

## Psychological impact of Covid-19

Covid-19'un Psikolojik Etkileri

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## ÖZET

Covid-19 pandemisi, 21. yüzyılın en büyük fiziksel, sosyal, ekonomik ve psikolojik krizi olarak dünya çapında derin izler bırakmıştır. Yalnızca milyonlarca insanın hayatını kaybetmesine sebep olmakla kalmayıp, ardında karmaşık sosyal ve psikolojik bir miras bırakmıştır. Bu derlemede, pandeminin psikoloji üzerindeki etkilerine kapsamlı bir bakış sunmak ve psikolojik perspektiften iki aşamalı kavram önerileri geliştirmek amaçlanmıştır. Literatür incelendiğinde, Covid-19'un hem sağlık çalışanları hem de genel kamu üzerinde psikolojik etkileri olduğu açıkça görülmektedir. Her iki taraf da farklı becerilere ve psikolojik destek mekanizmalarına ihtiyaç duymaktadır. Sağlık çalışanlarının, stresle daha kolay başa çıkabilme eğitimi alması ve hem virüslere hem de psikolojik etkilerine karşı korunmaları gerekmektedir; zira bu durumlar da yayılarak önemli psikolojik ve hatta psikopatolojik miraslar bırakabilmektedir. Kamu içinse, insanların ihtiyaç duydukları zamanlarda kolayca psikiyatristlere ve klinik psikologlara erişebilmeleri ve hükümet tarafından ücretsiz olarak sunulan kurslar aracılığıyla yeni normale uyum sağlayabilmeleri için eğitim almaları gerekmektedir.

Sonuç olarak, Covid-19'dan kurtulmak ve gelecekte olası pandemilere karşı psikolojik olarak hazırlıklı olmak için daha geniş bir psikolojik perspektife ihtiyaç vardır.

**Anahtar Kelimeler:** COVID-19, Tıp mensupları, Sağlık çalışanları,  
Psikolojik Destek, Yeni normal

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## ABSTRACT

The Covid-19 pandemic has emerged as an unparalleled crisis of the 21st century, with profound physical, social, economic, and psychological repercussions globally. Its impact transcends the staggering mortality toll, leaving behind a complex legacy of social and psychological ramifications. This review endeavors to provide a thorough analysis of the pandemic's psychological implications and proposes a dual-phase conceptual framework for psychological intervention. An examination of extant literature reveals the pandemic's pervasive psychological influence on both healthcare workers and the general populace, necessitating distinct support mechanisms and skill sets. Healthcare professionals require training to effectively manage stress and safeguard against not only the physical pathogen but also the accompanying 'psychological effects' that propagate and leave significant psychological and even psychopathological legacies. For the public, there must be readily available access to psychiatric and clinical psychological services during times of crisis, complemented by government-sponsored educational programs to equip individuals with strategies for adapting to the 'new normal.' In conclusion, a comprehensive psychological strategy is imperative for recovery from Covid-19 and to fortify our psychological preparedness for potential future pandemics.

**Keywords:** COVID-19, Healthcare Workers, Social impact, Pandemic recovery, Psychiatric services

## 1. Introduction

Throughout history, humanity has persevered and evolved due to an inherent resilience and an unyielding drive to overcome infectious diseases that have ceaselessly sought to debilitate or decimate populations. This enduring struggle continues as countless dedicated medical professionals and researchers tirelessly combat these viral adversaries for the sake of human welfare. The early 21st century witnessed significant viral threats with the emergence of Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) in 2002 and the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in 2012. Most recently, the highly pathogenic Covid-19 pandemic has engulfed the globe with unprecedented scale and severity (1). As of October 2021, the World Health Organization (WHO) reported a staggering 233 million cases and 4 million fatalities. In these bleak times, frontline healthcare professionals have emerged as the cornerstone of survival for nations worldwide, embodying hope and resilience in the face of an invisible, yet formidable adversary.

## 2. History and Background

Numerous influenza A viruses, particularly the low pathogenic avian influenza (LPAI H5/H7 types), pose no threat to chickens, aquatic and wading birds, swine, and other avian species. However, the highly pathogenic avian influenza (HPAI H5N1 type) leads to avian influenza, with fatal consequences for bird populations. In 2005, this strain reached Turkey via migratory birds, triggering a substantial epidemic that led to the culling of 400,000 chickens to prevent further spread (2). HPAI can also affect other animals; for instance, domestic cats and tigers in a zoo were infected after being fed contaminated birds, and humans can contract the virus through close contact, such as caregiving in homes. In Türkiye, the 2005 outbreak resulted in the death of four out of 21 confirmed human cases (3).

Tracing back to the 1800s, prior to the Spanish influenza pandemic, there were notable influenza epidemics, including the ones in Denmark (1846-1848) and Russia (1889-1892), the latter causing over a million deaths. The infamous Spanish influenza originated in the United States and rapidly spread to Europe, claiming over 100 million lives worldwide. This strain was inadvertently transported by American troops to Europe during World War I. Subsequently, the Asian influenza in 1957, caused by an antigenic shift in the H2N2 virus, resulted in one million deaths, and the Hong Kong influenza in 1968, caused by an H3N2 mutation, led to 750,000 deaths. The Russian influenza of 1977 was a laboratory accident related to vaccine development. The H1N1 virus, also known as the Mexican Pig influenza, originated in North America and was responsible for approximately 500,000 deaths. Unlike earlier pandemics, which predominantly affected the elderly or those with immune-related conditions, the Spanish influenza impacted individuals across all age demographics.

In the new millennium, the emergence of severe acute respiratory syndrome (SARS) marked another zoonotic pandemic originating from the southern Guangdong province of China. The virus, traced back to horseshoe bats in Yunnan province, spread to Asia and subsequently to Europe and North America, with a fatality rate of about 10% among those infected. Another zoonotic coronavirus, Middle East Respiratory Syndrome (MERS-CoV), emerged with less severe symptoms than SARS. Originating from fruit bats, it was transmitted to camels and then to humans, particularly those working closely with camels in the Arabian Peninsula, resulting in a fatality rate of 35% (4).

COVID-19, identified in a wet seafood market in Wuhan, China, in December 2019, represents the third zoonotic coronavirus pandemic connected to bats, closely related to SARS-CoV-1 and MERS-CoV. There have been speculations about its origin, including potential links

to the Wuhan Institute of Virology. After its initial emergence, the Chinese government reported the outbreak to the WHO at the end of December 2019. By January 2020, it was declared a global pandemic and emergency. Italy was the first European nation significantly affected as the virus spread rapidly worldwide. As of November 8, 2023, the pandemic has resulted in 772,011,164 confirmed cases and 6,979,786 deaths globally (5).

### **3. Importance of the Review**

This review is pivotal as pandemics have been recurrent challenges every half-century, and despite advancements in technology and ease of travel, containing infectious diseases has become increasingly arduous. Humans are inherently social beings, requiring connections and interactions that are vital for wellbeing. The Covid-19 pandemic has profoundly impacted billions due to lockdowns, placing immense strain on millions of medical staff, and delivering substantial medical, social, and psychological blows globally for over three years. This comprehensive review concentrates on the psychological dimensions of the pandemic, addressing the existing gaps in literature regarding its psychological toll on both the public and medical professionals. There is a pressing need for heightened awareness and strategic planning to rehabilitate from and anticipate future pandemics. This review specifically focuses on the psychological aftermath of the Covid-19 pandemic and offers a two-phased conceptual approach for psychological readiness and resilience in face of impending pandemics, from a psychological standpoint.

### **4. Frontline Health Professionals**

Frontline health professionals have been among the most vulnerable groups during the Covid-19 pandemic, facing unparalleled stress levels as they stood between humanity and the virus. A staggering 93% of healthcare workers reported experiencing stress, 86% experienced anxiety, 77% felt frustration, 76% reported exhaustion and burnout, and 75% felt overwhelmed. These figures underscore the sheer psychological toll of the pandemic on these individuals, who have had to contend with high-pressure workloads, intense stress, and the persistent threat of burnout—a condition more prevalent in healthcare workers even before the pandemic (6).

The mental and physiological challenges faced by healthcare workers stem from not only their professional duties but also from the unpreparedness of governments and healthcare systems to handle a crisis of this magnitude. The lack of protective equipment and adequate support has left many healthcare workers vulnerable, exacerbating mental health issues and contributing to a mood of despondency (7).

The psychological distress faced by these professionals is multifaceted. They are not only at risk of infection but also subject to the compounded effects of a heavy workload and the emotional toll of patient mortality. These factors have led to a significant increase in mental health symptoms among healthcare workers from 2018 to 2022, as compared to other worker groups. The prevalence of anxiety, depression, and stress among healthcare workers has been reported to range from 24.1% to 67.55% for anxiety, 12.1% to 55.89% for depression, and 29.8% to 62.99% for stress (8).

In response to these challenges, it is crucial to develop a psychological strategic plan to support the recovery and future resilience of healthcare workers. Such a plan should encompass not only health professionals but also the general public, who have been equally affected by the pandemic's far-reaching impacts. This approach would entail equipping medical professionals with the skills necessary to manage stress and protect themselves psychologically. For the public, a broader understanding of psychology is needed, including access to psychiatric and clinical psychology services, and skills-based training through governmental programs. The goal is to foster a holistic view of health that includes psychological well-being, especially during pandemics (9).

#### **4.1. Lockdown and social isolation**

Blaise Pascal once posited that the inability of a person to sit quietly in solitude is the root of all troubles; a notion that gains renewed relevance during the Covid-19 pandemic, which mandated widespread lockdowns and isolation. The pandemic has significantly disrupted psychosocial and socioeconomic aspects of life for billions globally. To mitigate virus transmission, nations have enforced quarantines, leading to prolonged periods of loneliness and anxiety, with far-reaching consequences such as chronic loneliness and psychological distress, impacting biological well-being (10).

Anxiety has surged as a natural response to this global human crisis, potentially leading to a lapse in logical reasoning and a shift towards reliance on belief and faith, stemming from vulnerability and despair. The isolation brought on by the pandemic is a potential risk factor for a spectrum of conditions, including anxiety, depression, adjustment disorder, insomnia, chronic stress, and possibly late-life dementia. Chronic loneliness is notably correlated with depression and suicide attempts, as documented in the literature. Loneliness can trap individuals in a self-perpetuating cycle, leading to further isolation as time progresses. Many people abhor the

thought of isolation, often seeking any distraction to escape the oppressive sensation of solitude (11).

Moreover, loneliness has been identified as a risk factor for several severe physical health issues, such as connective tissue disorders, sensory loss, autoimmune diseases, obesity, and cardiovascular problems. Thus, loneliness stands as a critical barrier to health. To address this and prepare for potential future pandemics, a strategic set of recommendations and action plans is essential. To cope with these issues—or even to prevent them—we require psychosocial professional support. This underscores the need for psychiatrists, clinical psychologists, and psychiatric nurses to be in optimal psychological condition to provide necessary guidance and assistance (12).

#### **4.2. Psychiatrists, Clinical Psychologists and Psychiatric Nursing**

Psychiatrists, clinical psychologists, and psychiatric nurses are indispensable in supporting individuals whose mental health has been adversely impacted, playing a crucial role in the recovery process (13). While professional codes and statements emphasize the importance of mental health professionals being adept at managing stress, organizations such as the British Association for Counselling and Psychotherapy (BACP) and the American Psychiatric Association (APA) acknowledge that these professionals are not impervious to stress, particularly occupational stress. This is especially pronounced when repeatedly working with trauma patients during a pandemic, compounded by their own personal pressures, heightening their susceptibility to distress (14).

The Covid-19 pandemic brought about an unanticipated surge in workload, rife with trauma and complicated by other mental health conditions due to the traumatic nature of the pandemic itself, presenting unique mental health challenges. This situation has particularly impacted psychiatrists, clinical psychologists, and psychiatric nurses (15).

There is substantial research indicating that frontline mental health professionals must acquire strategies to cope with occupational distress and fatigue (16). Therefore, it is essential to equip our frontline mental health and clinical personnel with the necessary skills to navigate and surmount these challenging times without succumbing to mental and physical health issues. After all, they are our guardians during such crises, warranting our support and investment in their well-being (17).

### 4.3. Other Mental Health Consequences in Public

The profound concern over Covid-19's impact on mental health has been echoed by global health authorities, including the World Health Organization (WHO) (18). The pandemic has precipitated a surge in depression, anxiety, loneliness, insomnia, substance abuse, self-harm, and suicidal behavior. Quarantine measures, while essential for controlling the virus's spread, have inadvertently left vulnerable groups such as women and children at risk of domestic abuse, with no means of escape from their abusers due to lockdown restrictions.

Mental health professionals are forecasting severe public health implications, particularly in terms of depression, suicide, and self-harm. The closure of shops and supermarkets also significantly affected individuals with alcohol dependence, exacerbating depression and withdrawal symptoms. Researchers anticipate a rise in neurotic disorders, such as obsessive-compulsive disorder (OCD) and anxiety disorders, likely exacerbated by the pandemic's emphasis on hand hygiene. The recommendation for 20-second handwashing, without clarity on frequency, may inadvertently foster OCD behaviors in those predisposed to anxiety (19).

Fear has been a pervasive sentiment, ranging from thanatophobia (fear of death) to fears of social interaction, isolation, stigmatization, and even shortages of food, potentially leading to psychopathological outcomes. This fear has driven behaviors such as hoarding, as a response to anxiety and concerns over resource scarcity, which aligns with OCD tendencies.

The economic fallout from the pandemic has been devastating, with millions losing jobs, especially in informal sectors, leading to heightened levels of depression and, in some cases, suicidal ideation due to the stress of meeting basic needs. Quarantine, while a necessary public health measure, has also strained family dynamics, increasing boredom, altering relationship dynamics, and potentially sparking conflict within households (20).

Misinformation spread via social media has fueled anxiety, fear, and depression, leaving individuals feeling paralyzed and uncertain about how to proceed. Such situations pose a significant risk of shifting from healthy to unhealthy psychological patterns.

Social stigma attached to the disease has deterred individuals from getting tested, for fear of isolation and societal exclusion, further complicating public health efforts.

Children, who experience and process stress and trauma differently from adults, have been especially affected. A lack of targeted interventions and preparedness from both society and governments has been evident.

To address these multifaceted issues, comprehensive measures including training, consulting, and psychotherapy are essential to help the public adapt to the 'new normal' and to mitigate the psychological aftermath of the pandemic.

## **5. The New Normal**

The phrase "new normal" first gained prominence during the 2008 Global Financial Crisis, signaling a shift in people's spending and work habits due to economic uncertainty and disrupted social constructs. This term further evolved during the Covid-19 pandemic, signifying the profound changes required to adapt to pandemic-influenced living in 2022.

The 'new normal' has fostered a host of psychopathological behaviors. The pandemic's pressures have prompted some to adopt behaviors like hoarding and excessive handwashing, potentially indicative of Obsessive-Compulsive Disorder (OCD). Health professionals, burdened by high workloads and challenges in managing distress, may experience heightened rates of depression (21).

The adaptation to this 'new normal' comes at a psychological cost. As a society, we are indebted to these new obligations, and repayment comes in various forms. One route involves learning to live within the constraints of this new reality, accepting the inherent challenges as part of life's tuition. Alternatively, others may struggle, paying a psychological toll as they grapple with the day-to-day realities of the pandemic.

With Covid-19 being among the most widespread respiratory viruses in history, mere hope for its cessation has proved futile. The health system has undergone significant changes in response to the pandemic, including shifts in categorization and conceptualization of health practices. But what of the psychological implications? Must our approach to psychopathological issues, counseling, psychotherapy, and even psychiatry evolve in kind?

Perhaps the 'new normal' in psychology should focus on empowering individuals to withstand challenging or rapidly changing conditions, not through resignation to obligation but through proactive adaptation. This may involve preemptively adjusting our mindset and lifestyle to be better prepared for future disruptions (22).

To achieve this, we must devise action plans for both health professionals and the public at large. Such plans should foster resilience, ensuring readiness for whatever challenges may arise, and fortifying our collective psychological fortitude against the unforeseen.

## 5.1. Two Phases of Concept Suggestions From A Psychology Perspective

**Phase One: Individual Stability and Coping Mechanisms:** The first phase in adapting to the new normal involves fostering individual psychological resilience. This can be achieved by educating people on stress management and promoting adaptability in challenging times. Governments could adopt policies where families are connected with clinical and social psychologists, who in turn may collaborate with psychiatrists as needed. For example, in Türkiye, family health medical centers are accessible in every community, providing each person with a family doctor. Incorporating psychologists into these centers could broaden the public's perception of health to include psychological well-being. By integrating psychological support within existing healthcare infrastructure, individuals can receive holistic care.

### *Public Skills Training for the New Normal*

Training the public to develop new skills pertinent to the new normal could involve setting up courses run by specialists. These courses would focus on stress management, self-awareness of psychological states, recognition of pathological patterns, and mutual support strategies. Such programs could be offered through public education centers, where a variety of skills are already taught. Empowering people with these skills would enable them to manage personal conflicts, stress, and enhance communication and support within their social networks.

**Phase Two: Integration of Psychology into Medical Education:** There is a need to incorporate more psychology courses into medical and nursing programs. In Türkiye, for instance, medical and nursing curricula currently include only a brief general behavioral science course. Expanding this to include more comprehensive psychological training would better prepare healthcare professionals to address the psychosocial aspects of patient care. Additionally, hospitals could offer in-house psychological training programs, and governments could provide university-affiliated psychological courses for medical staff.

### *Increasing Access to Psychological Services*

To address the shortage of mental health professionals, governments should strive to increase the number of available psychologists and psychiatrists. The current ratio in Türkiye is significantly lower than that in Europe and the global average. Improving access to psychological services requires not only policy support to increase these numbers but also cultural shifts in public perception. There is a need to normalize seeking psychological help, akin to visiting any other medical professional.

### *Public Education and Stigma Reduction*

A comprehensive communication strategy could help change public attitudes towards psychiatry and clinical psychology. Public education initiatives should illustrate the difference between normal behaviors, such as handwashing a few times a day, and behaviors associated with psychological disorders, like OCD, where handwashing could occur obsessively. By demystifying psychological conditions and treatment, governments can reduce stigma and encourage individuals to seek help without prejudice.

## **6. Conclusion**

The COVID-19 pandemic has starkly reminded us of the inextricable link between physical and psychological health. The unprecedented strain placed upon healthcare systems and individuals alike has necessitated a reevaluation of our psychological fortitude in the face of such global health crises. Frontline health professionals have borne a significant brunt of this impact, with alarming rates of stress, anxiety, burnout, and psychopathological symptoms. Moreover, the general populace has grappled with the 'new normal' of social isolation, economic upheaval, and a pervasive sense of uncertainty.

This review illuminates the critical importance of integrating psychological support into our healthcare paradigm, emphasizing a dual-phase approach to build resilience and establish coping mechanisms. In the immediate term, this involves equipping individuals and communities with the skills to manage stress and adapt to changing circumstances. For the long term, it requires a systemic integration of psychological education within medical and nursing curricula, enhancing the psychosocial competencies of healthcare professionals.

Furthermore, the pandemic has underscored the need for accessible psychiatric and clinical psychological services, along with public education to destigmatize mental health issues. To emerge stronger from this crisis and to prepare for potential future pandemics, it is imperative to normalize psychological support and cultivate a culture that values mental wellness as much as physical health.

As we move forward, the lessons learned during the COVID-19 pandemic must inform a comprehensive psychological strategy that spans individual, communal, and institutional levels. Only then can we ensure that our responses to such global challenges are as psychologically informed as they are medically grounded, fostering a society resilient enough to face whatever may come with strength and equanimity.

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