



Challenges of Women Healthcare Workers during COVID-19

Bushra Al-Akashee ¹, Wafa Barhoumi ², Fatima A. Algharbawi ², Fatma Hegazy ^{3*}

¹ Department of Education, College of Arts, Humanities and Social Sciences, University of Sharjah, United Arab Emirates.

² Department of Sociology, College of Arts, Humanities and Social Sciences, University of Sharjah, United Arab Emirates.

³ Department of Physiotherapy, College of Health Sciences, University of Sharjah, United Arab Emirates.

Abstract

Objectives: The study aimed to identify the psychological and social challenges faced by Emirati women working in the medical field during COVID-19, as well as the extent to which these challenges differed depending on the nature of their work, the variable of their social status, and the extent to which these challenges were related to the study's primary variables. **Methodology:** For this study, a questionnaire for assessing psychological and social issues was developed, and after obtaining psychometric features and proving validity and stability, it was used on a sample of 150 Emirati women. **Results:** The statistical data show that the study sample in the field of psychological issues suffers anxiety, dread, tension, and agitation. In addition, there are social difficulties to consider, such as social stigma, loss of family and professional relations, absence from home, trouble maintaining a work-life balance, and strained social relationships with patients. The findings also revealed a lack of statistical significance with the variables of the place of residence and social status on the study sample's varying challenges, as well as the presence of a statistically significant relationship between the study variables (age, shift time, housing, work sector, number of years of experience) and the challenges.

Keywords:

COVID-19;
Psychological Challenges;
Social Challenges;
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1- Introduction

The first COVID-19 cases in the United Arab Emirates occurred on January 29, 2020, and the UAE was the first Middle Eastern country to declare the appearance of the virus. The government adopted measures to limit its spread and monitor its progress and consequences through the Ministry of Health and Community Protection and the National Emergency Crisis and Disaster Management Authority [1]. The Corona pandemic "COVID-19" created a special situation worldwide, where the virus had spread significantly and had become an escalating global event; as of March 7, 2020, the World Health Organization (WHO) confirmed the outbreak of the virus and that it had infected more than 100,000 people, necessitating the activation of emergencies in all sectors of health, education, and religion [2]. In this regard, healthcare workers were fighters on the first front line, as they faced high risks dealing with those infected or expected to be infected with COVID-19, as well as the psychological and health effects on them, in addition to the long work periods and stones thrown at the beginning of the pandemic and their failure to return to their homes. This has increased the burden of responsibility for all health and medical workers and their relational repercussions on individuals and society.

On March 18, 2020, the WHO also revealed that "some healthcare workers may, unfortunately, experience avoidance by their families or communities owing to stigma or fear. This can make an already challenging situation far more difficult." [3].

* **CONTACT:** fhegazy@sharjah.ac.ae

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Under COVID-19, in most societies, women in general, and Emirati women in particular, played a prominent and crucial role in the medical, health, and other fields. Women represented 70% of health and social care workers [4]. According to the country's Federal Center for Competitiveness and Statistics, the number of licensed companies' women managed in the UAE has reached 8025, according to the 2020 statistics. The percentage of women out of the total number of employees in the country increased up to (24%) while representing the entire proportion of women in the country's population was (33.7%). However, the total percentage of women physicians, nurses, and technicians in the health sector was 64% [5].

To address the social challenges of COVID-19, the WHO speaks of creating an environment in which open discussions among people and healthcare workers are possible. The WHO states, "How we communicate about COVID-19 is critical in supporting people to take effective action to help combat the disease and avoid fueling fear and stigma." "All efforts must be made by lawmakers to eliminate the challenge of COVID-19 instead of statutory sermons scientifically," urges Sarkar. "Proper health education targeting the public appears to be the most effective method to prevent the social harassment of healthcare workers and COVID-19 survivors" [6].

Thus, Emirati women faced unprecedented challenges and pressures during the COVID-19 pandemic, impacting their psychological, physical, and social safety, such as excessive physical stress, the risk of infection, and psychological weakness, among other symptoms [7].

In addition to the physical effects of this disease, human society also faces extensive mental health effects. One of the psychological and social consequences of contracting COVID-19 is the patient's fear of social reactions, the stigma of the disease, and that the disease is transmissible, which in turn causes many psychological and behavioral disorders in these people and hurts them. Stigma can put people's mental and emotional health at risk and negatively affect communication and empathy between people and communities [8].

Providing mental, physical, and social health help to employees in the health sector is critical for healthcare professionals to maintain their capacity to function and adapt to a pandemic. The UAE launched initiatives such as the psychological and moral support program (Hayat), which aimed to assist federal government employees in dealing with the exceptional circumstances associated with COVID-19 and the resulting psychological and social pressures and challenges [9].

Frontline healthcare professionals (HCPs) have been the targets of stigma, social isolation, and discrimination in their workspace and social environments during the pandemic. Frontline HCPs caring for COVID-19 patients can suffer from stigma, negatively affecting their focus and efficiency in making sound decisions [10]. Furthermore, the impact of stigma is not limited to the psychological well-being of HCPs; it can also affect their professional competence in providing quality care during the pandemic [10, 11].

Given the above discussion, the desire to alleviate the challenges of health consequences that the study sample faced regarding psychological and social circumstances motivated this study, as working in the health sector during a pandemic may present such challenges [12, 13].

Due to the importance of the sample and the subject, the scarcity of studies that dealt with this problem based on the researchers' knowledge and viewpoint, and the fact that most studies were purely medical, they focused on dealing with the virus and how to prevent it and take preventive measures. Therefore, this study attempted to investigate the psychological and social challenges confronting Emirati women working in the medical field during the COVID-19 pandemic.

2- Literature Review

Medical and healthcare personnel may have been exposed to challenges during COVID-19, such as psychological or social isolation. They faced significant anxiety, stress, and uncertainty regarding the duration of the pandemic, the ability of medicines or vaccinations to avert it, and the sufficiency of healthcare resources. They felt threatened by the potential risks of infection, fear of disease, and lack of contact with family, in addition to the reaction to the sudden role transformation from a healthcare provider to a patient after transmission of the infection, which generated challenges regarding psychological and social adjustment during the spread of the epidemic.

This is reflected in the level of performance of healthcare workers in general and working women in particular. Women's multiple roles within and outside the family are a challenge to adapt and balance against the desire to be with their families during the pandemic, as revealed by Shaukat et al. [14], in that the physical and psychological health threats created by the appearance of COVID-19. Male workers in the healthcare profession had greater levels of depression, anxiety, sleeplessness, distress, and adjustment demolition than women workers. The study of Khanal et al. [15] also showed the presence of anxiety symptoms in 41.9% of the health sector workers, 37.5% had symptoms of depression, and 33.9%, especially women working in the health sector. The increased risk of infection posed a significant challenge for HCPs.

Although social distancing is the most effective way to contain the spread of this virus, it was not easy to implement for HCPs who required direct contact with COVID-19 patients, putting them at a high risk of infection [16]. Frontline healthcare professionals were particularly vulnerable during this pandemic because of their commitment to contain the disease [17].

According to studies on the psychological effects of COVID-19 on HCPs, healthcare workers were exposed to great fear, stress, and uncertainty about the duration of the crisis, as well as a lack of proven treatments, immunizations, and healthcare resources. Healthcare workers were also disturbed by the pandemic's effects, as they could not balance the effects of social distancing with the desire to be present with their families. They experienced psychological distress, which interfered with the delivery of direct care to COVID-19 patients. Indeed, 41.5% of participants reported greater levels of despair, anxiety, insomnia, and malaise, impacting care delivery but not directly caring for COVID-19 patients [18]. The Michigan Model evolved due to multiple research projects undertaken by the Institute for Social Research at the University of Michigan, demonstrating two models for comprehending the problems individuals face in the workplace. Work stress is addressed by focusing on the impact of the environment on individual perception, as this affects the individual's response to these stimuli, which affects their psychological and physical health. Accordingly, individuals are influenced by various factors that affect their degree of exposure to stress and their response to it. The first is environmental factors, which are classified into two categories. Anxiety, sadness, instability, and sleep problems are examples of psychological illnesses that affect an individual's productivity and capacity to work. These effects are dependent on women's awareness of these factors, and the role of individual differences emerges from one individual to the next, in addition to the health and pathological aspects related to mental and physical elements and their role in causing responses and ways of dealing with differing from one woman to the next. This variation depends on the psychological condition of the woman working in the health field and her social relationships in the external environment [19].

HCPs also suffer from insomnia, loneliness, sleep disorders, and depression because of their workload and related stress (10). They experienced anxiety attacks and frustration due to a lack of knowledge, environmental changes, and fear of infection both by themselves and by their family members [20]. HCPs maintained a physical distance from family members to reduce the risk of contagion, resulting in further psychological distress [21]. Hence, special attention to monitoring the psychological issues of high-risk populations exposed to COVID-19 is essential [22].

According to Eftekhar Ardebili et al. (2021). [23], there are two types of mismatches between an individual and their environment that are likely to have a detrimental influence: health and job satisfaction. The first shows a misalignment of an individual's needs and preferences with the rewards and side benefits of the organization or job. The second refers to a mismatch between an individual's talent, abilities, career or work needs, and conditions. In both situations, the imbalance is represented by a mismatch between individual requirements and workplace rewards and the scenario forced by the pandemic, which caused an imbalance in dominating all work environments and conditions in general and the health sector.

Doctors have faced tremendous difficulties during the COVID-19 pandemic [24]. Despite these obstacles, HCPs have adapted to the prevailing health crisis. A previous study [25] has shown that meditation, relaxation, and music therapy can help mitigate daily stress. During the severe acute respiratory syndrome (SARS) outbreak in 2005, HCPs took the initiative to cope with the anxiety associated with the pandemic. Coping mechanisms included avoidance of news about the SARS pandemic, small gatherings after work where problems could be shared, and participation in other recreational activities [26]. Proper training, PPE, and medical assistance are important for supporting HCPs [7]. However, these were unavailable globally. Several studies have been conducted on COVID-19-related issues in the UAE. However, no studies have been conducted on the challenges HCPs face during COVID-19. As health research generates rich information [27], we attempted to address this research gap to gain more in-depth knowledge of professionals' beliefs and opinions during the pandemic [28].

Thus, such harmonization was difficult to achieve considering the epidemic, which impacted the overall position of working women [29]. Similarly, Kanz and Kan identified factors that affect an individual's work environment, initially demonstrated by the degree of compatibility between the individual and their environment.

Dorothy Smith's feminist perspective theory, "Standpoint Theory," concerns feminist reality and what it contains, structural psychological and social factors and interactions, and how women think about those feelings and how they feel. Her study considered that the lived reality of women, their needs, roles, and place in society are among the patterns of ideas that have been formed in prior interactions, such as the challenges and pressures already formed through previous patterns and interacted with and formed her challenges and pressures. Therefore, she emphasizes the need to hear the woman's voice as she tells us, away from quantitative data, since reality informs her of the requirement of adaptation and balance. However, as a woman with an endless number of roles, she then faces the problem of matching these roles as they should [30]. The researchers perceive theoretical opinions in this regard as an affirmation of the alignment in the work environment for women working in the health sector because of the challenges in psychological and social health considering COVID-19 and highlight the thoughts and experiences of working women through their living reality, which the woman herself describes. It faces psychological and social obstacles reflected in its overall reality, distinct from the world of quantitative numbers and digital statistics.

Therefore, researchers were interested in the psychological, social, and health issues and impacts that affected women HCPs. Several studies in this area, such as the study Bettinsoli et al. [31], aimed to learn about the reality of the health psychology of HCPs during COVID-19 by assessing their psychological state and coping strategies amid the COVID-19 spread (March-April 2020). Cabarkapa et al. [32] used a quantitative approach that revealed that approximately 33.5% of HCPs suffered from psychopathy. Participants perceived their mental health to be worse during the COVID-19 emergency than before, particularly among married healthcare workers.

According to Alon et al. [33], working women were more affected than men during COVID-19, and social distancing measures and the closure of schools and daycare centers resulted in a decrease. The higher percentage of women working in the medical field compared to males working in the same sector harmed women and created psychological, health, and social issues.

AlAteeq et al. [34] revealed the levels of depression and anxiety among healthcare providers during COVID-19 in the Kingdom of Saudi Arabia. By evaluating the percentages of depression and anxiety through the Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder (GAD-7) by focusing on various HCPs: administrators (28.49%), nurses (26.29%), physicians (22.11%), non-physician specialists (13.94%), technicians (6.77%), and pharmacists (2.216). % on a sample of men and women that amounted to (68.1%). The results showed that more than half of them had depressive disorder (55.2%), ranging from mild (24.9%) to moderate (14.5%) and moderately severe (10%) to severe (5.8%). This showed that half of the sample suffered from generalized anxiety disorder (51.4%), ranging from mild (25.1%), moderate (11%) to severe (15.3%), and statistically significant differences were present in favor of women caregivers in being higher in anxiety. This study recommends paying more attention to and providing psychological care to women.

Abolfotouh et al. [35] agreed with the findings of the previous studies, which discovered that their study sample (72.1%) showed general anxiety and a fear of infection.

Most studies' findings also confirmed that the psychological effects on healthcare workers are variable according to the social reality, where the increased risk of trauma or disorders related to stress, depression, and anxiety due to the virus in their workplace and the increase in working hours, which increases their risk of infection, as revealed by Cabarkapa et al. [32], who found that 40% of HCPs in the Kingdom of Saudi Arabia have previously been exposed to the coronavirus owing to the nature of their work and their contact with patients.

A study conducted in China by Zhang et al. [2] to detect the mental health threats to HCPs, given the coronavirus pandemic, revealed that higher rates of insomnia, anxiety, obsessive-compulsive disorder, and depression among workers than non-workers in the health sector have increased among women working in the health sector.

Jemal et al. [36] conducted a study in Ethiopia on healthcare workers during COVID-19 and indicated that the first threat faced by the staff in the health sector is depression at a rate of 60.3%, followed by anxiety at 78%, and then stress at 33.8%; and that working women were more likely to have symptoms of depression, anxiety, and stress than men. The study recommended that the Ethiopian Federal Ministry of Health develop psychological interventions to meet the specific needs of healthcare workers affected by the pandemic.

Zhang et al. [2] used an electronic survey on the Internet to investigate psychological and social problems among medical workers and non-workers during the COVID-19 pandemic. They found that medical workers had higher rates of depression, anxiety, and obsessive-compulsive symptoms than non-workers, as well as physical symptoms and health diseases. In order to offer the greatest care for the patients, this research advised activating rehabilitation and attention programs for healthcare personnel.

According to the Lancet study [37], medical staff are exposed to physical and mental complications, as well as exhaustion and sadness, as a result of losing patients and colleagues. They feared infection and transmission of infection to their loved ones, endured a lack of medical resources, and saw patients suffer.

According to da Silva et al. [38], there is psychological distress among frontline workers and participants in diagnosing and treating COVID-19 patients. They are more vulnerable to post-traumatic stress disorder, as statistical indications showed a high degree of anxiety symptoms in the first degree. Insomnia is followed by second-degree depressive symptoms, regardless of age. Regarding post-traumatic stress symptoms among HCPs, research has revealed that most frontline workers have symptoms of clinical disorders, the most common of which are post-traumatic stress disorder, anxiety, and depression. Subsequently, research found a considerable increase in these indicators among HCPs—those who work on the rear lines indirectly [39].

Considering previous research, the researchers benefited from these studies by identifying scientific references that served and enriched the current study, assisting in developing the study's tools, formulating the methodology, and interpreting this study's results scientifically and objectively. During COVID-19, researchers conducted a survey to learn about the psychological and social challenges faced by Emirati women working in the medical sector to complement previous studies, some of which dealt with one or two aspects of the threats to workers in the health sector in general, without exploring factors of gender and their psychological and social challenges, as well as the link between these challenges and the demographic characteristics of the sample. This sets the present study apart from others; it focuses mostly on women in the healthcare field, and prior research has shown that they are the most affected group.

2-1- The Study Problem

Owing to the spread of the COVID-19 pandemic, women in the Arab area, in general, and particularly in the health sector, were exposed to conditions and factors more sensitive to psychological and social challenges. Nurses, midwives, and support staff comprise most individuals who work in the healthcare sector, which presents certain obstacles and health effects for them, as well as the danger of infection and social problems [40]. Given the importance of women in Emirati society, they are entrusted with various roles and responsibilities that conflicted during the coronavirus pandemic, particularly for women working in the health sector. They frequently worked in successive shifts without performing the rest of their functional and social roles and responsibilities. This study aimed to answer the following questions:

- What psychological and social issues confront women working in healthcare in light of COVID-19?
- Do Emirati women in healthcare endure distinct challenges based on their profession and social status?
- What is the relationship between psychological and social obstacles and the study's primary variables?

2-2- Objectives of the Study

The study aims to identify:

- Psychological challenges of women working in the health sector in light of COVID-19.
- Social challenges for women in the health sector in light of COVID-19.
- The extent to which the challenges differ according to the nature of work and social status variable among Emirati women working in the health sector.
- The extent to which psychological and social challenges are related to the primary variables in the study.

2-3- The Importance of the Current Study

This study highlights a significant group of women working in the health sector and represents their successful role in the COVID-19 pandemic. This calls for developing plans, strategies, and initiatives to deal with the challenges and consequences that affect women working in the health sector in the UAE community and the world in general through their direct statements and frank expressions. The scarcity of studies and research in this field that dealt with these challenges include the following:

2-3-1- Theoretical Aspect

- This study is considered a contribution by researchers to a study involving an important element of Emirati society. Emirati women educate, learn and work in various fields.
- The current study may reveal women's challenges in all aspects of their lives, including "family, professional, and self," as well as the causes of the gender imbalance among women working during the pandemic.

New information in quantitative and qualitative research dealing with women in the UAE's medical sector has been added to the Arab Knowledge Library in general and the Emirati Knowledge Library in particular.

2-3-2- The Aspect of Practical Importance Include

- Providing opportunities for researchers to conduct more studies on this critical aspect of the pandemic, which has directly affected working women, particularly in the medical field, through its many tools.
- Using the findings of this study to develop strategies and policies to reduce the burden on women in healthcare.

The quantitative and qualitative findings could lead to establishing a new support line affiliated with the Ministry of Health and Psychological Support for women working in the healthcare sector, solely to hear their demands and personal needs from their knowledge during the pandemic.

2-4- The Limits of the Study

Determined by studying the psychological and social challenges Emirati women faced working in the health sector in light of the coronavirus pandemic from Sharjah, Dubai, Ajman, and Abu Dhabi from August 2023 to November 2023.

2-5- Terminology of Study

- Psychological challenges: These reflect all the stresses and psychological consequences, such as anxiety, depression, tension, and nervousness, which affected Emirati women while performing their work during COVID-19.

- Social challenges: This indicates the relational imbalance among Emirati women working in the health field during COVID-19 at the professional and familial levels due to their overlapping duties and responsibilities.
- Women healthcare workers: All participants were Emirati women working in the health field. Based on what was made available to researchers, a representative sample was selected from different emirates of the United Arab Emirates.

The COVID-19 pandemic: This epidemic attacked the bases of all work sectors in numerous countries, including the UAE, and has mostly affected the health sector and its personnel.

2-6- The Study Population

Of the total women workers, 150 in the sector were drawn, representing 3% of 9003 and 64% of Emirati women working in the health sector, where reliance was placed on the purposive sample, in which the following conditions must be met: they must be 100% women working in the health sector and agreeing to postpone the study, in addition to being original citizens in the UAE's emirates of Sharjah, Ajman, Dubai, and Abu Dhabi. It was dispersed as follows: 47 from the Emirate of Sharjah, 16 from the Emirate of Dubai, five from the Emirate of Ajman, and 82 from the Emirate of Abu Dhabi.

2-7- Study Procedures

A quantitative descriptive analytical approach was used to determine the study's aims and answer questions via email. Ethical factors considered in the study included obtaining approval from the college's scientific research committee, obtaining respondents' consent, respecting respondents' confidentiality, and explaining that the data collected will be used solely for this research. In addition, participants were invited to complete an anonymous, voluntary web-based questionnaire. After the first part of the web-based questionnaire, two options, "I agree to participate in the study" and "I do not want to participate in the study," were created. Participants who selected the latter option were excluded from the study. Informed consent was obtained from all participants.

3- Methods and Procedures for Developing a Psychological and Social Scale

The study tools were obtained from a literature review, such as [9, 41, 42], and others, in addition to the items obtained from the study sample via open survey questions on 15 women working in the medical sector to identify the types of pressures they were exposed to during the pandemic. Simple descriptive statistics, "frequencies and percentages," were used for the sample's demographic data and averages and standard deviations. Multiple regression analysis determined the relationship between the primary data and the study axes. (30). Paragraphs were distributed across two dimensions (11, 19) (psychological, social, relational, professional, and family challenges).

The psychological and social challenges faced by working Emirati women can be classified into two parts:

- The first component of the sample data included age, marital status, education level, employment sector, number of years of experience, nature of work during the pandemic, shift times, housing, income, and residence.
- The second part covered two sections that addressed challenges to the balance of professional and familial relations for Emirati women working in the health sector during the COVID-19 epidemic, and the parameters of the scale were as follows:
 - The psychological challenges section has (11) paragraphs that cover symptoms of fear, anxiety, panic, and depression that dominate the research sample (Emirati women working in the health sector) throughout the pandemic.
 - The social challenges domain contains (17) paragraphs that examine the challenges women faced in their careers and familial relationships during COVID-19.

These dimensions were presented to a group of experts in psychology and sociology to determine the validity of the dimensions and their definitions, as well as the extent to which they cover the challenges while deciding the relative importance of each dimension. The relative importance of each scale dimension was determined based on the experts' opinions, as shown in Table 1.

Table 1. The relative importance of the measurement dimensions

Dimension	Importance by percentage
Psychological challenges	49%
Social challenges	51%
Total	100%

3-1- Validity and Reliability of the Scale

The scale’s validity and reliability were determined by calculating the reliability coefficient using Cronbach’s alpha, and the stability value was determined (0.87). These values are considered positive indicators of the consistency of responses on a scale of psychological and social challenges. Table 2 presents the results.

Table 2. The validity and reliability of the psychological and social Challenges Scale.

Dimension	Number of paragraphs	Alpha Cronbach
psychological challenges	11	85 %
social challenges	17	83 %
Total	28	87 %

4- Results and Discussion

For the first question, the outcomes are as follows:

Considering COVID-19, to what degree do women working in the healthcare field face health issues (psychological, physical, and social)?

Table 3 lists the arithmetic averages, standard deviations, and relative significances evaluated to answer the first question.

Table 3. Results of the arithmetic averages, standard deviations, and the proportional relevance of the psychological and social challenges scale.

Dimension	Mean	Standard Deviation	Percentage	Level	Rank
Psychological challenges	36.74	10.84	83%	High	1
Social challenges	24.38	7.26	85%	High	2
Total	30.56	9.05	84%	High	

According to Table 3, the general arithmetic averages of the axes of the scale of psychological and social challenges experienced by women working in the health sector during COVID-19, psychological challenges were in first place with an arithmetic mean (36.74) and standard deviation (10.84), indicating the influence of psychology among women health workers. This might also be related to the fact that married women made up the bulk of the sample, and their ongoing fear and worry about the spread of coronavirus and their concern for their families and children have a greater influence on their psyche than single women.

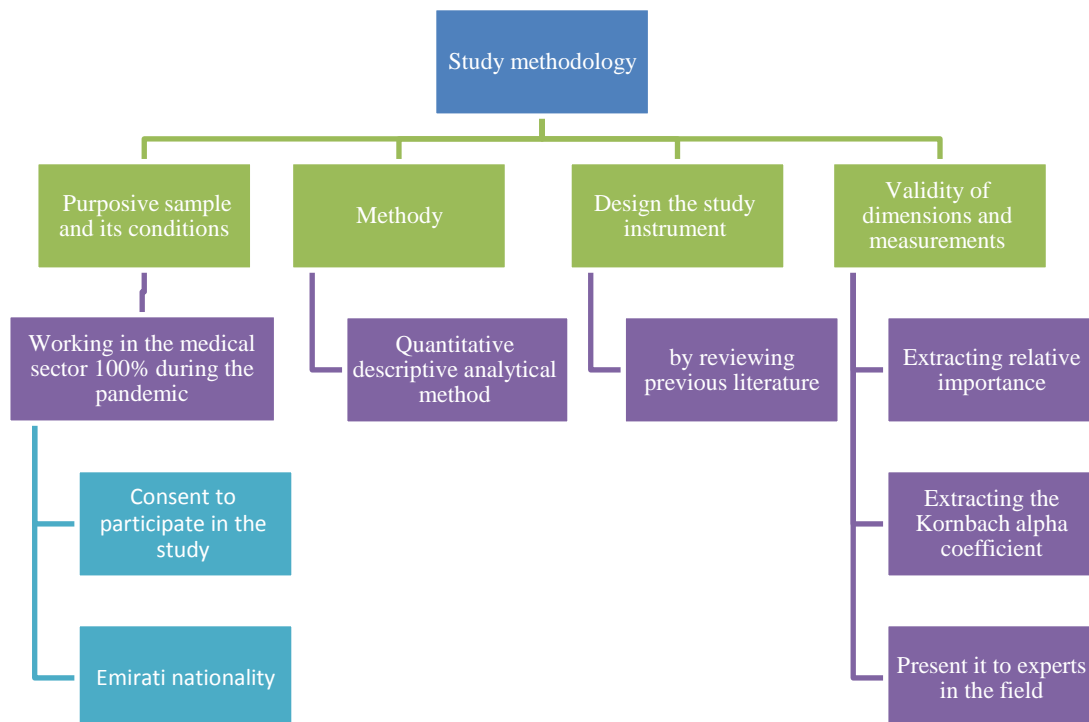


Figure 1. Flowchart to show the research methodology

The arithmetic averages and standard deviations of the scale items were derived in descending order based on the arithmetic means of the items to determine the extent of psychological and social challenges at the detailed segment level, as shown in Table 4.

Table 4. Arithmetic averages and standard deviations measuring psychological and social challenges

Psychological challenges				
#	Items	Mean Arithmetic	Standard Deviation	Rank
1	I Lose motivation to work when some cases die as a result of not responding to treatment	2.8582	1.26452	1
2	I am trying to maintain my emotional equilibrium in light of the pandemic.	2.4863	1.42246	2
3	Following up on infected cases tires my soul	2.2516	1.38353	3
4	Because of my close contact with persons affected by the developing coronavirus, I am afraid of getting the virus.	2.1838	1.48118	4
5	I'm watching anxiously the latest Coronavirus news.	2.1453	1.41855	5
6	Because of the COVID-19 epidemic, I had to check continually to make sure I wasn't infected.	2.1125	1.39108	6
7	I miss my family because I could not see them because of my absence due to the COVID-19 pandemic.	2.0533	1.27353	7
8	I get agitated as a result of work pressure.	2.0118	1.20572	8
9	I feel stress and anxiety due to the Coronavirus epidemic.	2.0118	1.20572	9
10	Because I work longer hours, I am more worried and tense.	1.8557	1.36282	10
11	The coronavirus pandemic has become a source of worry at work.	1.7329	1.23020	11
Total		2.08	1.2	
<i>Social challenges faced by working women in the health sector in light of the Corona pandemic: In terms of family relations</i>				
1	My relationship with my family was harmed by my family's anxiety that I might transmit the virus to them.	2.7673	1.54431	1
2	Due to my devotion to work amid the pandemic, I've been away from home for several days.	2.6847	1.51722	2
3	Because of my frequent absence from home, the epidemic has harmed my relationship with my children.	2.6305	1.48559	3
4	Due to the stress of work and the Corona epidemic pandemic, I lost most of my family relationships.	2.4078	1.49277	4
5	Due to the pandemic's job pressures, I'm having issues with my family.	2.3809	1.44523	5
6	While working during the pandemic, I could maintain contact with my family through social media.	2.1531	1.40855	6
7	I got support and encouragement from my family members to keep working	2.1375	1.02161	7
8	I gave up the roles assigned to me in the family because of my work during the pandemic.	2.1307	1.24119	8
9	During the pandemic, I've had a lot of difficulties managing my job and family.	2.1317	1.28422	9
10	As a consequence of the increased working hours as a result of the epidemic, my contact with my family has deteriorated.	1.8489	1.18410	10
Total		1.28	2.23	
<i>In terms of professional relations</i>				
1	Because of the pandemic's stress, I've lost a lot of professional relations.	2.8438	1.37928	1
2	Because of the Corona epidemic, my relations with patients have degraded.	2.6223	1.47129	2
3	Due to work stress during the pandemic, my relationships with my professional superiors were strained.	2.4845	1.53416	3
4	In light of the pandemic, I boosted my communication link with the work team to meet the needs of patients.	2.1236	1.36842	4
5	My knowledge in my field increased due to the openness and exchange between different hospitals	1.8966	1.29465	5
6	There was encouragement and solidarity among the members of the medical team	1.7853	1.25962	6
7	I have greater expertise working with patients with various health issues.	1.6898	1.11856	7
Total		2.27	1.38	

With an arithmetic mean between 2.84 and 1.68 compared to the general arithmetic mean of 30.56 for women working in the health sector during the pandemic, and standard deviations between 1.27 and 1.18 compared to the general standard deviation of the scale (9.05), Table 4 demonstrates that the psychological and social challenges scale ranged between good and very good. This suggests that women encounter a variety of psychological and social obstacles, which vary according to their hierarchy and from one dimension and axis to another. According to the data, the psychological problems axis was ranked highest (arithmetic average: 2.85), followed by emotional balance (arithmetic average: 2.48), and loss of job motivation as a result of several patients dying. This confirmed the state of internal awareness among women, a form of internal equilibrium for them to preserve their emotions, which occur when instances are lost, and psychological tiredness while following cases with an arithmetic average (2.25). The average anxiety level when handling cases directly was (2.18). The sample's comments support the rationale of these findings, as psychological exhaustion is linked to anxiety, worry, and close observation. This supports Kans' claims that job performance is mostly

influenced by the environment, which leads to worry, dread, and panic among Emirati women due to the imbalances brought on by the pandemic over patient loss. This supports the findings of Bettinsoli et al. [31], who found that the majority of employees in the health industry experience acute mental illness. This is consistent with Wu et al. [18], which reported on the high levels of dread and anxiety experienced by front-line health sector personnel during the pandemic.

Concerning the axis of social-relational challenges experienced by women, the results at the family level indicated that “the family’s fear of transmitting the disease to them has affected the relationship with them” came first with an average of (2.76), indicating social stigma that the health worker was exposed to during the pandemic, even from those around them. People stayed away from them. “Absence from home for several days to commit to work under the pandemic,” reflecting the social and psychological conflict and the physical pressure that Emirati women working in the health sector suffer. In fourth place, “I lost most of my family relationships due to work pressure under the Corona pandemic,” with an arithmetic average (of 2.40) showing the social-relational cost that the Emirati women had to pay for performing their work to fulfill requirements during the pandemic. The family encouraged them but was forced to relinquish several duties because of the imbalance.

Professionally, "losing many professional relationships due to work pressure" (mean = 2.84), "weak relations with patients under the pandemic" (mean = 2.62) and "weak relations with officials at work" were the most common social-relational challenges that women faced. Owing to the pressure of the pandemic, the results exhibit favorable attributes including enhanced communication, increased knowledge, motivation, camaraderie, and work experience, with an arithmetic average of 2.48. This is in line with Shaukat et al.'s work [14]. which confirmed that healthcare care workers face a lack of balance in the effects of social distancing against the desire to be with their families and suffer from psychological distress, which in turn affects the provision of care to patients infected with COVID 19. The study of Singh & Subedi [10] confirmed anxiety and depression, particularly among women working in the health sector, and the stigma and insufficient preventive measures in the workplace. This is consistent with Kanz’s suggestion that individuals’ reality and environment are inappropriate, mainly caused by ill health and job satisfaction. It affects the nature of work and its profitability.

The answer to the second question is as follows: Do the level of challenges differ depending on the nature of the work and the variable of socioeconomic standing among Emirati women working in the health sector?

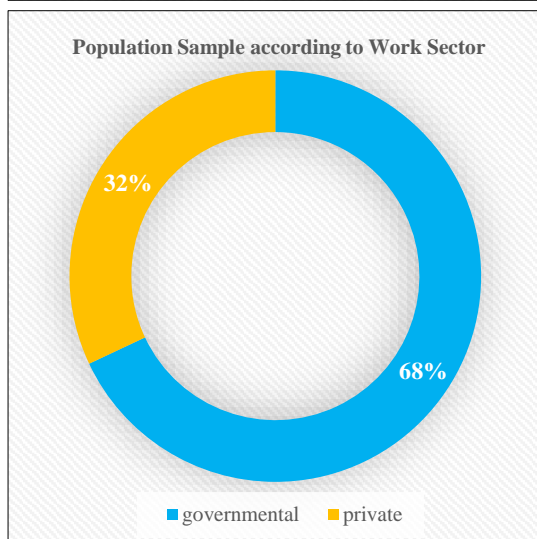
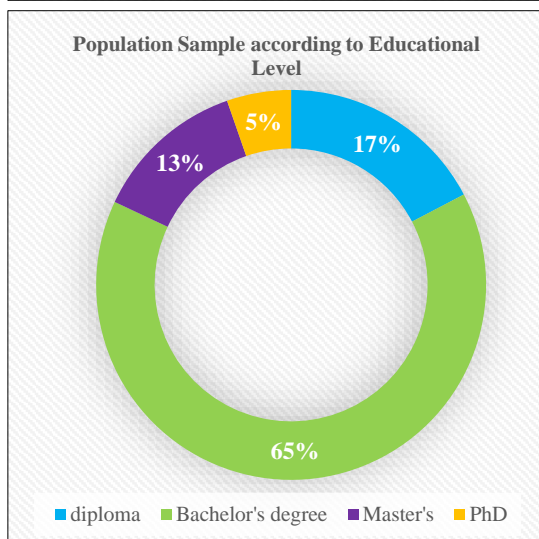
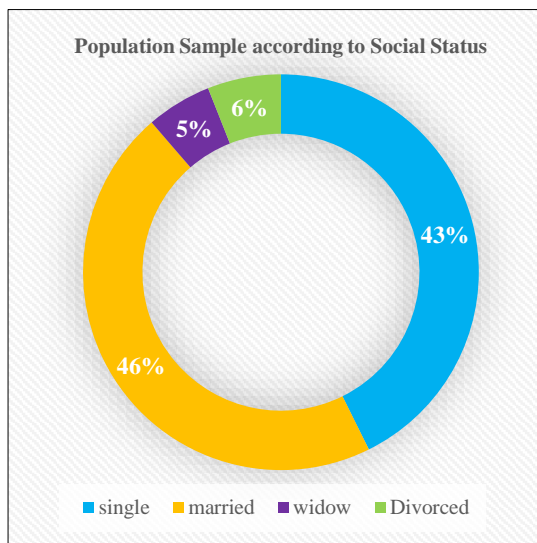
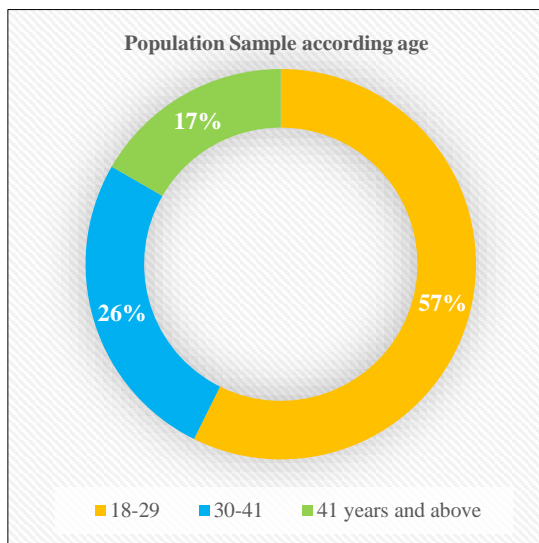
The following steps were taken to respond to the second question:

First, Determining the level of challenges according to demographic variables (see Table 5 and Figure 2).

Table 5. The sample’s demographic characteristics

Variable	Category	Frequency	Ratio
Age	18-29	86	57.33%
	30-41	39	26%
	41 years and over	25	16.67%
	Total	150	100 %
Social status	Single	64	42.67%
	Married	69	46%
	Widow	8	5.33%
	Divorced	9	6%
Total	150	100 %	
Educational level	Diploma	26	17.33%
	Bachelor’s degree	97	64.67%
	Master’s	19	12.67%
	PhD	8	5.33%
Total	150	100 %	
Work sector	Governmental	102	68%
	Private	48	32%
	Total	150	100%
Number of years of work experience	1-5	42	28 %
	6-10	81	54 %
	11-15	9	6 %
	16 years and over	18	12 %
Total	150	100%	

Shift time	Usually at night	29	19.33%
	It's usually daytime	27	18%
	Alternate day and night	94	62.67%
	Total	150	100%
Housing	With family	87	58%
	Appendix	5	3.33%
	Independent	27	18%
	Apartment	31	20.67%
Total	150	100%	
Residence	Sharjah	47	31.33 %
	Dubai	16	10.67%
	Ajman	5	3.33%
	Abu Dhabi	82	54.67%
Total	150	100%	
Nature of work	Emergency	35	23.33 %
	Fieldwork	31	20.67 %
	Isolation of COVID-19 cases	37	24.67 %
	Nurse	23	15.33 %
	GP	24	16 %
	Total	150	100 %



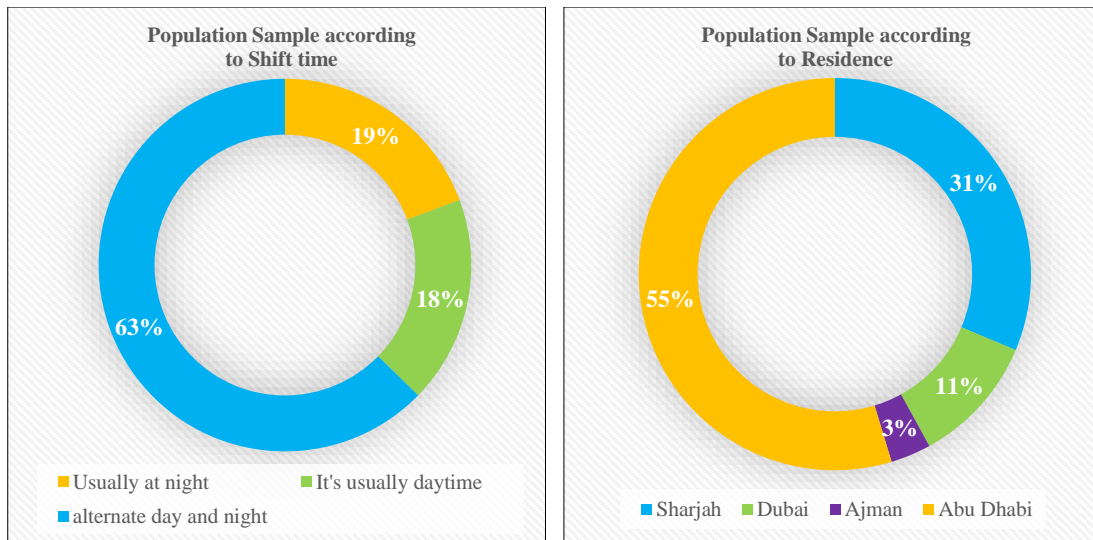


Figure 2. Population sample's demographic characteristics

The study's respondents state that the majority of the sample members are young to middle-aged, with the majority falling into the 18–29 age group (86 singles, or 57.33 percent) and the 30–41 age group (39 singles, or 26 percent). This result is important since it includes young women who are still graduating and starting careers in the medical field. Additionally, it gives students the chance to work in a delicate field like medicine under the supervision and guidance of elder generations. With (69) women (46%), married women made up the majority of the sample. This represents significant indicators in the field, where psychological obstacles are mostly caused by duplication and the diversity of social status responsibilities. Single women account for the second largest share of these challenges, with 64 women and a percentage of 42.67%. Consequently, we consider a significant percentage of women whose challenges may decrease due to regular roles and lack of burdens, affecting anxiety and tension.

Over half of the women in the sample held a bachelor's degree (97), which represents (64.67%), and this reflects the commitment, specialization and challenges faced by women working in the medical sector during the pandemic, making it difficult for them to complete higher studies. They were satisfied with a bachelor's degree. Notably, most women in the sample worked in the government sector (102), representing (68%). They faced double pressure during the pandemic, as the government sector was mainly affected by it. The private sector was a complement and assistant to it. Approximately half of the sample had 10–6 years of experience, a relatively average rate of (81) women (54%). However, the UAE community was concerned about providing the appropriate expertise to deal with the pandemic.

The data show that over half of the women in the sample worked alternately night and day (94) at (62.67%), reflecting the openness in the UAE society and permitting women to work regardless of time. They worked day and night to confront the pandemic without regard for anxiety, fear, or the plurality of roles. Most women in the sample lived with their parents (87) (58%), indicating the severe challenges that women face. The data suggest that the sample was divided between Sharjah, with (47) women (31.33%), and Abu Dhabi, with (82) women (54.67%).

The samples were divided according to the nature of the work. We note that (35) women were in the emergency, that is, first respondents, with higher psychological challenges than others, as they did not know who was injured and who was in a stable condition, and they represent (31) women (20.67%). This reflects a significant percentage in the direct front lines with the injured and the uninjured, raising the severity of the challenges in general. However, the most dangerous field for working women at all levels is in isolation rooms with COVID-19 patients, where (37) women worked at a rate of (24.67%), generating different challenges that affect all their other roles. As for the percentage of women workers in the sector, nursing and general medicine were similar, representing 16% of the total, with 24 women considered the least severe and influential sectors.

Second, Determining the level of challenges according to place of residence and social status.

To determine the level of challenge according to place of residence, social status, averages, and standard deviations were used (see Table 6).

Table 6. Variation of axes and their differences according to the variable of place of residence and social status

The psychological and social challenges vary according to the place of residence:				
Residence	The Axis	Arithmetic mean	Standard deviation	Rank
Sharjah	Psychological challenges	24.5576	9.32635	1
	Social challenges	17.2233	2.53294	2
Dubai	Psychological challenges	25.0210	8.13468	1
	Social challenges	17.5883	2.43113	2
Ajman	Psychological challenges	25.3333	7.44537	1
	Social challenges	18.6667	4.11672	2
Abu Dhabi	Psychological challenges	23.3100	8.18787	1
	Social challenges	18.2510	3.22865	2
Psychological and social challenges vary according to social status:				
Social status	The Axis	Arithmetic mean	Standard deviation	Rank
Single	Psychological challenges	24.7759	7.72833	1
	Social challenges	17.3211	2.60412	2
Married	Psychological challenges	21.6134	8.75546	1
	Social challenges	17.3156	3.26542	2
Divorced	Psychological challenges	25.7640	8.24267	1
	Social challenges	18.9850	4.16202	2
Widow	Psychological challenges	21.7667	8.06115	1
	Social challenges	19.4445	3.03483	2

Table 6 shows that the psychological and social challenges of Emirati women working in the health sector do not differ according to the different emirates within the UAE, as the arrangement was unified in all the emirates covered by the study “Sharjah, Dubai, Ajman, Abu Dhabi,” starting with psychological challenges, followed by the impact on the external public social context for women working in the health sector. This is in contrast to Zhang et al. [2], who stated that the psychological and social challenges for healthcare workers differ depending on whether they work in rural or urban areas, owing to the extent of health and medical equality as well as the equality of services and treatment plans during the pandemic across all Emirates.

No disparity was observed in the hierarchy of challenges according to social status, where the gradation coincided with the results of the main axes in the study, where previous results indicated severe anxiety and fear. Then, these challenges turned into losses and social difficulties, “professional and family,” which is also inconsistent with Bettinsoli et al. [31], which confirmed that the challenges are different for married women than for single women.

The answer to the third question in the study:

To what extent are psychological and social challenges related to the study’s primary variables?

The primary variables were generated using a multiple correlation matrix to determine the association between the various axes of the scale (notably psychological and social challenges) and several factors from the initial study.

Table 7 demonstrates a statistically significant correlation between "shift time, nature of housing, and place of residence" and the psychological difficulties faced by Emirati women employed in the health sector during the epidemic. This suggests that shift times are negatively inversely related to each other ("night, day, night"). "Alternate day and night" and the psychological obstacles, as well as a strong correlation between the psychological issues and housing characteristics. Lastly, there is a negative inverse association between the psychological obstacles experienced and the place of residence. It demonstrates a statistically significant correlation between the social obstacles faced by Emirati women employed in the health sector throughout the period and the major factors of "age, work sector, number of years of work experience, shift time, and place of residence.". There is a positive direct relationship between the variables sector, work, number of years of work, and social challenges, and a negative inverse relationship between age, shift time, place of residence, and social challenges. This aligns with the Michigan model, where there is a clear impact on the environment. According to this proposition, the individual is affected by many factors, which affect the degree of his exposure to pressures and his response to them. These are represented in the results of the current study: the work sector, number of years of experience, shift time and place of residence, and all environmental factors that affect the individual. This study is consistent with Cabarkapa et al. [32], which reveals a relationship between psychological and social challenges for workers in the health sector, the nature of their work sector, and their interaction with patients.

Table 7. Correlation between psychological and social challenges and the study's primary variables

Psychological challenges					
Variables	B	s.d	Beta	t	sig
Shift time	-3.699	1.155	-0.369	-3.252	0.002
Housing	2.258	0.824	0.332	2.751	0.006
Residence	-3.365	.989	-0.387	-3.368	0.001
Social - Relational challenges					
Variables	B	s.d	Beta	t	sig
Age	-2.408	0.815	-0.554	-3.123	0.003
Labor Sector	6.376	1.378	0.534	4.713	0.000
Number of years of work experience	2.258	0.530	0.769	4.124	0.000
Shift time	-1.485	0.437	-0.373	-3.225	0.003
Residence	-1.376	0.375	-0.428	-3.334	0.001

5- Conclusions

Despite UAE's relentless pursuit of gender equality to give all rights to Emirati women, including the right to work, education, and drive, Emirati women, especially those working in the health sector, have been overlooked for their psychological and social rights, which are different from any other Arab society due to its privacy, relationships, and dependence on women (tribal and clans).

This study reveals the social and psychological crisis due to the coronavirus pandemic and the tensions and pressures that accompanied it, with women as frontline fighters of government hospitals to deal with multiple cases. They bear various workloads and their relational and psychological consequences. The results of this study are based on a descriptive methodology through the use of statistical methods represented by "frequency, percentage, arithmetic means, standard deviation, and multiple regression" to reveal women's social and psychological challenges. This procedure attempts to restore the importance of knowing what women experienced in the medical sector—the true expression of how gender discrimination is practiced against them and their rights are neglected.

The results of the study showed women suffered "depression, anxiety, and social stigma." Despite the efforts of the Emirati society through policies, medical directions, and psychological support leaders in this society, according to the study results, women's suffering was magnified with the passage and progress of the pandemic. Moreover, the loss of patients and their families affected them.

The Emirati society succeeded in arming all women's teams to confront the pandemic. Still, it failed to contain the crises experienced by working women who simultaneously suffered from more than one pressure. Undoubtedly, the sociocultural context that perpetuates gender distinctions stands against women's crises. The loss of their families, the pressure of work during that period, the promise of direct communication with those around them, even their co-workers, and the self-sufficiency generated by the pandemic helped women deal with the psychological and social health situation, covered by the health, social, and psychological policies of Emirati society.

Mismatches between an individual and their surroundings are likely to have a negative impact on health and work satisfaction, and women in Emirati society may suffer as a result. This refers to the mismatch between a person's demands and preferences and the advantages and incentives offered by the company or employment. describes a mismatch between a person's potential, skills, needs for a vocation or place of employment, and circumstances. This led to an imbalance in both cases that affected the health sector as well as all other work environments and circumstances in general [23].

This emergency placed all its burden on women in general, and the burdens were greater for women working in the health sector. This exceptional circumstance extends to normal daily life before the pandemic. That is, gender bias preceded the pandemic, but the crowding out of the requirements for different roles in one temporal and spatial space doubled its effects. Most women working in the health sector face pressure and tension. Working on the frontlines and balancing it with other roles form an interactive system that further magnifies the crisis for women.

In general, Emirati society has come a long way in eliminating gender differences by empowering women and increasing their levels of education. It reached the rank of 25% percent according to the Sustainable Development Goals and United Nations reports, but equality requires policies and strategies to achieve the optimal balance for women. However, it increases the burden on women. It burdens them by imposing different roles. The pandemic embodied this in terms of its emotional nature, burdening women with the role of a caregiver on the front lines and the lack of real support in the psychological and social situation, which increased the gender balance between men and women and raised their psychological and social crises.

5-1-Recommendations

Emirati society is a leading society that empowers women and protects them psychologically and about their health. The previous results show gaps despite this leadership and effective contribution. Emirati women in the health sector need more than one type of psychological and social support in the work environment, especially due to crises and disasters (flexibility in working hours, exceptions during crises, psychological and social motivation, and support). This is because of the gender and the multiplicity of roles assigned to women, in addition to the peculiarities of Emirati society and the different roles it bestows on them.

The previous results indicate the importance of having social policies and legislation fair to women working in the health sector, adding to women's work policies, and introducing special provisions for Emirati women to bridge the existing gender gap and dedicate the greatest burden to Emirati women. On the other hand, the importance of exposing the most suitable hours and kinds of work for women working in the health sector in the shadow of the coronavirus epidemic, which lessens the intensity of their issues. Given the epidemic, there is an urgent need to focus more on healthcare employees, particularly women, and increasing "psychological" healthcare for healthcare personnel. In addition, it is important to pay attention to the physical health of women working in the health sector by establishing a suitable work environment and space for physical exercise to boost their productivity.

6- Declarations

6-1-Author Contributions

Conceptualization, B.A. and F.H.; methodology, F.A.; software, W.B.; validation, B.A. and F.H.; formal analysis, F.A.; investigation, W.B.; resources, B.A., F.H., W.B., and F.A.; data curation, W.B.; writing—original draft preparation, F.A. and B.A.; writing—review and editing, W.B. and F.H. All authors have read and agreed to the published version of the manuscript.

6-2-Data Availability Statement

The data presented in this study are available in the article.

6-3-Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

6-4-Institutional Review Board Statement

Not applicable.

6-5-Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

6-6-Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

7- References

- [1] Temsah, M. H., Al-Sohime, F., Alamro, N., Al-Eyadhy, A., Al-Hasan, K., Jamal, A., Al-Maghlouth, I., Aljamaan, F., Al Amri, M., Barry, M., Al-Subaie, S., & Somily, A. M. (2020). The psychological impact of COVID-19 pandemic on health care workers in a MERS-CoV endemic country. *Journal of Infection and Public Health*, 13(6), 877–882. doi:10.1016/j.jiph.2020.05.021.
- [2] Zhang, W. R., Wang, K., Yin, L., Zhao, W. F., Xue, Q., Peng, M., Min, B. Q., Tian, Q., Leng, H. X., Du, J. L., Chang, H., Yang, Y., Li, W., Shangguan, F. F., Yan, T. Y., Dong, H. Q., Han, Y., Wang, Y. P., Cosci, F., & Wang, H. X. (2020). Mental Health and Psychosocial Problems of Medical Health Workers during the COVID-19 Epidemic in China. *Psychotherapy and Psychosomatics*, 89(4), 242–250. doi:10.1159/000507639.
- [3] Bagcchi, S. (2020). Stigma during the COVID-19 pandemic. *The Lancet Infectious Diseases*, 20(7), 782. doi:10.1016/s1473-3099(20)30498-9.
- [4] WHO (2019). Fulfilling the promise of women who will achieve universal health coverage. World Health Organization (WHO), Geneva, Switzerland. Available online: <https://www.who.int/ar/news-room/commentaries/detail/uhc-day-2019-keeping-the-promise-to-the-women-who-will-deliver-uhc> (accessed on July 2024).
- [5] United Nations (2012). The Millennium Development Goals Report 2012. United Nations, New York, United States. Available online: <https://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf> (accessed on July 2024).

- [6] Rewerska-Juško, M., & Rejdak, K. (2022). Social Stigma of Patients Suffering from COVID-19: Challenges for Health Care System. *Healthcare*, 10(2), 292. doi:10.3390/healthcare10020292.
- [7] WHO (2021). Frontline workers and COVID-19: Coping with stress. World Health Organization (WHO), Geneva, Switzerland. Available online: http://www.emro.who.int/images/stories/mnh/documents/1_flyer_flws_covid_coping_with_stress.pdf?ua=1 (accessed on July 2024).
- [8] UNICEF (2020). Social stigma associated with the coronavirus disease (COVID-19). UNICEF, New York, United States. Available online: <https://www.unicef.org/media/65931/file/Social%20stigma%20associated%20with%20the%20coronavirus%20disease.2020;202019:20> (accessed on August 2024).
- [9] The United Arab Emirates Government Portal. (2021). Maintaining mental health during COVID-19. The United Arab Emirates' Government portal, Dubai, United Arab Emirates. Available online: <https://u.ae/en/information-and-services/justice-safety-and-the-law/handling-the-covid-19-outbreak/maintaining-mental-health-in-times-of-covid19> (accessed on June 2024).
- [10] Singh, R., & Subedi, M. (2020). COVID-19 and stigma: Social discrimination towards frontline healthcare providers and COVID-19 recovered patients in Nepal. *Asian Journal of Psychiatry*, 53, 102222. doi:10.1016/j.ajp.2020.102222.
- [11] Villa, S., Jaramillo, E., Mangioni, D., Bandera, A., Gori, A., & Raviglione, M. C. (2020). Stigma at the time of the COVID-19 pandemic. *Clinical Microbiology and Infection*, 26(11), 1450–1452. doi:10.1016/j.cmi.2020.08.001.
- [12] Stemple, L., Karegeya, P., & Gruskin, S. (2016). Human rights, gender, and infectious disease: From HIV/AIDS to Ebola. *Human Rights Quarterly*, 38(4), 993–1021. doi:10.1353/hrq.2016.0054.
- [13] Bradshaw, S., & Fordham, M. (2015). Double Disaster: Disaster through a Gender Lens. In *Hazards, Risks, and Disasters in Society*, Academic Press, 233–251. doi:10.1016/B978-0-12-396451-9.00014-7.
- [14] Shaikat, N., Ali, D. M., & Razzak, J. (2020). Physical and mental health impacts of COVID-19 on healthcare workers: A scoping review. *International Journal of Emergency Medicine*, 13(1), 40. doi:10.1186/s12245-020-00299-5.
- [15] Khanal, P., Devkota, N., Dahal, M., Paudel, K., & Joshi, D. (2020). Mental health impacts among health workers during COVID-19 in a low resource setting: A cross-sectional survey from Nepal. *Globalization and Health*, 16(1), 1–12. doi:10.1186/s12992-020-00621-z.
- [16] Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, 395(10227), 912–920. doi:10.1016/S0140-6736(20)30460-8.
- [17] DiGiovanni, C., Conley, J., Chiu, D., & Zaborski, J. (2004). Factors Influencing Compliance with Quarantine in Toronto During the 2003 SARS Outbreak. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, 2(4), 265–272. doi:10.1089/bsp.2004.2.265.
- [18] Wu, P. E., Styra, R., & Gold, W. L. (2020). Mitigating the psychological effects of COVID-19 on health care workers. *Canadian Medical Association Journal*, 192(17), E459–E460. doi:10.1503/cmaj.200519.
- [19] Katz, D., & Kahn, R. L. (1978). *The Social Psychology of Organizations*. Wiley, Hoboken, United States.
- [20] Sun, N., Wei, L., Shi, S., Jiao, D., Song, R., Ma, L., Wang, H., Wang, C., Wang, Z., You, Y., Liu, S., & Wang, H. (2020). A qualitative study on the psychological experience of caregivers of COVID-19 patients. *American Journal of Infection Control*, 48(6), 592–598. doi:10.1016/j.ajic.2020.03.018.
- [21] World Health Organization (WHO). (2020). Mental health and psychosocial considerations during the COVID-19 outbreak. World Health Organization (WHO), Geneva, Switzerland.
- [22] Botchway, S., & Fazel, S. (2021). Remaining vigilant about COVID-19 and suicide. *The Lancet Psychiatry*, 8(7), 552–553. doi:10.1016/S2215-0366(21)00117-6.
- [23] Eftekhari Ardebili, M., Naserbakht, M., Bernstein, C., Alazmani-Noodeh, F., Hakimi, H., & Ranjbar, H. (2021). Healthcare providers experience of working during the COVID-19 pandemic: A qualitative study. *American Journal of Infection Control*, 49(5), 547–554. doi:10.1016/j.ajic.2020.10.001.
- [24] Gerada C. (2020). *Beneath the white coat doctors, their minds and mental health*. Routledge, Milton Park, United Kingdom. doi:10.4324/9781351014151.
- [25] National Institutes of Health (NIH). (2017). Trends in HIV/AIDS morbidity and mortality in Eastern Mediterranean countries, 1990–2015: findings from the Global Burden of Disease 2015 study. *International Journal of Public Health*, 63(S1), 123–136. doi:10.1007/s00038-017-1023-0.
- [26] Lee, S. H., Juang, Y. Y., Su, Y. J., Lee, H. L., Lin, Y. H., & Chao, C. C. (2005). Facing SARS: Psychological impacts on SARS team nurses and psychiatric services in a Taiwan general hospital. *General Hospital Psychiatry*, 27(5), 352–358. doi:10.1016/j.genhosppsych.2005.04.007.

- [27] Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative Data Analysis for Health Services Research: Developing Taxonomy, Themes, and Theory. *Health Services Research*, 42(4), 1758–1772. doi:10.1111/j.1475-6773.2006.00684.x.
- [28] Frank, T. D., Carter, A., Jahagirdar, D., Biehl, M. H., Douwes-Schultz, D., Larson, S. L., Arora, M., Dwyer-Lindgren, L., Steuben, K. M., Abbastabar, H., Abu-Raddad, L. J., Abyu, D. M., ... Murray, C. J. L. (2019). Global, regional, and national incidence, prevalence, and mortality of HIV, 1980–2017, and forecasts to 2030, for 195 countries and territories: a systematic analysis for the Global Burden of Diseases, Injuries, and Risk Factors Study 2017. *The Lancet HIV*, 6(12), e831–e859. doi:10.1016/s2352-3018(19)30196-1.
- [29] Luo, M., Guo, L., Yu, M., & Wang, H. (2020). The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public—A systematic review and meta-analysis. *Psychiatry Research*, 291, 113190. doi:10.1016/j.psychres.2020.113190.
- [30] Wallace, S., & Wolf, A. (2011). *Contemporary theory in sociology extends the horizons of classical theory*. Majdalawy House for Publishing and Distribution, Aman, Jordan.
- [31] Bettinsoli, M. L., Di Riso, D., Napier, J. L., Moretti, L., Bettinsoli, P., Delmedico, M., Piazzolla, A., & Moretti, B. (2020). Mental Health Conditions of Italian Healthcare Professionals during the COVID-19 Disease Outbreak. *Applied Psychology: Health and Well-Being*, 12(4), 1054–1073. doi:10.1111/aphw.12239.
- [32] Cabarkapa, S., Nadjidai, S. E., Murgier, J., & Ng, C. H. (2020). The psychological impact of COVID-19 and other viral epidemics on frontline healthcare workers and ways to address it: A rapid systematic review. *Brain, Behavior, & Immunity - Health*, 8, 100144. doi:10.1016/j.bbih.2020.100144.
- [33] Alon, T., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). *The Impact of COVID-19 on Gender Equality*. National Bureau of Economic Research, Cambridge, United Kingdom. doi:10.3386/w26947.
- [34] AlAteeq, D. A., Aljhani, S., Althiyabi, I., & Majzoub, S. (2020). Mental health among healthcare providers during coronavirus disease (COVID-19) outbreak in Saudi Arabia. *Journal of Infection and Public Health*, 13(10), 1432–1437. doi:10.1016/j.jiph.2020.08.013.
- [35] Abolfotouh, M. A., Almutairi, A. F., Banimustafa, A. A., & Hussein, M. A. (2020). Perception and attitude of healthcare workers in Saudi Arabia with regard to Covid-19 pandemic and potential associated predictors. *BMC Infectious Diseases*, 20(1), 1-10. doi:10.1186/s12879-020-05443-3.
- [36] Jemal, K., Deriba, B. S., Geleta, T. A., Tesema, M., Awol, M., Mengistu, E., & Annous, Y. (2021). Self-Reported Symptoms of Depression, Anxiety, and Stress Among Healthcare Workers in Ethiopia During the COVID-19 Pandemic: A Cross-Sectional Study. *Neuropsychiatric Disease and Treatment*, 17, 1363–1373. doi:10.2147/ndt.s306240.
- [37] The Lancet. (2020). COVID-19: protecting health-care workers. *The Lancet*, London, United Kingdom, 395(10228), 922. doi:10.1016/S0140-6736(20)30644-9.
- [38] da Silva Neto, R. M., Benjamim, C. J. R., de Medeiros Carvalho, P. M., & Neto, M. L. R. (2021). Psychological effects caused by the COVID-19 pandemic in health professionals: A systematic review with meta-analysis. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 104, 110062. doi:10.1016/j.pnpbp.2020.110062.
- [39] Johnson, S. U., Ebrahimi, O. V., & Hoffart, A. (2020). PTSD symptoms among health workers and public service providers during the COVID-19 outbreak. *PLoS ONE*, 15(10), 241032. doi:10.1371/journal.pone.0241032.
- [40] UN Sustainable Development Group. (2020). *Policy Brief: The new coronavirus-19 affects all people in the Arab region*. United Nations, New York, United States.
- [41] Chakraborty, N. (2020). The COVID-19 pandemic and its impact on mental health. *Progress in Neurology and Psychiatry*, 24(2), 21–24. doi:10.1002/pnp.666.
- [42] Joshi, A., Tammana, S., Babre, T., & Kallianpur, R. (2020). Psychosocial response to COVID-19 pandemic in India: Helpline counsellors' experiences and perspectives. *Counselling and Psychotherapy Research*, 21(1), 19–30. doi:10.1002/capr.12378.