



The Epidemiological Impact of Mental Health Disorders in Post-Pandemic Societies: A Comprehensive Review

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Abstract

Background: The COVID-19 pandemic has resulted in unprecedented global health challenges, significantly impacting mental health across various populations. The emotional toll of the pandemic has led to the emergence of conditions such as post-pandemic stress disorder (PPSD), particularly among vulnerable groups, including healthcare workers and those with pre-existing mental health issues.

Methods: This review synthesizes existing literature on the epidemiology of mental health disorders in post-pandemic societies, focusing on PPSD and its prevalence. A comprehensive search of the PubMed database was conducted, utilizing MeSH terms and Boolean operators to identify relevant studies published between 2019 and 2023. The review includes findings from various demographic groups, including healthcare professionals and the general public.

Results: The findings indicate a significant prevalence of stress-related disorders, with studies revealing that 36.5% of older adults reported clinically significant symptoms of traumatic stress related to COVID-19. In healthcare workers, the incidence of post-traumatic stress disorder (PTSD) and burnout has markedly increased, with rates as high as 44% for PTSD in some studies. Moreover, the psychological impact extends to dietary habits and lifestyle changes, exacerbating mental health challenges.

Conclusion: The COVID-19 pandemic has highlighted the urgent need for mental health support and intervention strategies tailored to address the long-term psychological effects of global health crises.

Implementing early psychoeducation and accessible mental health resources is crucial to mitigate the impact of PPSD and enhance overall public health resilience.

Keywords: COVID-19, mental health, post-pandemic stress disorder, healthcare workers, epidemiology

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1. Introduction

Acute coronavirus illness (COVID-19) is regarded as a global pandemic due to fast viral dissemination. While the condition is generally moderate for most individuals, some patients, particularly the elderly and those with chronic comorbidities, may have severe bilateral pneumonia, acute respiratory distress syndrome, and subsequent multiorgan failure, potentially resulting in death [1-3]. The apprehension of infection, particularly the severity of the sickness and mortality, has indisputably engendered widespread worry and panic among several individuals. This worry may stem not just from concerns for one's own health but also from worries over the health and life of loved ones [4,5]. The COVID-19 epidemic has significantly impacted the mental health of the people, leaving a lasting imprint. The fear of the unknown, exemplified by the pandemic of a novel coronavirus declared by the World Health Organization (WHO) on 11 March 2020, exacerbates anxiety symptoms in society, thereby initially deteriorating the mental health of even those who are otherwise healthy [6,7].

The World Health Organization provides daily updates on coronavirus data. From 3 January 2020 to 17 April 2022, about 6.2 million individuals succumbed to COVID-19 globally. Considering the provided figures and information, the WHO is very concerned about the potential for disease proliferation and the transfer of infection from patients to healthcare personnel. Medical personnel often experience significant psychological stress due to their frontline role in combating the coronavirus [8]. The current workplace stressors, including exposure to disease, the risk of infecting loved ones, managing the deaths of hospitalized patients, the demands of extended on-call duty, excessive working hours, and insufficient personal protective equipment, have markedly exacerbated stress and anxiety levels [9,10]. Consequently, a much more prevalent and more distinctive syndrome seen in a greater proportion of medical professionals than before the pandemic is professional burnout disorder, frequently termed "covidian burnout" (derived from COVID-19 burnout) [11,12]. It is a psychiatric condition arising from prolonged exposure to emotional and/or psychological stimuli in the workplace. The disease has three fundamental aspects that constitute its core. The first aspect is emotional weariness, characterized by a profound depletion of vitality for life. The second aspect is depersonalization, characterized by a sense of detachment and the emergence of adverse emotions. Furthermore, the third aspect is a diminished assessment of personal accomplishments, linked to a perceived deficiency in professional efficacy. This condition undoubtedly undermines the healthcare system, since the job effectiveness of medical professionals afflicted by it significantly diminishes. The problem of absenteeism subsequently escalates, along with the probability of medical staff turnover, which unequivocally impacts the quality of healthcare for ill patients [13,14].

In light of the potential severity of the illness, the WHO promptly issued formal advice for individuals to reduce the risk of coronavirus infection upon the emergence of the first cases. Consequently, first limits and prohibitions were implemented in Poland in March 2020, resulting in the whole society being denied of access to numerous services [15,16]. The everyday lives of many individuals have markedly changed, and the persistent epidemic has posed challenges not just for the healthcare sector but also for the whole economy, finance, education, tourism, culture, and public health overall. It has resulted in adverse transformations throughout several aspects of life, the repercussions of which society endures to this day. The cumulative effect of these issues has adversely affected global mental health.

This literature review seeks to consolidate knowledge pertinent to the core issue of post-pandemic stress disorder. The primary portions of the study address the disorder's prevalence in the general population and a review of the existing research on this topic. The second portion addresses a cohort of medical

professionals who are directly engaged in combating the COVID-19 pandemic; it is posited that they are much more susceptible to the development of post-pandemic stress disorder.

2. Methods

A review of the scientific evidence was performed utilizing the available literature by inputting sample phrases (aligned with the MeSH dictionary) employing Boolean logic, logic operators (and, or, not), and unique personalities; SARS-CoV-2, COVID-19, epidemiological studies, mental disorders, healthcare workers, and post-traumatic stress disorder a global epidemic stress (and multiple combinations thereof) through the methodological instrument of the PubMed database. The PubMed database seems most suitable since it serves as a systematic instrument for searching papers across other scientific databases, including Medline and Embase. Its use affords the capacity to fulfill all criteria outlined in the study (transparency, clarity, thoroughness, focus, consistency, accessibility, and thorough covering of the subject matter). Only items in the English language published from 2019 to 2023 were used in the search.

3. Post-Traumatic Stress Disorder vs Post-Pandemic Stress Disorder

Tedros Adhanom, the Director of the WHO, said at a conference that the global community must prepare for the impending "mass trauma" resulting from the present epidemiological circumstances [17,18]. The advancement of assistance for mental health and psychosocial well-being is crucial in the formulation of rehabilitation strategies. It is important to recognize that these adverse consequences may persist in people even after the pandemic concludes, perhaps resulting in depression or post-pandemic stress disorder (PPSD) [19].

The concept of post-pandemic stress disorder was coined by psychotherapist Owen O’Kane in 2021. While it is not now classified as a separate disease entity, it remains a significant issue that many individuals encounter, often without their awareness. The phrase has not yet been included into the worldwide classification of mental and behavioral illnesses ICD-10; however, this may happen soon. The term post-traumatic stress disorder (PTSD) is defined by its inventor as the condition known as post-traumatic stress disorder. Post-traumatic stress disorder is a psychological condition that arises after exposure to a traumatic, severe, and distressing incident. The incident surpasses the individual's capacity to adjust and manage stress. PTSD often arises from a single traumatic incident, such as seeing death in warfare, suffering sexual assault, receiving a terminal diagnosis, or enduring other significant calamities. Conversely, in the instance of PPSD, the resultant trauma arises from experiencing and being influenced by several little stressful events. These may include a fear of infection, exposure to quarantine and isolation, apprehension about job loss, lockdown, loneliness, and the deterioration of social life [19,20].

Numerous nations globally today classify post-traumatic stress disorder into two categories, which serve as the basis for diagnosing PPSD. These refer to the DSM-5 (2013) and ICD-10. The DSM-5 categorization, as outlined by the American Psychiatric Association (APA), was established based on many criteria. Criterion A pertains to a stressor and necessitates "exposure to actual or threatened death, serious injury, or sexual violence" via direct exposure, witnessing, or being informed that a family or close friend has encountered trauma [21]. A difference is drawn between indirect exposure, which occurs, for instance, among medical professionals during their occupational duties [22]. Criterion B requires the existence of at least one sign of "psychological intrusion" in the individual affected. Instances include persistent and intrusive recollections, flashbacks, and elevated emotional distress. Criterion C entails the evasion of stimuli associated with the traumatic experience by shunning both internal (personal emotions, sensations) and outward (locations, people, items) reminders [23,24]. Criterion D pertains to mostly adverse alterations in an individual's mood and cognition that correlate with the traumatic incident. Criterion E encompasses alterations in reactivity and arousal. Criterion F pertains to the length of symptomatology. To diagnose PTSD, symptoms must persist for over one month. Criterion G pertains to the functional implications of PTSD, including the potential for persistent suffering and/or incapacity across several life domains. Criterion H pertains to the exclusion of the effects of other drugs, particularly psychoactive ones, and the absence of other medical conditions that might misleadingly suggest the onset of PTSD [25].

The diagnostic criteria of the ICD-10 classification closely resemble those of the DSM-5 classification, however notable variances exist between the two. The ICD classification often presents a less intricate and more straightforward approach to mental diagnosis than the previously stated DSM classification [26]. Nonetheless, the essence of the ICD categorization pertains to the response to an intensely stressful incident and the reemergence of the stressor in recurrent so-called "flashbacks." All recommendations are predicated on symptoms of anxiety and terror, which include the recurring re-experiencing of a particular traumatic experience. The evasion of reminders and the potential for peril are equally significant [27]. A fundamental aspect of PTSD is the re-experiencing traumatic experiences in the present. The ICD-10 classification categorizes "severe stress reaction and adjustment disorder" under category F43. This is the only diagnostic category associated with psychotraumatic effects. The ICD-10 categorization differentiates between "acute stress reaction" and "post-traumatic stress disorder." [28]

While COVID-19 does not conventionally align with post-traumatic stress disorder models as per DSM-5 and ICD-10 classifications and diagnostic criteria, numerous published studies increasingly document the emergence of traumatic stress symptoms resulting from a persistent stressor, such as a coronavirus pandemic. Contemporary models mostly emphasize the direct exposure to trauma from specific life-threatening incidents. Traumatic stress responses might occur in response to future indirect exposure to trauma and non-criterion A events, indicating that COVID-19 may also serve as a traumatic stressor potentially resulting in PTSD symptoms [28,29].

The symptoms of PPSD and PTSD are similar but may present differently in individuals. Common symptoms encompass dread and worry, recurring intrusive thoughts, unpleasant emotions, social disengagement, sleep disturbances, altered eating habits, feelings of helplessness, and dissociative disorders [20,28]. Symptoms characteristic of PTSD include the re-experiencing of the traumatic event and the avoidance of stimuli that evoke memories of the incident. Individuals with PTSD may evade even little cues associated with the distressing incident. These symptoms often lead to discomfort in social interactions and an increasing mistrust of interpersonal connections, as well as pervasive dread. Certain people may also encounter identity diffusion, characterized by a mistaken self-perception [30]. The symptoms mentioned may last for a few weeks to a few years in a tiny number of instances, significantly affecting an individual's life [28].

The term "post-pandemic stress disorder" is being advocated by its originator, psychotherapist O'Kane, who seeks to establish recognition for a new mental health disease, PPSD. He underscores that, in the context of PPSD, identifying the main cause of the symptoms is more critical than just addressing the symptoms themselves. He asserts that if the fundamental anxiety is from trauma induced by a stressor related to the COVID-19 epidemic, then the trauma must be addressed first; otherwise, the symptoms will persist. Due to unresolved trauma, individuals with PPSD remain in a perpetual state of danger, resulting in persistent severe and invasive symptoms.

The issue of PTSD and PPSD highlights that the worldwide pandemic crisis has elicited many emotional and psychological reactions, both collective and individual, observable everyday among those around us. Nonetheless, the pandemic may represent a significant stressor for individuals who have recovered from COVID-19 and for healthcare professionals. Furthermore, the traumatic experiences associated with the pandemic that the public has persistently endured in recent years have had a lasting influence on their psyche; hence, the need of addressing their mental health must be acknowledged to avert PPSD [30,31].

4. The Psychosocial Context of the COVID-19 Pandemic: A Review of Existing Research

Numerous research in the worldwide literature examines the effects of the COVID-19 epidemiological scenario on mental health in relation to the general population. A nationwide study of the UK population examined the incidence and connection of traumatic stress symptoms related to the COVID-19 epidemic among the elderly [32]. An examination of data gathered by Horowitz and Wilner [33] was performed on a sample of 3012 individuals aged 60 and above. Participants in the study were requested to engage in an online survey that assessed post-traumatic stress disorder symptoms using the Impact of Event Scale (IES). This scale is a well-recognized instrument for assessing PTSD. Furthermore, it has been modified for

evaluating the effects of COVID-19, referred to as the Impact of Event Scale with adaptations for COVID-19 (IES-COVID19) [34]. The instrument has 15 items that delineate responses to traumatic situations, with 7 statements pertaining to the assessment of intrusions, such as intrusive sensations and imagery, and the remaining 8 focusing on the examination of avoidance, specifically the evasion of memories and emotions associated with the traumatic incident. All are evaluated on a 4-point scale, where 0 signifies "not at all" and 5 denotes "often". The point score is directly related to the trauma symptoms. The elevation correlates positively with the severity of its symptoms [33,34]. The research yielded the following results: 36.5% of respondents indicated suffering clinically significant symptoms of traumatic stress associated with trauma, including COVID-19, with 27.4% of these instances potentially developing PTSD. Furthermore, women and older persons reported comparatively more severe symptoms [32]. The study's findings indicate a substantial need for psychological help among many elderly individuals suffering from post-traumatic stress disorder.

Research examining the mental health implications of the COVID-19 pandemic was undertaken in Greece by Nikopoulou et al. The research included 538 participants who completed a questionnaire assessing post-traumatic stress symptoms using several psychometric scores [35]. The Fear of COVID-19 Scale (FCV-19S), established in 2020, is acknowledged globally as an effective psychometric instrument for evaluating fear of COVID-19 during a pandemic. It is a seven-item measure with elements pertaining to sentiments on the COVID-19 sickness. Responses to the above questions may be provided using a five-point Likert scale indicating the level of agreement, with 1 representing "strongly disagree" and 5 denoting "strongly agree". A higher score on the FCV-19S indicates an elevated degree of dread about COVID-19 [36,37]. The findings from the Greek authors indicated that 32.7% of women and 7.8% of males in the research were categorized as exhibiting heightened fear and post-traumatic stress symptomatology. The observed disparity in outcomes between the sexes does not indicate that women exhibited markedly greater levels of dread than males. The study's sample size varied considerably by gender, with women comprising 80% of the sample, rendering the two groups incomparable [35]. Moreover, although most respondents exhibited typical levels of fear, this does not imply that the mental health hazards associated with COVID-19 worry are absent. Conversely, initiatives to safeguard the mental health of the populace must be amplified.

Research examining the symptoms and correlates of post-traumatic stress disorder during the COVID-19 pandemic, done on the Chinese population, revealed the persistent worldwide mental health problem. The research was performed via a digital survey. Following the analysis of all responses, 338 were included in the research. The symptoms of post-traumatic stress disorder among the respondents were evaluated using the PTSD checklist for the DSM-5, known as the PCL-5 checklist, as outlined in the APA Diagnostic and Statistical Manual [38]. The post-traumatic stress disorder checklist is a widely utilized instrument for evaluating PTSD symptoms as per the DSM-5, comprising 20 items that gauge the severity of PTSD in accordance with DSM-5 criteria. Respondents assess each listed issue using a five-point Likert scale ranging from 0, indicating "not at all," to 4, denoting "intensely." The list aims to demonstrate the degree to which each ailment has affected the survey participants in the preceding month. The cumulative symptom severity score was derived by summing the scores of the 20 items, yielding a range from 0 to 80. Preliminary investigations suggest that the PCL-5 cut-off score is between 31 and 33, suggesting a probable onset of PTSD [39,40,41]. The research in the referenced study indicated that the average PCL-5 score among participants was 12.9. Furthermore, 3.5% of the entire sample indicated a cumulative score of PTSD symptoms above the PCL-5 threshold, perhaps reflecting the onset of PTSD. Conversely, 25.44% of the whole sample satisfied two or more criteria for a PTSD diagnosis, while having total PCL-5 scores below the threshold. The investigation of the PTSD symptom network was a significant component of the research. Within the symptom network linked to the COVID-19 pandemic, self-destructive and reckless behaviors emerged as the most prominent symptom [38].

The subsequent scientific research I referenced analyzed the dietary habits of young individuals within the German population for notable alterations during the COVID-19 epidemic. The research included 1980 university students from Bavaria who were requested to fill out a questionnaire. The authors reported the following findings: 610 individuals indicated an increase in their food consumption, whereas 328

individuals reported a decrease compared to their pre-pandemic habits, and the remaining respondents exhibited no change in their food intake. Additionally, a link was seen between heightened alcohol use (42.3%), smoking (42.0%), psychological stress (35.4%), and increased food intake during the COVID-19 pandemic [39,40]. The alterations are unequivocally associated with the implementation of limitations in Bavaria, with the heightened worry and psychological stress impacting a significant portion of the population during the epidemic. In addition to the risk of possible infection, a pandemic engenders significant uncertainty, hence heightening emotions of stress and hyper-vigilance, which might influence eating behaviors [41]. This concept is substantiated by the findings of the study's authors, who concluded that individuals experiencing psychological stresses have a heightened risk of excessive food consumption [42]. The findings of the referenced research are concerning due to the substantial impact of poor dietary habits on individuals' health. The issue of overweight and obesity significantly elevates the risk of cardiovascular illnesses, which have been the predominant cause of mortality globally for over two decades. Obesity significantly elevates the chance of getting severe COVID-19 pneumonia [43,44].

Another noteworthy research pertains to the mental health condition of COVID-19 survivors. The research, done in Pakistan and released on January 6, 2022, is therefore quite pertinent. Furthermore, COVID-19 survivors constitute a specific demographic at heightened risk for developing signs of PPSD, making this study especially noteworthy. The research group included 70 individuals aged 18 to 60 years. The authors used instruments to assess mental status, including the Impact Event Scale-Revised (IES-R), Patient Health Questionnaire-9 (PHQ-9), and Coronavirus Anxiety Scale (CAS) [45]. The IES-R scale, used for assessing PTSD, has 22 questions and encompasses three distinct dimensions: intrusive thoughts, avoidance, and hyperarousal. Each sentence is evaluated using a 5-point Likert scale, with 0 indicating "not at all" and 4 signifying "very much." The threshold score is 33, indicating a substantial probability of PTSD symptomatology [46]. The PHQ-9 questionnaire is used for the preliminary diagnosis of depression and to assess the severity of its symptoms. The PHQ-9 score, which assesses severity, ranges from 0 to 27, with each of the 9 categories evaluated from 0, indicating "not at all," to 3, indicating "almost every day" [47,48].

The CAS scale serves as an instrument for evaluating mental health and quantifying dysfunctional anxiety related to COVID-19. The assessment consists of a 5-item questionnaire, with each item reflecting a distinct physiological reaction to dread induced by the COVID-19 epidemic in the preceding 2 weeks. For each item enumerated, a suitable rating is assigned using a five-point scale, with 0 indicating "not at all" and 4 signifying "almost every day" [49,50]. The researchers of the aforementioned study assessed the degree of depression in the participants using the PHQ-9. The findings indicate a widespread prevalence of depressive disorders among the recovered individuals. Of the 70 individuals included in the research, only 8 (11.4% of the total) had no symptoms suggestive of depression. Among the remaining 62 individuals, 27 (38.5% of the total) exhibited mild depression, while 18 (25.7% of the total) had moderate or severe depression. The authors used the IES-R scale to assess the prevalence of PTSD among subjects who had encountered COVID-19. The findings indicate that 47 respondents (67.1% of the total) exhibited indications of post-traumatic stress disorder, whilst the remaining 23 respondents (32.9%) showed no impact of COVID-19 on their mental health. The authors used the CAS scale to assess the levels of anxiety and panic related to the COVID-19 epidemic. The findings indicate that 52 individuals (74.3% of the total) did not report anxiety, but 14 individuals (29.7% of the total) exhibited anxiety associated with COVID-19. Furthermore, it was shown that individuals exhibiting symptoms of COVID-19 had markedly elevated levels of despair, tension, and anxiety in comparison to asymptomatic individuals [45]. This research illustrates the trauma experienced by COVID-19 survivors and the need for comprehensive psychological assistance.

Research with a Mexican population revealed psychological discomfort and post-traumatic stress symptoms related to health risks connected with COVID-19. The whole research sample included 3,932 participants. The aforementioned IES-R scale was used to assess the existence of psychological suffering after the traumatic incident. The authors' findings on the prevalence of psychological stress indicated that 1160 individuals (27.7% of the total) had clinically significant symptoms of post-traumatic stress disorder. Concerning moderate to severe mental stress, 943 individuals (22% of the total) had intrusive thoughts, 933 individuals (22.3% of the total) showed avoidance behaviors, and 515 individuals (12.2% of the total)

presented excessive agitation. The findings are concerning, since over 30% of respondents had symptoms of PTSD, representing a significant proportion of the questioned population. In this instance, it seems warranted to use all steps designed to mitigate the manifestation of PTSD symptoms. These may include activities such as psychotherapy, which includes learning to regulate emotions or psychoeducation [51].

5. The Psychological Well-being of Healthcare Workers During the COVID-19 Pandemic—A Review of Existing Research

The COVID-19 pandemic undeniably affected the operation of the healthcare system significantly. Research investigated the impact of the global health crisis related to the pandemic on the mental health of healthcare professionals. The research conducted by Spilg et al. [52] included 962 Canadian healthcare practitioners who participated in an online survey. A collection of specialized scales and questionnaires, including the MMD-HP, RMRS, and GAD-7, was used to gather data. The first scale is the Revised Measure of Moral Distress for Healthcare Professionals (MMD-HP), with 27 items. Participants evaluate each item on a Likert scale based on its frequency in their practice and the level of discomfort it causes when it happens. The frequency score is then multiplied by the distress score, yielding a comprehensive value. A higher score correlates with an increased degree of moral anguish [53,54]. The second instrument is The Rushton Moral Resilience Scale (RMRS), with 17 items. Participants evaluate their level of agreement with the specified topics using a Likert scale. The overall score is derived by computing the average of all items. A higher score indicates more moral resilience [55]. The third item is the Generalized Anxiety Disorder (GAD) Scale, a fundamental instrument for evaluating anxiety levels and the probability of generalized anxiety disorder. It has seven items and, like the preceding ones, utilizes a four-point Likert scale. Participants may get from 0 to 3 points based on the frequency of a certain incident occurring in the preceding 14 days. A minimum score of 10 points indicates a strong likelihood of generalized anxiety disorder [56,57]. The research concluded that there is an association between moral distress and professional exposure in the management of COVID-19 infected individuals. The examination of the findings indicated that a greater proportion of medical professionals with direct interaction with COVID-19 patients had been diagnosed with mental health issues compared to those without such contact. Moreover, one finding indicated that greater moral resilience was ensured by parameters like advanced age, male gender, the absence of mental problems, and sufficient psychological support from both colleagues and employers. Furthermore, elevated moral resilience correlates with decreased symptoms of anxiety, stress, and depression. In conclusion, initiatives designed to enhance the psychological well-being of healthcare professionals should focus on therapies that tackle the fundamental causes of anxiety and distress, namely its moral implications, rather than only alleviating the symptoms [52].

Further research investigated resilience and self-reported stress levels among paramedics before to and during the COVID-19 pandemic, using instruments such as the Perceived Stress Questionnaire (KPS) and the Stress Measurement Scale (SPP-25) [58]. The KPS has 27 questions that evaluate the overall experience of stress by examining its three aspects via distinct subscales. These include emotional strain, external stressors, and intrapsychic stress. The questionnaire also has a lying scale. Participants are asked to choose a response for each of the emphasized items based on a five-point Likert scale, with 1 indicating "not true" and 5 indicating "true". A greater overall score correlates with an elevated stress level in the individual assessed [59]. The SPP-25 is a scale including 25 questions that assess the overall amount of resilience, a characteristic of human personality. Among the five criteria addressed are tolerance of unpleasant emotions, persistence, determination, and the capacity to mobilize in challenging circumstances. Each item is evaluated by the responder using a five-point Likert-type scale, with 0 indicating "definitely not" and 4 indicating "definitely yes". A higher score correlates with an increased degree of resilience, indicating better resilience [60]. The research included Polish paramedics from the Pomeranian area employed in the Hospital Emergency Department (ED) and the Polish Air Ambulance (LPR). The research group included 84 individuals. The study's authors found that paramedics who interacted with COVID-19-infected patients had a moderate degree of stress, while those without such interaction showed a low level of stress. The cited findings pertain to each component of KPS, namely external stress, intrapsychic stress, and emotional strain. Moreover, it was shown that persistence and perseverance were the paramount elements in

mitigating perceived stress escalation. Experiencing regular stress in the workplace undoubtedly fosters psychological resilience. Consequently, possessing a kind of individual resilience resource provided by a professional group, such as paramedics, is crucial for properly managing workplace stress [58].

Further research assessed the interplay of post-traumatic stress, depression, and anxiety symptoms among healthcare personnel during the COVID-19 pandemic. A total of 514 medical professionals engaged in frontline pandemic efforts in Italy participated in the research. Symptoms of depression, anxiety, and post-traumatic stress disorder were assessed using diagnostic and psychometric instruments, including the IES-R, PHQ-9, and GAD-7, all of which have been detailed in previously referenced literature. The outcomes achieved by the writers were quite negative. A total of 115 respondents, or 23.5% of the sample, exhibited severe post-traumatic stress disorder. Individuals who scored 10 points or above on the GAD-7 scale have a significant likelihood of generalized anxiety disorder. Furthermore, 99 respondents (20.2% of the total) had PHQ-9 scores of 10 or above, indicating the presence of moderate to severe depressive disorders. Moreover, IES-R scale scores were elevated for medics employed in emergency rooms relative to those in other departments. This indicates that medical personnel in emergency rooms are disproportionately impacted by PTSD symptoms. This may be attributed, among other factors, to the increased unpredictability of all clinical situations present, including those involving COVID-19 individuals. The study's authors identified that anxiety, depressive symptoms, and PTSD were the primary causes contributing to the impairment of health professionals, adversely affecting both their quality of life and patient care. These data unequivocally affirm the classification of medical professionals as a notably high-risk demographic for the onset of mental health problems during the COVID-19 pandemic. This professional group must have sufficient access to psychological and psychiatric support. This is as crucial as combating the COVID-19 epidemic, since only healthcare professionals in a condition of mental well-being can effectively attend to patients [61].

B. also examined the emotional and physical health of healthcare personnel during the COVID-19 epidemic. Chang and A. Shechter. The incidence of psychological distress among medical professionals in emergency rooms during the COVID-19 pandemic was evaluated. The research group included 52 medical professionals who had direct contact with individuals infected with COVID-19. This research used specific instruments to assess COVID-19 pandemic-related stress and PTSD using the PCL-5 scale, depression via the PHQ-9 scale, and anxiety utilizing the GAD-7 questionnaire. All diagnostic scales have been further upon in previously reviewed publications. The authors' good findings regarding psychological symptoms in the current research seemed to be prevalent among the participants. Specifically, 48% of respondents reported acute stress, 37% exhibited depressive symptoms, and 30% suffered from anxiety disorders. This confirms that medical professionals endure significant stress in the workplace during the COVID-19 epidemic, hence underscoring the need for adequate psychological support for healthcare workers [62].

The subsequent research referenced investigated the mental health concerns associated with the COVID-19 pandemic among healthcare professionals in the United States. A total of 571 people were included in the research and requested to complete an online survey. The PCL-5 checklist was used to evaluate acute traumatic stress, the PHQ-8 to assess depression, and the GAD-7 to measure anxiety, all in accordance with the DSM-5 categorization for PTSD. The risk threshold for acute post-traumatic stress disorder, as per the PCL-5, was a minimum of 33; for depression, according to the PHQ-8, it was at least 10; and for anxiety, based on the GAD-7, it was 10. Considering the risk thresholds, the authors' findings revealed that 15% of respondents reported acute traumatic stress, 20% showed despair, and 17% experienced anxiety. Furthermore, it was anticipated that medical personnel in emergency departments were more predisposed to developing these diseases than professionals in other hospital wards. This undoubtedly adds to the increased incidence of contact among medical personnel in emergency rooms with individuals infected with COVID-19. The research unequivocally shows that several medical professionals during a pandemic are susceptible to acquiring problems that compromise their mental health. Consequently, professional organizations engaged on the "front line" of pandemic response should be assured access to diverse mental health initiatives [63].

Post-traumatic stress disorder and depression among health workers during the COVID-19 pandemic were also assessed in the population of England. A total of 103 health professionals completed the online test. The authors assessed PTSD symptoms using the PCL-5, whilst depression symptoms were evaluated with the PHQ-9 questionnaire [64,65]. Following the analysis of the online survey findings, the authors reached out to individuals who exceeded the threshold for the PCL-5 or PHQ-9. The survey findings indicated that 44% of participants satisfied the criterion for PTSD, while 39% fulfilled the criteria for serious depression. Additionally, 24% of all participants reported experiencing trauma associated with the COVID-19 pandemic. Furthermore, 29% of the research group reported experiencing suicidal ideation or ideas pertaining to self-harm. The findings indicate a spectrum of traumas encountered by healthcare professionals associated with PTSD and despair. Consequently, this research further substantiates the urgent need for psychological care tailored to this specific professional cohort [66].

6. Conclusions

Many specialists in psychology and psychiatry assert that the instability resulting from the coronavirus pandemic may not be immediately apparent but will likely become evident post-pandemic. The standardization and normalization of the surrounding world by many undoubtedly adds to this. Numerous scholars assert that the magnitude and extent of trauma endured by the population would remain unrecognized by many until the conclusion of the epidemic. The conclusion of the pandemic and the subsequent global recovery, together with the total lifting of limitations, will not prevent individuals from being impacted by resurgent coronavirus occurrences. This is most applicable to healthcare professionals and those significantly impacted by the pandemic, including those who have caught COVID-19 or lost relatives to the illness. Consequently, people suffering from post-pandemic stress syndrome have to be included into prevention strategies. Implementing early psychoeducation is crucial for successfully addressing isolation, misinformation, and other significant stresses that may arise during the COVID-19 epidemic.

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التأثير الوبائي لاضطرابات الصحة النفسية في المجتمعات ما بعد الجائحة: مراجعة شاملة

الملخص

الخلفية: أسفرت جائحة كوفيد-19 عن تحديات صحية عالمية غير مسبقة، أثرت بشكل كبير على الصحة النفسية في مختلف الفئات السكانية. وقد أدت التداخات العاطفية للجائحة إلى ظهور حالات مثل اضطراب ما بعد الجائحة (PPSD)، خصوصاً بين الفئات الضعيفة، مثل العاملين في مجال الرعاية الصحية والأشخاص الذين يعانون من مشكلات صحية نفسية مسبقة.

الطرق: تُجمع هذه المراجعة الأدبيات الموجودة حول وبائيات اضطرابات الصحة النفسية في المجتمعات ما بعد الجائحة، مع التركيز على PPSD وانتشاره. تم إجراء بحث شامل في قاعدة بيانات PubMed باستخدام مصطلحات MeSH ومشغلات بوليانية لتحديد الدراسات ذات الصلة المنشورة بين عامي 2019 و2023. تشمل المراجعة نتائج من مجموعات ديموغرافية متنوعة، بما في ذلك العاملين في الرعاية الصحية والجمهور العام.

النتائج: تشير النتائج إلى انتشار كبير لاضطرابات المرتبطة بالتوتر، حيث كشفت الدراسات أن 36.5% من كبار السن أبلغوا عن أعراض إجهاد نفسي كبيرة مرتبطة بكوفيد-19. أما بين العاملين في مجال الرعاية الصحية، فقد زادت معدلات اضطراب ما بعد الصدمة (PTSD) والإرهاق بشكل ملحوظ، حيث وصلت في بعض الدراسات إلى 44% بالنسبة لـ PTSD علاوة على ذلك، امتدت الآثار النفسية إلى العادات الغذائية وأنماط الحياة، مما زاد من التحديات المرتبطة بالصحة النفسية.

الاستنتاج: أبرزت جائحة كوفيد-19 الحاجة الملحة لدعم الصحة النفسية واستراتيجيات التدخل المصممة لمعالجة الآثار النفسية طويلة المدى للأزمات الصحية العالمية. يعد تنفيذ التنقيف النفسي المبكر وتوفير موارد الصحة النفسية المتاحة أمراً ضرورياً لتخفيف تأثير PPSD وتعزيز مرونة الصحة العامة.

الكلمات المفتاحية: كوفيد-19، الصحة النفسية، اضطراب ما بعد الجائحة، العاملون في الرعاية الصحية، علم الأوبئة.