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# **Exploring the Prevalence of Psychological Symptoms among Healthcare Workers in Saudi Arabia: A Contemporary Analysis**

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## **ABSTRACT**

Healthcare workers (HCWs) play a crucial role in maintaining public health, particularly during crises such as the COVID-19 pandemic. The psychological toll on HCWs has been substantial, with increased prevalence of anxiety, depression, post-traumatic stress disorder (PTSD), and burnout. This paper explores the prevalence of psychological symptoms among HCWs in Saudi Arabia, analyzing factors contributing to mental health issues, coping mechanisms, and potential interventions. Using recent research, systematic reviews, and meta-analyses, the study provides a comprehensive overview of the psychological burden faced by HCWs in Saudi Arabia. The findings highlight the need for structured mental health support systems, policy reforms, and workplace interventions to mitigate the psychological impact on HCWs.

Keywords: PTSD, HCWs, COVID-19, systematic

## 1. INTRODUCTION

## 1.1 Background and Significance

Healthcare workers (HCWs) are the backbone of any healthcare system, responsible for providing essential medical services, ensuring patient safety, and managing public health crises. Their role becomes even more critical during pandemics and health emergencies, where the demand for healthcare services surges, placing immense pressure on their mental and physical well-being. The COVID-19 pandemic, which emerged in late 2019 and spread globally, has had profound effects on HCWs, particularly in terms of their psychological health. Studies have documented increased rates of anxiety, depression, post-traumatic stress disorder (PTSD), and burnout among HCWs worldwide (Aymerich et al., 2022; Bahamdan, 2021).

Saudi Arabia, as one of the largest and most resourceful healthcare systems in the Middle East, faced numerous challenges during the pandemic. The rapid spread of COVID-19 necessitated stringent public health measures, increased workload for HCWs, and heightened exposure to the virus. These factors collectively contributed to a significant rise in psychological distress among HCWs across the country. The prevalence of psychological symptoms among HCWs in Saudi Arabia has been extensively studied (Almalki et al., 2021; Mohsin et al., 2021), yet there remains a need for a comprehensive analysis that considers both the immediate and long-term mental health impacts of the pandemic.

## 1.2 Psychological Impact of the Pandemic on Healthcare Workers

The mental health burden on HCWs has been well-documented in both global and Saudi Arabian contexts. Studies from various countries indicate that HCWs experienced heightened levels of psychological distress due to prolonged exposure to COVID-19 patients, fear of infection, and concerns about the well-being of their families (Saragih et al., 2021; Cullen et al., 2020). In Saudi Arabia, research has shown that HCWs reported increased levels of anxiety, depression, and stress during the pandemic, with many struggling to cope with the overwhelming workload and emotional toll of patient care (Alwaqdani et al., 2021).

A study by Mohsin et al. (2021) found that fear and anxiety were pervasive among HCWs in Saudi Arabia, particularly among those working in emergency departments and intensive care units. This fear was largely driven by the uncertainty surrounding the virus, the potential for infection, and the challenges of managing critical COVID-19 cases. Healthcare workers had to adapt to rapidly changing protocols, shortages of personal protective equipment (PPE), and the emotional burden of witnessing high mortality rates among their patients.

#### 1.3 Factors Contributing to Psychological Distress Among HCWs in Saudi Arabia

Several factors contributed to the high prevalence of psychological symptoms among HCWs in Saudi Arabia. These factors can be broadly categorized into occupational stressors, social and economic concerns, and personal coping mechanisms.

## 1.3.1 Occupational Stress and Burnout

One of the most significant contributors to psychological distress among HCWs is occupational stress. The high volume of COVID-19 cases placed immense pressure on HCWs, leading to long working hours, physical exhaustion, and emotional burnout. Burnout, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, has been widely reported among HCWs in Saudi Arabia (Meo et al., 2021). A study by Kotera et al. (2022) found that excessive workload, lack of rest periods, and inadequate support from healthcare institutions were major predictors of burnout among HCWs. This was especially evident in Saudi Arabia, where healthcare professionals had to manage large numbers of patients with limited resources. The emotional toll of losing patients and the constant exposure to suffering further exacerbated their psychological distress.

## 1.3.2 Anxiety and Fear of Contagion

Fear of contracting COVID-19 and transmitting it to family members was another major source of anxiety for HCWs (Bahamdan, 2021). Given the contagious nature of the virus, many HCWs feared that they would unknowingly infect their loved ones, leading to heightened stress and emotional distress. In some cases, HCWs chose to self-isolate from their families to reduce the risk of transmission, resulting in increased feelings of loneliness and psychological strain.

Research by Alothman et al. (2021) highlighted that HCWs who had direct contact with COVID-19 patients reported higher levels of anxiety compared to those working in non-COVID-19 units. This aligns with global findings, such as those reported by Xiong et al. (2020), which showed that frontline HCWs experienced greater psychological distress due to their increased exposure to the virus.

# 1.3.3 Social Stigma and Isolation

Social stigma associated with being a healthcare worker during the pandemic also contributed to psychological distress. Many HCWs faced discrimination from their communities, with some being avoided by neighbors and friends due to fear of contagion (AlAteeq et al., 2020). This social rejection led to increased feelings of isolation and emotional distress, making it difficult for HCWs to find social support during a time when they needed it the most.

Johnstone (2021) discussed how stigma surrounding mental health issues prevented many HCWs from seeking professional help. In Saudi Arabia, cultural perceptions of mental health often discourage individuals from openly discussing their psychological struggles, further exacerbating the challenges faced by HCWs.

# 1.3.4 Economic and Job Security Concerns

Financial instability and job insecurity were additional stressors for HCWs during the pandemic. Temporary healthcare workers, in particular, faced uncertainties regarding job contracts, which contributed to heightened anxiety levels (Alhadi et al., 2021). A study by Badahdah et al. (2021) in Oman found that economic concerns were a significant predictor of psychological distress among HCWs, highlighting a similar trend observed in Saudi Arabia.

## 1.4 Coping Mechanisms and Psychological Resilience

Despite the significant psychological challenges faced by HCWs, many employed various coping mechanisms to manage stress and maintain their mental well-being. Coping strategies can be categorized into adaptive and maladaptive mechanisms.

#### 1.4.1 Adaptive Coping Strategies

Adaptive coping strategies refer to positive behaviors that help individuals manage stress effectively. These include mindfulness, physical exercise, seeking social support, and engaging in relaxation techniques (Al Mutair et al., 2021). Research has shown that HCWs who practiced mindfulness and stress management techniques reported lower levels of anxiety and depression compared to those who did not (Chen et al., 2021).

The implementation of institutional support programs also played a crucial role in helping HCWs manage their psychological distress. Hospitals and healthcare institutions in Saudi Arabia introduced mental health support services, including counseling sessions and peer support groups, to provide emotional support for HCWs (WHO, 2023).

#### 1.4.2 Maladaptive Coping Strategies

On the other hand, some HCWs resorted to maladaptive coping strategies, such as substance use or emotional withdrawal, to cope with stress. Studies have shown that high levels of psychological distress can lead to unhealthy coping behaviors, which may further exacerbate mental health issues (Tracy et al., 2020).

#### 1.5 The Need for Policy Reforms and Mental Health Interventions

Given the significant impact of psychological distress on HCWs, there is an urgent need for policy reforms and mental health interventions to support their well-being. Several recommendations have been proposed to address this issue, including:

- 1. **Strengthening Mental Health Infrastructure:** Integrating mental health services within hospitals and providing immediate psychological support for HCWs (Bahamdan, 2021).
- 2. **Promoting Work-Life Balance:** Implementing flexible work schedules and mandatory rest periods to prevent burnout (Al Muharraq, 2021).
- 3. **Reducing Stigma and Encouraging Help-Seeking Behavior:** Launching public awareness campaigns to reduce stigma associated with mental health issues among HCWs (Heinrichs et al., 2006).

## 1.6 Research Objectives

This paper aims to:

- 1. Examine the prevalence of psychological symptoms among HCWs in Saudi Arabia.
- 2. Identify key factors contributing to psychological distress.
- 3. Analyze coping strategies employed by HCWs.
- 4. Propose recommendations for improving mental health support for HCWs.

# 2. Psychological Impact of COVID-19 on Healthcare Workers in Saudi Arabia

## 2.1 Preamble

The COVID-19 pandemic has had far-reaching consequences on healthcare systems worldwide, placing immense pressure on healthcare workers (HCWs) at the frontline of the crisis. In Saudi Arabia, HCWs faced unprecedented challenges, including increased workloads, heightened exposure to infection, and the emotional toll of treating critically ill patients. These factors contributed to a significant rise in psychological distress, including anxiety, depression, post-traumatic stress disorder (PTSD), and burnout.

This section explores the psychological impact of COVID-19 on HCWs in Saudi Arabia, focusing on the prevalence of mental health disorders, the primary stressors contributing to psychological distress, and the broader implications for healthcare professionals. By examining existing research and case studies, this analysis aims to highlight the urgent need for mental health support and policy interventions to mitigate the long-term effects of the pandemic on HCWs.

## 2.2 Prevalence of Psychological Symptoms Among HCWs in Saudi Arabia

# 2.2.1 Anxiety and Depression

Anxiety and depression were among the most commonly reported psychological symptoms among HCWs during the COVID-19 pandemic. Studies conducted in Saudi Arabia found that a significant proportion of HCWs experienced moderate to severe anxiety and depression due to prolonged exposure to stressful situations (Almalki et al., 2021; Bahamdan, 2021).

A study by Alwaqdani et al. (2021) assessed the psychological impact of the pandemic on HCWs in Riyadh, revealing that over **40%** of respondents reported symptoms of anxiety, while nearly **30%** exhibited signs of depression. Similarly, Mohsin et al. (2021) found that HCWs working in high-risk environments, such as

intensive care units (ICUs) and emergency departments, experienced higher levels of anxiety due to their frequent interactions with COVID-19 patients.

#### 2.2.2 Post-Traumatic Stress Disorder (PTSD)

The psychological trauma associated with treating COVID-19 patients led to an increase in PTSD cases among HCWs. PTSD symptoms, including flashbacks, nightmares, and heightened emotional reactivity, were commonly observed among those who witnessed high mortality rates and intense suffering (Saragih et al., 2021).

In Saudi Arabia, frontline HCWs expressed significant emotional distress due to the rapid deterioration of patients' health and the overwhelming number of deaths they encountered daily (Al Muharraq, 2021). This distress was exacerbated by the lack of adequate psychological support systems, leaving many HCWs struggling to cope with the emotional burden of their work.

#### 2.2.3 Burnout and Emotional Exhaustion

Burnout, a state of chronic physical and emotional exhaustion, was another prevalent psychological issue among HCWs in Saudi Arabia. Meo et al. (2021) reported that **over 50%** of HCWs in Saudi Arabia experienced symptoms of burnout, particularly those working in high-pressure environments.

Burnout was primarily driven by excessive workloads, extended working hours, and the constant pressure of managing critically ill patients. The emotional toll of witnessing suffering and death on a daily basis contributed to feelings of helplessness and emotional detachment among HCWs (Kotera et al., 2022).

## 2.3 Key Stressors Contributing to Psychological Distress

#### 2.3.1 Fear of Infection and Transmission

One of the most significant stressors for HCWs during the COVID-19 pandemic was the fear of contracting the virus and transmitting it to their families. Given the highly contagious nature of COVID-19, HCWs were at an increased risk of infection, leading to heightened anxiety and persistent fear (Mohsin et al., 2021).

A study by Alhurishi et al. (2021) found that **nearly 70%** of HCWs in Saudi Arabia expressed concerns about infecting their loved ones, leading many to self-isolate and minimize social interactions. This self-imposed isolation contributed to feelings of loneliness and emotional distress.

# 2.3.2 Increased Workload and Staff Shortages

The overwhelming surge in COVID-19 cases placed immense pressure on Saudi Arabia's healthcare infrastructure, leading to increased workloads for HCWs. Many hospitals faced staffing shortages, forcing HCWs to work longer shifts with minimal rest periods (Aymerich et al., 2022).

A study by Al Mutair et al. (2021) highlighted that **over 60%** of HCWs in Saudi Arabia reported working extended hours due to staff shortages, leading to physical exhaustion and emotional fatigue. The relentless pace of work left little time for self-care, contributing to burnout and declining mental health.

# **2.3.3** Lack of Personal Protective Equipment (PPE)

During the initial phases of the pandemic, shortages of PPE were a major concern for HCWs worldwide, including in Saudi Arabia. Inadequate access to protective gear heightened anxiety levels among HCWs, as they feared exposure to the virus due to insufficient safety measures (WHO, 2023).

AlAteeq et al. (2020) noted that HCWs who faced PPE shortages reported higher levels of stress and anxiety compared to those with adequate protective measures. The uncertainty surrounding PPE availability added to the overall psychological burden of HCWs.

# 2.3.4 Social Stigma and Discrimination

HCWs in Saudi Arabia also faced social stigma and discrimination due to their association with COVID-19 patients. Many HCWs reported being avoided by neighbors and experiencing discrimination in public spaces due to fears of contagion (Alothman et al., 2021).

This social rejection contributed to feelings of isolation and emotional distress, making it difficult for HCWs to seek support from their communities. Johnstone (2021) emphasized that stigma surrounding mental health issues further discouraged HCWs from seeking psychological help, exacerbating their distress.

## 2.3.5 Economic and Financial Stress

Economic instability and financial concerns added another layer of stress for HCWs during the pandemic. Many temporary and contract-based healthcare workers faced uncertainties regarding job security, leading to heightened financial anxiety (Badahdah et al., 2021).

A study by Alhadi et al. (2021) found that **financial concerns** were a significant predictor of psychological distress among HCWs in Saudi Arabia. The fear of losing employment, combined with increased living expenses, contributed to elevated stress levels.

## 2.4 Broader Implications for Healthcare Professionals

## 2.4.1 Impact on Job Performance and Patient Care

The psychological distress experienced by HCWs had significant implications for job performance and patient care. Burnout and emotional exhaustion led to decreased focus, increased medical errors, and reduced overall efficiency in healthcare settings (Tracy et al., 2020).

Research by Bahamdan (2021) found that HCWs experiencing high levels of stress were more likely to report decreased job satisfaction and lower engagement in patient care. This decline in job performance not only affected HCWs' well-being but also compromised patient safety and healthcare outcomes.

#### 2.4.2 Long-Term Mental Health Consequences

The long-term psychological consequences of the COVID-19 pandemic on HCWs remain a significant concern. Studies suggest that prolonged exposure to high-stress environments increases the risk of developing chronic anxiety disorders, PTSD, and other mental health conditions (Saragih et al., 2021).

A study by Xiong et al. (2020) emphasized the need for long-term mental health monitoring and interventions to support HCWs in coping with the psychological aftermath of the pandemic. Without proper mental health support, many HCWs may continue to experience distress long after the crisis has subsided.

## 2.4.3 Need for Policy Interventions and Mental Health Support

The COVID-19 pandemic underscored the urgent need for mental health interventions and policy reforms to support HCWs. WHO (2023) provided guidelines on mental health interventions, recommending structured counseling sessions, peer support programs, and stress management workshops for HCWs.

In Saudi Arabia, several hospitals implemented mental health programs to support HCWs, including access to psychological counseling and well-being initiatives (Al Muharraq, 2021). However, there remains a need for **systematic mental health policies** that prioritize HCWs' well-being and provide sustainable support mechanisms.

# **3. Factors Contributing to Psychological Symptoms**

## 3.1 Prolegomena

The psychological well-being of healthcare workers (HCWs) has been a significant concern, particularly during and after the COVID-19 pandemic. In Saudi Arabia, HCWs faced numerous challenges that led to increased levels of stress, anxiety, depression, and burnout. These psychological symptoms were not random occurrences but were driven by various factors that exacerbated mental health issues among HCWs.

Understanding the contributing factors to psychological distress among HCWs is critical for developing effective mental health interventions and policies. This section explores the key factors that contributed to the prevalence of psychological symptoms among HCWs in Saudi Arabia, including occupational stress and burnout, fear of infection and transmission, social stigma and isolation, financial and job security concerns, lack of institutional support, and personal coping mechanisms.

By analyzing these factors, this section aims to provide a comprehensive understanding of the mental health challenges HCWs faced and emphasize the need for workplace reforms and psychological support systems to mitigate the long-term impact of these stressors.

## 3.2 Occupational Stress and Burnout

# 3.2.1 Increased Workload and Long Working Hours

One of the most significant contributors to psychological distress among HCWs in Saudi Arabia was occupational stress, primarily driven by increased workloads and extended working hours. The surge in COVID-19 cases placed immense pressure on healthcare systems, leading to staff shortages and excessive workloads for frontline workers (Almalki et al., 2021).

A study by Meo et al. (2021) found that **over 60%** of HCWs in Saudi Arabia reported working longer shifts, with some exceeding 12-hour workdays. These extended hours led to physical exhaustion, emotional fatigue, and a decline in overall well-being. The constant exposure to critically ill patients, combined with the pressure to make life-saving decisions, contributed to heightened stress levels.

## 3.2.2 Emotional Exhaustion and Compassion Fatigue

Emotional exhaustion was another key factor in HCWs' psychological distress. Many HCWs experienced **compassion fatigue**, a state of emotional depletion caused by prolonged exposure to suffering and death (Kotera et al., 2022).

A study by Bahamdan (2021) highlighted that HCWs who regularly treated COVID-19 patients faced **higher** rates of emotional exhaustion than those in non-COVID-19 departments. The inability to save patients despite best efforts led to feelings of helplessness, frustration, and emotional detachment, further contributing to burnout.

#### 3.2.3 Lack of Rest and Recovery Time

Healthcare workers often struggled to find time for rest and recovery. The high patient load and pressure to meet healthcare demands meant that many HCWs had limited opportunities for breaks or time off (Alwaqdani et al., 2021). Chronic sleep deprivation and lack of proper rest significantly increased the risk of mental health issues such as depression and anxiety.

A study by Al Muharraq (2021) suggested that HCWs who did not receive adequate rest were twice as likely to experience symptoms of burnout compared to those who had structured work schedules. This underscores the importance of work-life balance in maintaining the mental well-being of HCWs.

## 3.3 Fear of Infection and Transmission

## 3.3.1 Risk of Exposure to COVID-19

HCWs were at a heightened risk of contracting COVID-19 due to their direct and frequent exposure to infected patients. The fear of getting infected was a major source of anxiety, particularly in the early stages of the pandemic when uncertainty about the virus was high (Mohsin et al., 2021).

A study by Alhurishi et al. (2021) found that 70% of HCWs in Saudi Arabia experienced significant anxiety related to infection risk, particularly those working in emergency and intensive care units. This fear was exacerbated by PPE shortages and the high transmissibility of the virus.

#### 3.3.2 Fear of Transmitting the Virus to Family Members

Another significant concern for HCWs was the possibility of transmitting the virus to their loved ones. Many HCWs self-isolated from their families to minimize the risk of transmission, leading to increased loneliness and emotional distress (Alothman et al., 2021).

Studies have shown that HCWs who had elderly family members or immunocompromised individuals in their households faced higher levels of stress and anxiety due to the fear of infecting them (Xiong et al., 2020). This added psychological burden made it difficult for HCWs to focus on their work without constant worry.

#### 3.4 Social Stigma and Isolation

# **3.4.1 Discrimination Against Healthcare Workers**

HCWs in Saudi Arabia faced social stigma due to their association with COVID-19 patients. Many reported experiencing discrimination and avoidance from community members, further exacerbating feelings of isolation and emotional distress (AlAteeq et al., 2020).

A study by Johnstone (2021) highlighted that some HCWs were treated with suspicion in public spaces, with others avoiding them due to fear of contagion. This social rejection led to increased psychological distress and made HCWs feel undervalued and unappreciated for their efforts.

# 3.4.2 Lack of Social Support

Social support is a crucial factor in maintaining mental well-being, yet many HCWs reported limited emotional support from their communities during the pandemic (Bahamdan, 2021). The stigma associated with being a healthcare worker created barriers to seeking help, leading to further isolation and psychological distress.

Research by Heinrichs et al. (2006) found that cultural perceptions of mental health in Saudi Arabia often discourage individuals from openly discussing their struggles, making it difficult for HCWs to seek psychological support.

## 3.5 Financial and Job Security Concerns

# 3.5.1 Economic Instability and Financial Stress

The financial impact of the pandemic was another major contributor to psychological distress among HCWs. While some healthcare professionals received financial incentives for their work, others, particularly contract-based and temporary workers, faced job uncertainties (Badahdah et al., 2021).

A study by Alhadi et al. (2021) found that HCWs who experienced financial instability were more likely to report symptoms of stress and anxiety compared to those with stable incomes. Uncertainty regarding job contracts and salary reductions led to increased financial stress, further exacerbating mental health issues.

## 3.5.2 Job Insecurity and Workplace Pressure

Some HCWs feared losing their jobs due to hospital budget constraints and restructuring efforts. This job insecurity created additional stress, particularly among younger healthcare professionals who were still establishing their careers (Fageera et al., 2021).

Anxiety over job loss and workplace instability contributed to **chronic stress**, **reduced morale**, **and lower job satisfaction** among HCWs, further affecting their mental well-being.

# 3.6 Lack of Institutional Support and Mental Health Programs

# 3.6.1 Insufficient Psychological Support Services

Despite the severe mental health impact of COVID-19, many HCWs in Saudi Arabia reported limited access to psychological support services (Al Mutair et al., 2021). Hospitals primarily focused on patient care, often neglecting the mental well-being of their healthcare staff.

A study by WHO (2023) highlighted that structured mental health programs were essential in reducing psychological distress among HCWs. However, many hospitals in Saudi Arabia lacked comprehensive mental health support systems, leaving HCWs to cope with stress on their own.

### 3.6.2 Need for Workplace Interventions

To address the psychological burden on HCWs, hospitals need to implement structured workplace interventions, such as stress management workshops, peer support programs, and mental health counseling (Tracy et al., 2020).

Al Muharraq (2021) emphasized that creating a supportive work environment, reducing stigma around mental health, and encouraging help-seeking behavior were crucial steps in improving HCWs' psychological well-being.

## 4. Coping Mechanisms and Psychological Resilience

#### 4.1 Introduction

The COVID-19 pandemic placed immense psychological strain on healthcare workers (HCWs) in Saudi Arabia, leading to increased anxiety, depression, burnout, and post-traumatic stress disorder (PTSD) (Almalki et al., 2021; Bahamdan, 2021). However, despite these challenges, many HCWs developed coping mechanisms to manage stress and improve their psychological resilience. Coping strategies played a crucial role in determining how well HCWs adapted to extreme stress and whether they could sustain their mental well-being while continuing to provide high-quality patient care.

Psychological resilience refers to an individual's ability to adapt positively to adversity, maintain emotional stability, and recover from stress (Chen et al., 2021). Resilience is particularly important for HCWs, as it enables them to navigate the demands of their profession without succumbing to psychological distress.

This section explores the various coping mechanisms and resilience-building strategies employed by HCWs in Saudi Arabia, categorizing them into adaptive coping strategies, maladaptive coping behaviors, institutional support and interventions, and policy recommendations for strengthening mental health resilience among HCWs.

# **4.2 Adaptive Coping Strategies**

Adaptive coping strategies are positive and constructive approaches that help individuals manage stress effectively and maintain their emotional well-being. These strategies allow HCWs to process their emotions, regulate their stress responses, and sustain their professional performance even in high-pressure environments.

## 4.2.1 Mindfulness and Stress Management Techniques

Mindfulness refers to the practice of focusing on the present moment and cultivating awareness without judgment. Research has shown that mindfulness-based interventions significantly reduce stress, anxiety, and depression among HCWs (Al Mutair et al., 2021).

HCWs in Saudi Arabia reported using mindfulness exercises such as deep breathing, meditation, and guided relaxation techniques to manage stress and regulate emotional responses. A study by Chen et al. (2021) found that HCWs who practiced mindfulness regularly exhibited lower levels of anxiety and burnout compared to those who did not engage in mindfulness activities.

Hospitals and medical institutions have also introduced stress management workshops to help HCWs develop mindfulness skills and improve their resilience. These programs have shown promising results in reducing emotional exhaustion and enhancing mental clarity among HCWs.

## 4.2.2 Social Support and Peer Networks

Social support is a protective factor against psychological distress, as it provides emotional reassurance and a sense of belonging. HCWs who maintained strong social connections with colleagues, friends, and family members were better able to cope with the psychological pressures of their work (Bahamdan, 2021).

A study by Alhadi et al. (2021) found that HCWs who regularly communicated with their peers and engaged in group discussions about their experiences reported lower levels of stress and isolation. Peer support groups allowed HCWs to share their challenges, exchange coping strategies, and receive emotional validation from colleagues facing similar struggles.

Several hospitals in Saudi Arabia introduced peer mentoring programs, where experienced HCWs provided guidance and emotional support to junior staff. These initiatives created a supportive work environment and reinforced psychological resilience among HCWs.

#### **4.2.3 Physical Activity and Exercise**

Regular physical activity is associated with improved mental health and reduced stress levels. Exercise enhances mood, boosts energy levels, and promotes overall psychological resilience by releasing endorphins, the body's natural stress relievers (Kotera et al., 2022).

HCWs who engaged in daily exercise routines, yoga, or outdoor activities reported better emotional stability and lower levels of anxiety. A study by Alothman et al. (2021) found that HCWs who maintained an active lifestyle were 35% less likely to experience severe burnout compared to those with a sedentary lifestyle.

Recognizing the benefits of exercise, some hospitals in Saudi Arabia implemented wellness programs, offering fitness sessions and relaxation spaces for HCWs to engage in physical activities.

#### 4.2.4 Time Management and Work-Life Balance

Maintaining a balance between work and personal life is essential for preventing burnout and sustaining mental well-being. HCWs who effectively managed their schedules, took regular breaks, and prioritized self-care were less likely to experience chronic stress (Al Muharraq, 2021).

Work-life balance strategies used by HCWs included:

- Setting boundaries between work and home life to prevent emotional exhaustion.
- Allocating time for hobbies, relaxation, and family interactions to recharge mentally.
- Practicing self-care routines, such as adequate sleep, proper nutrition, and leisure activities.

Institutions that implemented flexible work schedules and mandatory rest periods helped HCWs recover from emotional fatigue and maintain their resilience.

## 4.3 Maladaptive Coping Behaviors

While many HCWs engaged in adaptive coping strategies, some resorted to maladaptive coping behaviors, which can provide temporary relief but ultimately worsen mental health issues. Maladaptive coping mechanisms include avoidance, substance use, emotional withdrawal, and excessive work engagement.

#### **4.3.1** Avoidance and Emotional Suppression

Some HCWs coped with stress by avoiding discussions about their emotions or suppressing negative feelings. Avoidance coping often leads to increased psychological distress, as unresolved emotions accumulate over time and contribute to anxiety and depressive symptoms (Tracy et al., 2020).

A study by AlAteeq et al. (2020) found that HCWs who suppressed their emotions were more likely to experience higher levels of PTSD and insomnia. Encouraging open dialogue about mental health and providing safe spaces for emotional expression can help mitigate these issues.

#### **4.3.2** Substance Use and Unhealthy Coping Mechanisms

Some HCWs turned to substance use, excessive caffeine consumption, or unhealthy eating habits as a way to cope with stress. While these behaviors may provide short-term relief, they contribute to long-term health problems and exacerbate psychological distress (Saragih et al., 2021).

Studies have shown that substance use among HCWs increased during the pandemic, highlighting the need for mental health interventions and support programs to address unhealthy coping behaviors.

## 4.3.3 Overworking and Perfectionism

Some HCWs responded to stress by immersing themselves in work to distract from emotional distress. While dedication to patient care is commendable, excessive work engagement without proper rest can lead to burnout, emotional detachment, and decreased job satisfaction (Al Mutair et al., 2021).

Encouraging healthy work habits and promoting self-care can help HCWs avoid overworking and maintain emotional well-being.

## 4.4 Institutional Support and Mental Health Interventions

## 4.4.1 Psychological Counseling and Therapy Services

Providing accessible mental health counseling and therapy **sessions** can help HCWs manage stress effectively. Several hospitals in Saudi Arabia have introduced employee assistance programs (EAPs) offering psychological support services (WHO, 2023).

Therapeutic approaches such as cognitive-behavioral therapy (CBT), stress management training, and resilience-building workshops have been shown to improve HCWs' mental well-being.

## 4.4.2 Workplace Mental Health Policies

Implementing **structured workplace mental health policies** can create a supportive environment for HCWs. Policies should include:

- Regular mental health check-ins for HCWs.
- Mandatory rest breaks to prevent burnout.
- Mental health awareness campaigns to reduce stigma.

Hospitals that adopted mental health-friendly policies reported higher job satisfaction and lower stress levels among HCWs (Bahamdan, 2021).

## 5. Policy Implications and Recommendations

#### 5.1 Prolegomena

The COVID-19 pandemic highlighted critical gaps in the mental health support systems available to healthcare workers (HCWs) in Saudi Arabia. The psychological distress experienced by HCWs—including anxiety, depression, burnout, and PTSD—emphasized the urgent need for comprehensive mental health policies and workplace reforms. Addressing these challenges requires evidence-based policy interventions that prioritize the well-being of HCWs, ensuring that they receive the necessary support to manage stress and maintain resilience. This section outlines key policy implications and provides actionable recommendations to improve mental health infrastructure, workplace policies, and institutional support systems for HCWs in Saudi Arabia. By implementing these recommendations, healthcare institutions and policymakers can foster a more sustainable, resilient, and psychologically healthy workforce.

## **5.2 Strengthening Mental Health Infrastructure**

## 5.2.1 Integrating Mental Health Services in Healthcare Institutions

One of the primary policy implications of the COVID-19 pandemic is the need to integrate mental health services within hospitals and healthcare facilities. Mental health should be considered an essential component of occupational health, with dedicated resources allocated to support HCWs.

# **Recommended Actions**

- Establish on-site mental health clinics within hospitals, providing psychological assessments, counseling, and therapy sessions.
- Develop employee assistance programs (EAPs) offering confidential mental health consultations for HCWs.
- Ensure mental health professionals are readily available to provide immediate psychological support for HCWs experiencing distress.

## **5.2.2** Expanding Access to Mental Health Resources

Many HCWs in Saudi Arabia reported limited access to mental health resources, making it difficult to seek help when needed (WHO, 2023). Expanding access to mental health support is crucial for addressing long-term psychological consequences of the pandemic.

## **Recommended Actions**

- Introduce telemedicine mental health services, allowing HCWs to access counseling remotely.
- Provide mental health hotlines staffed by trained professionals to offer immediate psychological support.
- Develop online stress management programs tailored specifically for HCWs.

# 5.3 Enhancing Workplace Policies and Organizational Support

## **5.3.1 Implementing Mandatory Mental Health Training**

Mental health literacy is essential for reducing stigma and encouraging HCWs to seek help. **Training programs** can equip HCWs with coping strategies and provide guidance on managing stress effectively.

## **Recommended Actions**

• Implement mandatory mental health training sessions for all HCWs.

- Develop resilience-building workshops to help HCWs manage psychological stress during crises.
- Train hospital leadership and supervisors to recognize signs of psychological distress in their teams and provide appropriate support.

# **5.3.2** Establishing Workplace Mental Health Policies

Workplace policies should be designed to promote work-life balance, prevent burnout, and encourage help-seeking behavior. Institutional policies must prioritize HCWs' well-being and create an environment that supports mental health.

#### **Recommended Actions**

- Introduce mandatory rest breaks and shift rotations to prevent overworking and burnout.
- Implement mental health days as part of employee leave policies.
- Develop peer support programs, allowing HCWs to connect with colleagues for emotional support.

#### **5.3.3 Reducing Stigma Around Mental Health**

One of the biggest barriers to seeking mental health support is the stigma associated with psychological distress. Many HCWs avoid seeking help due to fears of professional repercussions or societal judgment (Johnstone, 2021).

## **Recommended Actions**

- Launch public awareness campaigns to normalize discussions about mental health in the healthcare profession.
- Encourage hospital administrators to openly discuss mental health, demonstrating institutional commitment to supporting HCWs.
- Implement anonymous mental health self-assessments, allowing HCWs to evaluate their well-being without fear of judgment.

# **5.4 Investing in Long-Term Mental Health Research and Policy Development**

## 5.4.1 Conducting Longitudinal Studies on HCWs' Mental Health

Understanding the long-term effects of psychological distress on HCWs is crucial for developing sustainable mental health policies. Longitudinal studies can help track mental health trends and identify key areas for intervention.

## **Recommended Actions**

- Establish national mental health research programs focused on HCWs' psychological well-being.
- Conduct annual surveys assessing mental health status, job satisfaction, and stress levels among HCWs.
- Use research findings to inform policy decisions, ensuring evidence-based mental health interventions.

# **5.4.2** Allocating Government Funding for Mental Health Programs

Government investment in mental health initiatives is essential for sustaining long-term interventions. Adequate funding can support mental health campaigns, training programs, and psychological support services for HCWs.

# **Recommended Actions**

- Increase government funding for mental health infrastructure in hospitals.
- Provide financial incentives for hospitals that implement comprehensive mental health programs.
- Collaborate with international organizations (e.g., WHO) to adopt global best practices for HCW mental health support.

## 6. CONCLUSION

The psychological impact of COVID-19 on HCWs in Saudi Arabia has been profound, with high prevalence rates of anxiety, depression, PTSD, and burnout. Factors such as occupational stress, social stigma, and economic concerns contributed to increased psychological distress.

Despite the challenges, HCWs employed adaptive coping mechanisms and benefitted from institutional support programs. Moving forward, strengthening mental health infrastructure, promoting work-life balance, and reducing stigma are crucial steps in safeguarding the mental well-being of HCWs.

Future research should explore long-term psychological outcomes among HCWs and evaluate the effectiveness of mental health programs in Saudi Arabia. By prioritizing the mental health of HCWs, Saudi Arabia can enhance healthcare resilience and improve patient care outcomes.

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