Psychological impact of the COVID-19 on health care workers. *Journal of Taibah University Medical Sciences*, 6(3), 536-543.
- 27.Wu, T, Jia, X & Wang ,X.(2021). Prevalence of mental health problems during the COVID-19 pandemic: A systematic
- 28.Zhu N, & Zhang D, & Wang W. (2020). A novel coronavirus from patients with pneumonia in China, *N Engl*, 2(5), 727-33.