



Work-life condition of health work force during COVID-19: A study based on literature review

 **Mohammad Kibria**
Anamul Hoque¹⁺
Anil Chandhok²
 **Khaled Kalam**
Sunny³

¹Chandigarh University, India.

Email: anambup028@gmail.com

²University School of Business Chandigarh University, India.

Email: anil.e1863@cumail.in

³Shandong University, China.

Email: Khaledkalam135@gmail.com



(+ Corresponding author)

ABSTRACT

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The COVID-19 epidemic is proving to be an unparalleled disaster in all facets, including health, sociological, economic, and financial. Aside from the fact that it may have a substantial influence on their health and well-being, health practitioners all over the world have risen to the challenge of treating COVID-19 patients. The primary goal of this research is to examine and evaluate the work-life balance of healthcare personnel during pandemics. This study conducted a systematic evaluation to determine the current situation of health workforces and to assess the impact of COVID-19 on health workforces. This paper began with 70 article reviews. A brief evaluation of 70 publications, 30 articles were chosen for the research based on area and analysis. After examining all of the publications, the study has found that the primary causes of depression, burnout, and suicidal thoughts include workload, anxiety, worry for safety, future earning uncertainty, and panic attack, and sleep disturbance, job stress, exhaustion, and dread. These characteristics affect workers' physical and mental well-being. Finally, it has an impact on their work-life balance and service quality. Future studies could include additional publications for better results and a review of other sectors. The government and organizations should provide more training, organizational assistance, support for healthcare practitioners' families, PPE, and mental health services. Regularly monitor the health of the healthcare workers and employ preventative measures. To alleviate work-related stress, higher-level management must recruit extra health personnel.

Contribution/Originality: This study of the literature focuses on several papers regarding the work-life balance issues faced by the medical workforce during the COVID-19 epidemic. It draws attention to the challenges experienced by healthcare personnel, such as their hectic schedules, burnout, and insufficient support mechanisms. The report points out how crucial it is to address these challenges to ensure the workforce's performance and well-being.

1. INTRODUCTION

At the close of 2019, fresh drainage of undecorated acute respiratory syndrome coronavirus 2 blowouts over the world from Wuhan, China, spawning austere acute respiratory disorder (Lu, Stratton, & Tang, 2020). The WHO classified COVID-19 as a worldwide hazard in March 2020. The COVID-19 outbreak is proving to be a historic tragedy in many aspects, including health, social, and economic, particularly in the hardest-hit countries,

such as India, China, Italy, Iran, and the United States (Di Gennaro et al., 2020). Separation, quarantine, social separation, and public detention were all performed immediately (Hopman, Allegranzi, & Mehtar, 2020). Self-distancing, lockdown tactics, improved diagnosis and treatment, and limitations on mass gatherings are all being utilized to try to halt the virus's spread in the affected nations (Gautam, 2020). People in low- and middle-income nations' sexual and reproductive health are expected to suffer as a result of the outbreak's load on health systems (Riley, Sully, Ahmed, & Biddlecom, 2020). Local or national lockdowns that compel health services to close if they are not judged vital, as well as the consequences of physical isolation, travel limitations, and economic hardship, will have an impact on sexual and reproductive health (WHO). To stop the virus from spreading, many governments are restricting people's travels (Riley et al., 2020). During COVID-19, 28,000 maternal mortalities and 168,000 infant deaths would be terrible. Complications affect 1.7 million mothers giving birth and 2.6 million infants (Riley et al., 2020). As of May 1, 2021, there had been over 153 million verified COVID-19 infections and 3.2 million deaths (WHO). When compared to middle- or low-income nations, some industrialized countries with a greater quality of life had higher COVID-19 mortality rates (Singh & Misra, 2020). COVID-19 patients have been linked to metabolic abnormalities such as hypertension, diabetes, obesity, cardiovascular disorders, cerebrovascular accident, chronic obstructive pulmonary disease, asthma, renal problems, and cancer (Singh & Misra, 2020). COVID-19 causes a significant increase in severity and fatality (Li et al., 2020). All persons who provide or assist in the delivery of health services or the operation of healthcare facilities are considered part of the health workforce (Centre for Health Workforce, 2021). Doctors, nurses, dental hygienists, psychiatrists, creative arts therapists, dietitians and nutritionists, Patient Care Coordinators, and others make up the health workforce (Centre for Health Workforce, 2021). Sudden changes in work circumstances and strain are likely to significantly influence physicians' long-term health outcomes during COVID-19 (Moazzami, Razavi-Khorasani, Dooghaie, Farokhi, & Rezaei, 2020). Globally, healthcare workers have responded to the task of treating COVID-19 patients, perhaps at great expense to their health and well-being (Billings, Ching, Gkofa, Greene, & Bloomfield, 2020). COVID-19 harmed persons who already have anxiety or mood issues (Asmundson et al., 2020). The main sources of anxiety were confusion about COVID-19 treatment guidelines, insufficient resources, especially individualized safety tool, and the possibility of transmission to loved ones at home. During COVID-19, the most common indications of stress were anxiety, physical tiredness, and sleep difficulties (Asmundson et al., 2020). During pandemics, medical personnel had to cope with a higher number of patients who died at a high rate in a stressful setting (Billings et al., 2020). High-stress occupations, combined with the special demands of the current COVID-19 crisis, have undeniably raised the risk of distress, burnout, melancholy, drug and alcohol addiction, and suicide among frontline healthcare professionals worldwide (Billings et al., 2020). During these trying circumstances, healthcare personnel is at a higher risk of burnout, which could have a substantial influence on their patients' health and care (Fitzpatrick, Patterson, Morley, Stoltzfus, & Stankewicz, 2020). Physician tiredness affects patient care and satisfaction, as well as the quality of care provided (Shanafelt & Noseworthy, 2017).

2. REVIEW OF LITERATURE

In a study by Khalafallah et al. (2020) analysis of 407 U.S. (Neurosurgeons) to understand the impact of as part of the epidemic on burnout and job fulfilment, the paper correlates emotional tiredness, alienation, and personal success with burnout and professional contentment. According to the data, during the COVID-19 outbreak, future earnings were tied to burnout. Future earnings were uncertain during COVID-19. Because of the reduced work hours during the epidemic, professional life would deteriorate. According to the study, controllable stressors reported among neurosurgeons during the pandemic assisted in reducing burnout and increasing job satisfaction. Jiménez-Labaig et al. (2021) The researchers looked into the burnout levels of 243 Spanish oncologists, as well as the consequences of the endemic on their working out and healthiness. This article quantifies burnout levels using three dimensions: exhaustion, cynicism, and efficacy, and it classifies burnout into five burnout profile groups for

analysis: burnout, ineffective, engaged, overextended, and disengaged. According to the findings, creating a healthy work-life balance, having access to support systems, and taking enough vacation time can all help to minimize burnout. During pandemics, oncologists experience worry and moderate sadness. As a result, young European oncologists frequently experience burnout. [Arkanudin and Rupita \(2021\)](#) Investigated the perceptions of female nurses in Indonesia on burnout throughout their performance and integrity services during the ongoing COVID-19 epidemic. The descriptive qualitative methodology was employed in this article. Burnout hurts performance and service quality, according to the findings. Handling COVID-19 patients causes anxiety, concern, and exhaustion. Work overload, work stress, poor work performance, anxiety, and worry are all factors that contribute to nursing burnout. [Wu et al. \(2020\)](#) Conducted a study on 190 (Chinese medical workers to assess the prevalence of burnout among physicians and nurses working in frontline (Frontline) wards vs those working in usual wards. The descriptive statistics method was utilized in this article. Despite dealing directly with sick patients, frontline wards showed a considerably lower rate of burnout and were also less concerned about becoming infected than the normal wards group. Front-line workers may have felt more in control of their situation, which can assist prevent burnout. [Torrente et al. \(2021\)](#) Looked into the same topic of frontline and routine ward burnout during COVID-19 this article analyzed 674 Spanish healthcare experts. The descriptive-analytic method was used on doctors, nurses, nursing assistants, and emergency healthcare technicians this research sought to find out how common burnout is among front-line hospital staff in Spain. According to this study, professionals who work in COVID-19 frontline wards had twice the risk of burnout as those working in their normal wards. Women had much more burnout than men owing to fear of self-infection performance and the quality of care provided to patients. For adolescent women working on the COVID-19 frontline during the pandemic outbreak, weariness is a big issue. [Abdelhafiz et al. \(2020\)](#) analyzed 220 Egyptian doctors to determine the occurrence of burnout syndrome and related peril variables in a sample of Egyptian physicians according to the findings the majority of respondents had lower levels of personal success while a smaller minority of respondents had high levels of depersonalization and emotional weariness with burnout syndrome the female gender was found to be associated with higher levels of emotional tiredness infection with COVID-19 or death from it among coworkers or family was linked to higher emotional exhaustion and lower personal achievement.

Additionally, [Kotera, Maxwell-Jones, Edwards, and Knutton \(2021\)](#) conducted studies on burnout. Burnout, self-compassion, work-life balance, and strain are all investigated in this study on 110 people in the United Kingdom. This study indicated that burnout was adversely correlated with age, self-compassion, and work-life balance, and substantially correlated with weekly working hours and pressure. The weekly working hours and work-life balance were substantially associated with burnout. Self-compassion helped to reduce the relationship between work-life balance and emotional exhaustion. According to this article, encouraging work-life balance and self-compassion would significantly lower burnout among psychotherapists. In order to look into the prevalence and severity of burnout as well as the factors that contribute to burnout and the impact of the coronavirus (COVID-19) on burnout syndrome. [Dinibutun \(2020\)](#) Conducted a descriptive study on 200 Turkish. The poll found that physicians had low levels of depersonalization and personal achievement and a medium level of emotional exhaustion. Burnout affects both married and single people, men and women. The degree of financial fulfilment a person experiences has minimal bearing on burnout.

[Kelker et al. \(2021\)](#) conducted a study on 213 emergency medicine practitioners in the US. In the early stages of the COVID-19 epidemic, this study focuses on the characteristics and needs of emergency physicians and advanced practice clinicians, including their well-being, resilience, burnout, and well-being. The majority of frontline emergency medicine provider workers experienced considerable levels of stress, worry, panic, safety worries, and relationship stress as a result of COVID-19, despite their resiliency. The study found that COVID-19 also increased the stress on their relationships. Personal safety, the impact on dependent care, interpersonal conflict, increased job demands, and feelings of isolation have all been linked to COVID-related burnout.

Maqsood et al. (2021) The quality of work-life (QWL) of the intensive care units (ICUs) and emergency unit workforce was assessed in a descriptive study of 290 Saudi Arabian healthcare workers. The quality of life among healthcare workers was bad during the COVID-19 pandemic, according to this study. Extra working hours were linked to reducing quality of work-life, whereas demographic factors were linked to higher quality of work-life. Extra working hours and direct interaction with COVID-19 patients did not affect healthcare workers' work-life balance. Osita, Onyekwele, Idigo, and Eze (2020) Studied 342 Nigerian health workers in a descriptive study. The focus of this research was on work-life balance and employee performance, as well as the impact of workload on service quality. Workload affects the quality of service provided by health personnel, according to these researchers. Manikandan et al. (2020) and Pai et al. (2021) Assess how work-life balance is impacted by overall health, activities, relationship status, and work environment. A descriptive study was undertaken on 500 Indian clinicians. During COVID-19, doctors faced cultural changes and emotional issues, as well as heightened professional expectations and anxiety, according to this article. The factor analysis revealed that marital status and the number of children had a significant impact on work-life balance. Energy levels, sleep length, and general health have no bearing on work-life balance. Female dentists noted irritability, worry, and changes in sleep habits as having an impact on their mental and physical health. Nadkarni, Patel, Pawar, and Bodhanwalla (2021) The impact of the COVID-19 epidemic on the personal and professional lives of 264 Indian doctors were investigated. This study demonstrates improvements in family life and interpersonal ties, eating choices, daily activity volume, and fitness levels. Doctors' financial status was harmed throughout the outbreak. During the pandemic, doctors reported negative mental health symptoms like fear, worry, panic, and wrath. Venkateswaran, Felix, and Umamaheswari (2020) Conducted a descriptive study was conducted on 349 Indian nurses, focusing on the rapport between overall work-life and life consummation in clinics in the Coimbatore district. This study discovered that work-life quality, remuneration, and welfare policies may all contribute to a pleasant and smooth work environment. When job satisfaction and work-life balance improve, so does life satisfaction. Workload, stress, and work pressure, as well as a lack of collaboration from superiors and coworkers, all contribute to job unhappiness. Ghislieri, Molino, Dolce, Sanseverino, and Presutti (2021) Steered a study on 211 Italian administrative and technical professionals, work family conflict, and cognitive demands, off-work hours and technology based job needs were explored. Work-family conflict may be driven by the number of job inquiries as well as the more or less intentional use of technology to meet extreme job demands, according to the findings of this study. Work-family conflict when needed work from home is favorably related to both cognitive demands and off-technology assisted job demands. People that have a lot of responsibilities have a lot of off-TAJD. Women's cognitive requirements are greater than men's. Fitzpatrick et al. (2020) Directed a study on the influence of COVID-19 on the health of emergency physicians was studied in a descriptive study of 137 American emergency physicians. During the epidemic, physicians' sleep deprivation, concern about their financial status, and feelings of stress reduce emergency physician's well-being, and these things contribute to burnout. Another qualitative study by Salem et al. (2021) focuses on COVID-19 focuses on the well-being and training of 161 junior doctors in the United Kingdom. This article demonstrates that pandemics hurt complete training, sleep disruption, and anxiety about missing clinical competence. The majority of responders need to continue their education to improve their clinical competence. Hlubocky et al. (2021) Did qualitative research on 161 American junior doctors' analyses of oncologists' well-being and patient care during the COVID-19 epidemic about professional and personal implications. This research suggests that social isolation or PPE enhanced junior doctors' worry about passing COVID-19 to family members. When people are fatigued after lengthy shifts, their sleep is affected. The organization's redeployment plan was successful in providing a reasonable, albeit heavy workload. The pandemic disrupted their jobs, particularly their order to accomplish training requirements. Another study by Ofei-Dodoo, Loo-Gross, and Kellerman (2021) looked at 113 American family physicians to examine their health and well-being under COVID-19. In this descriptive study, family physicians exhibiting at least one burnout symptom were included, particularly those who had treated any verified COVID-19 patients with at least one symptom of burnout

and suffered from emotional exhaustion were found to exhibit at least one burnout symptom. People's stress levels skyrocketed once the COVID-19 outbreak came out. During the pandemic, family physicians reported more physiological symptoms such as sadness, anxiety, insomnia, and psychological anguish. The COVID-19 epidemic influences orthopedic surgeons. Khan, Khan, and Khan (2021) Conducted a study of 364 Pakistani orthopedics doctors was carried out to analyze the impact of the COVID-19 Pandemic on their working lives and mental stability. According to these descriptive investigations, due to a lack of proper personal safety equipment, most orthopedics experts were not actively involved in the care of COVID-19 patients. Participants in the treatment reported greater levels of stress, dread, sleep issues, and anxiety. The COVID-19 outbreak influenced both the professional and mental health of orthopedic surgeons. Van Der Goot et al. (2021) Directed a study, during the outbreak, he directed research that included 259 questionnaires and 60 audio diaries to evaluate emotional distress. This exploratory longitudinal study revealed an increase in psychological discomfort among frontline employees. Autonomy and expertise in the workplace Work-related phylogeny gratification were linked to lower levels of psychological anguish, whereas frustration was linked to higher levels of mental agony. Need fulfillment was shown to be inversely connected to psychological discomfort, but need frustration was found to be positively related. Park et al. (2020) Examined psychological distress among infectious disease (ID) physicians during the coronavirus sickness 2019 in descriptive research of 265 South Korean infectious disease specialists. (COVID-19). During the COVID-19 outbreak, infectious disease physicians were more fatigued. Infectious disease physicians who treated COVID-19 patients and those who did not have substantially different levels of burnout, sadness, anxiety, or stress. Female infectious disease doctors had higher rates of depression, anxiety, stress, and emotional exhaustion than their male counterparts. Karakose and Malkoc (2021) Conducted a study that utilized 204 medical doctors in Turkish to investigate the psychological consequences of the COVID-19 epidemic on doctors. Throughout the epidemic, people faced personal tension, anxiety, terror, panic attacks, depressed tendencies, and sleep problems, according to this article. Anxiety problems have the biggest psychological impact on physicians. Medical practitioners saw substantial psychological consequences, such as the dread of dying and concern about infecting family members with COVID-19. Aggarwal et al. (2021) conducted a study on 260 Indian female doctors focusing on the challenges experienced by women doctors in India during the first wave of the COVID-19 epidemic. According to this study, female doctors were concerned during the COVID-19 lockdown. COVID-19 tackles six major issues confronting women: academic productivity, work-life balance, missed possibilities for collaboration, mental health, the need for equity-minded academic leadership, and decision-making. According to the poll, the COVID-19 epidemic has also had a considerable impact on working women, owing to their dual responsibilities at work and home. Pabalkar and Prakash (2020) Focused on Occupational Stress among Indian doctors and the ineffectiveness of inpatient treatment execution. A total of 1607 Indian doctors were studied in this descriptive study. After a pandemic, physicians experience mental health concerns, according to this report. Increased average operational hours, increased number of COVID-19 patients treated, decreased peer and supervisor support, lesser logistic aid, and lower performance sentiments all contribute to increased working stress. Morgantini et al. (2020) Centered on COVID-19's impact on healthcare professionals working during the pandemic on 2,707 healthcare workers worldwide the majority of health care professionals in this study reported burnout as a result of a heavy workload, significant job stress, tight deadlines, and a lack of organizational support. The United States had the greatest reported burnout among the 33 countries participating in COVID-19 in Pakistan, while Italy had the least. Zeb et al. (2021) Investigated the relationship between work-family conflict, emotional intelligence, and self-efficacy. This study found a significant negative connection between work-family conflict and Emotional intelligence among medical practitioners. You'll need a lot of self-assurance to deal with the tensions between life and work. When there was more family-to-work conflict, emotional intelligence and general self-efficacy were lower. Emotional intelligence is enhanced through self-efficacy.

3. MODELS OF CONSCIOUSNESS

Khalafallah et al. (2020) Work on COVID-19 Workflow changes, personal and professional stress, job satisfaction, and burnout are all factors to consider. In order to evaluate medical burnout, the author used the Abbreviated Maslach Burnout Inventory (AMBI). Three categories—emotional exhaustion, depersonalization, and personal accomplishment—were used to group the nine questions. Bivariate analysis was used by the authors to identify potential risk factors for Emotional Exhaustion, Depersonalization, Personal Accomplishment, burnout, and job satisfaction. Burnout and work satisfaction were examined using a multivariate binary logistic regression analysis. A study by Maqsood et al. (2021) examined the importance of the quality of work-life balance for healthcare workers in intensive care units. The author (WHO) used the WHO QoL-BREF instrument with permission from the World Health Organization. In this study, the author also used the last-observation-carried-forward technique. The determinants of quality of life were evaluated using hierarchical regression analysis.

Manikandan et al. (2020) Studied using a structural equation model to compute obtained data relating to physical and mental health, activities, relationship status, and workplace influence on work-life balance. Burnout Female nurses' expertise. Wu et al. (2020) Studied burnout levels using the Maslach Burnout Inventory. In addition, the authors used a Chi-squared test to compare the frequency of burnout between the frontlines and the usual ward. Torrente et al. (2021) Used Wald's asymptotic method for determining the prevalence of burnout syndrome. The Maslach Burnout Inventory model was used to categorize the burn-out condition. Finally, a logistic regression model was developed to investigate the relationship between working in the COVID-19 front liners and being diagnosed with burnout. Morgantini et al. (2020) Applied the binary burnout result used in a quasi-Poisson regression analysis to assess characteristics associated with low and average burnout against high emotional weariness burnout. Burnout is also treated with multivariable regression analysis. Sanford, Agrawal, and Miotto (2021) Used COVID-19 emotional support and mental health response were determined using disaster behavioral health models. They also employed another model, Psychological First Aid (PFA), to assess needs, provide urgent assistance to address immediate needs and concerns, and connect and link individuals with social support and other resources. Abdelhafiz et al. (2020) This study looks at the prevalence of burnout syndrome and the risk factors that contribute to it. The authors, like previous research, employed the Maslach Burnout Inventory Human Services Survey model to evaluate the incidence and risk variables for Burnout syndrome. The Kolmogorov-Smirnov analysis was performed to determine the normality of the data. Age, gender, comorbidity, and marital status were all adjusted using the stepwise elimination technique in multiple logistic regression models. Kotera, Maxwell-Jones, Edwards, and Knutton (2021) Discover Burnout among professional psychotherapists to measure the level of work-life balance, the Work-Life Balance Checklist was employed. The Self-Compassion Scale, a simplified version of the original 26-item Self-Compassion Scale, was used to assess self-compassion. Psychotherapist burnout was tested using the Maslach Burnout Inventory. A study was used to assess participants' perceived psychological distress through General Health Questionnaire (Van Der Goot et al., 2021). Pai et al. (2021) Used Structural equation modelling (SEM) to assess the impact of several aspects on the work-life balance of dental professionals, such as activities, physical and mental health, relationship status, and workplace. The Variance Inflation Factor (VIF) was used to assess the link between influencing elements (relationships, mental health, work environment, and physical health) and work-life balance. Venkateswaran et al. (2020) Used canonical correlation analysis associated with overall work-life and life satisfaction. Linear regression models for each quality work life measurement. Kelker et al. (2021) assessed well-being, burnout, and baseline resilience using validated methods such as the Well-Being Index, Physician Work-Life Study item, and Brief Resilience Scale. The Chi-square, Fisher's Exact, and Wilcoxon tests are used to analyze characteristics of well-being, resilience, burnout, and well-being. Maslach Burnout Inventory was used by Al-Humadi et al. (2021) to assess emotional tiredness and depersonalization. The Patient Health

Questionnaire was used to assess mental health. To investigate differences between men and women, chi-square was used for categorical data while t-Student was used for quantitative variables.

4. OBJECTIVE

This is a literature review-based article so the authors mainly focus on the following area.

- To observe and review the work-life condition of healthcare employees by reviewing related literature.

5. METHODOLOGY

The study is based on the case study on healthcare employees' situation and problems during COVID-19 of 30 articles by various researchers.

Figure 1 Illustration of Systematic Review Process of the articles.

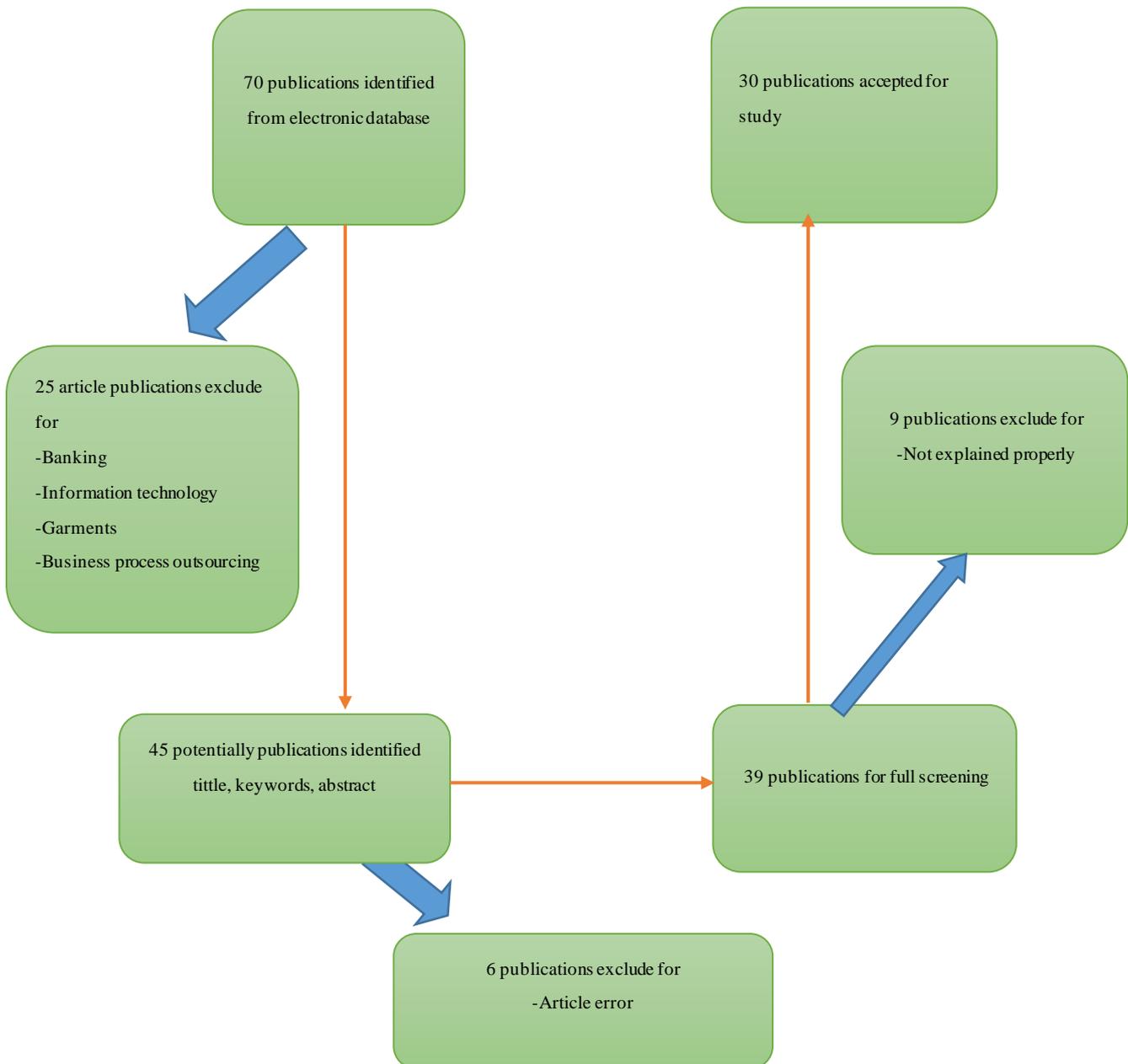


Figure 1. Systematic review process of the articles.

The problem presented above leads to a considerable need to conduct studies in the work-life condition area. The work has been concentrated on understanding the work-life issues of the current healthcare workforce.

6. FINDINGS

The recent coronavirus (COVID-19) outbreak has disrupted clinical workflow and healthcare delivery. Following a study of the selected literature, the authors offer an overview of the current state of healthcare employees. During COVID-19, a large number of healthcare personnel experienced burnout. Burnout is defined as sentiments of energy depletion or tiredness, increasing mental detachment from one's employment, negativism or cynicism about one's career, and a lack of professional efficacy the World Health Organization. To avoid burnout, maintain a good work-life balance, have access to support systems, and take enough vacation time. Job overload, workplace stress, poor job performance, anxiety, worry, weekly working hours, pressure, safety concerns, effect on dependent care, and relationship strain are the most common causes of healthcare staff burnout. Burnout is common among young European oncologists. Burnout hurts performance and service quality. Women were more likely than males to have burnout owing to concerns about self-infection, performance, and the quality of care offered to patients, as well as depression, worry, stress, and emotional weariness. Physicians who chose their profession deliberately experience less burnout than those who do not. Depression, suicidal thoughts, and burnout continue to afflict physicians of all specializations. Work-life balance and self-compassion would be extremely advantageous in minimizing burnout among psychotherapists.

Figure 2 Illustration of Factors affecting on health workforce during COVID-19.

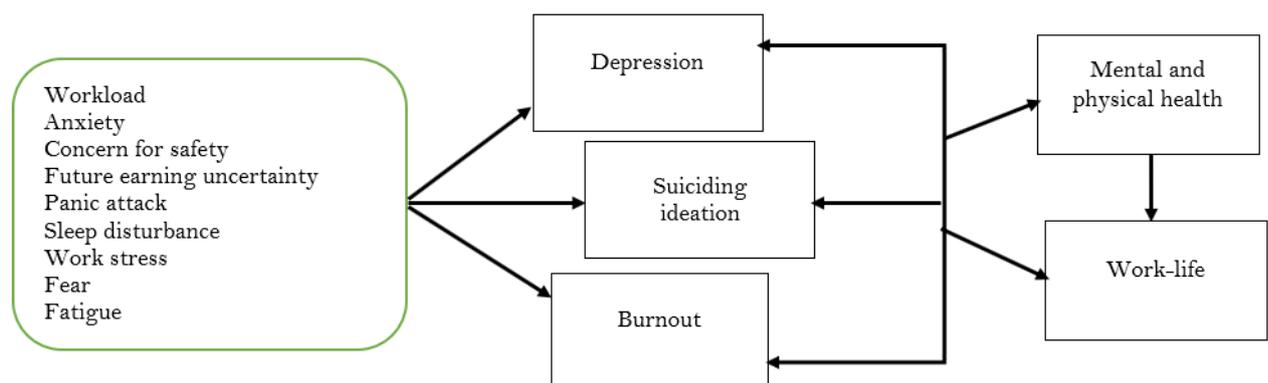


Figure 2. Factors affecting on health workforce during COVID-19.

During the COVID-19 pandemic, healthcare workers had a horrible work-life balance. Workload has an impact on the quality of service provided by medical personnel. According to factor analysis, marital status and the number of children have a considerable influence on work-life balance. Work-life balance is unaffected by energy levels, sleep duration, or general health. Irritability, sleep disruptions, fear, concern, fury, panic attacks, and depressive tendencies all affect their mental and physical well-being. Workload, stress, and pressure at work, as well as a lack of participation from superiors and coworkers, all lead to job dissatisfaction. Life satisfaction increases as job satisfaction and work-life balance improve. Clinical skills are disputed due to insufficient training, sleep disturbances, and anxiety. Because of societal stigma, healthcare workers are concerned about transferring COVID-19 to their family members.

Handling COVID-19 patients causes anxiety, concern, and exhaustion. Need fulfilment was adversely connected with psychological discomfort, whereas need frustration was favorably associated. Working women have been particularly hard hit by the COVID-19 epidemic, owing to their simultaneous duties at work and home. Increased average operational hours, increased number of COVID-19 patients treated, decreased peer and supervisor support, lesser logistic aid, and lower performance feelings all contribute to increased working stress. To

reconcile the tension between job and family, a high level of self-efficacy is required. Those who possess higher family-to-work conflict had worse emotional intelligence and self-efficacy overall. Self-efficacy is linked to emotional intelligence.

Table 1 present articles summary.

Table 1. Some of the article summary.

Author	Year	Publication type	Methodology/Model	Findings
Khalafallah et al. (2020)	2020	Article	Abbreviated Maslach burnout inventory bivariate analyses logistic regression models.	Future earnings were linked to burnout during the COVID-19 pandemic. COVID-19 was concerned about his future earnings. Because of the epidemic's shortened office hours and professional life
Maqsood et al. (2021)	2021	Article	WHO quality of life brief version instrument bivariate analyses hierarchical regression analysis	The work-life balance of healthcare personnel was terrible during the COVID-19 outbreak. Additional working hours were linked to reduce QWL, whereas demographic characteristics were linked to greater QWL. Excessive working hours and direct contact with COVID-19 patients have no bearing on healthcare workers' work-life balance.
Jiménez-Labaig et al. (2021)	2021	Article	Professional quality of life scale-30 generalized anxiety disorder-7 patient health questionnaire-9 Maslach burnout inventory model	Burnout may be mitigated by keeping a healthy work-life balance, having access to support systems, and taking enough vacation time. During pandemics, oncologists experience anxiety and moderate depression.
Osita et al. (2020)	2020	Article	Taro Yamane formula face and content method Cronbach alpha	Employee performance wellness bears the cost of sleep deprivation, financial concerns, and emotions of stress during the epidemics, and these things drive burnout.
Manikandan et al. (2020)	2020	Article	Structural equation model	During COVID-19, doctors were challenged with societal changes and emotional difficulties, as well as enhanced work demands and anxiety. These variables have an unfavorable impact on the families of doctors.
Wu et al. (2020)	2020	Article	Maslach burnout inventory Chi-squared test	Despite dealing directly with infected patients, frontline wards showed a lower rate of burnout and were less worried about being infected than the normal wards group. Front-line workers may have felt more in control of their condition, which can assist prevent burnout.
Torrente et al. (2021)	2021	Article	Wald's asymptotic method Maslach burnout inventory model logistic regression model	Working in COVID-19 frontline twice the chance of suffering from burn-out syndrome when compared to professionals working in their typical wards, and women had higher burn-out due to fear of self-infection, performance, and quality of care delivered to patients than males. Young women working on the frontlines of

Author	Year	Publication type	Methodology/Model	Findings
				COVID-19 are at significant risk of burnout.
Morgantini et al. (2020)	2020	Article	Quasi-Poisson regression multivariable regression analysis	The majority of healthcare staff reported burnout as a result of increasing workload, high job stress, high time pressure, and a lack of organizational support. The highest rate of reported burnout was in the United States, while the lowest was in Italy.
Abdelhafiz et al. (2020)	2020	Article	Maslach Burnout inventory human services survey Kolmogorov Smirnov test multiple logistic regression analysis of variance test Pearson correlation coefficient	The majority of respondents reported reduced levels of personal achievement, while a smaller minority reported significant levels of depersonalization and emotional weariness, both of which are associated with burnout syndrome. The female gender has been linked to higher degrees of emotional weariness. COVID-19 illness or mortality among employees or family members has considerably increased. A link between higher emotional exhaustion and worse personal accomplishment (PA)
Kotera et al. (2021)	2021	Article	Work-life balance checklist (WLBC) self-compassion scale Maslach burnout inventory	Burnout has a positive link with weekly working hours and pressure, but a negative relationship with age, self-compassion, and work-life balance. Work-life balance and weekly working hours were both significant predictors of burnout. The association between work-life balance and emotional weariness was mitigated by self-compassion.
Dinibutun (2020)	2020	Article	Cross-sectional survey Maslach burnout inventory Whitney-U test Kruskal Wallis-H test	Emotional exhaustion was strong among physicians, while depersonalization and personal accomplishment were low. Men and women, married and single, are all influenced by burnout. Burnout has little to do with a person's degree of monetary fulfilment. Physicians who choose their careers freely experience less burnout than those who did not catch it willingly.
Ofei-Dodoo et al. (2021)	2021	Article	Depression anxiety stress scales-21 Maslach burnout inventory	The physicians rated emotional weariness, depersonalization, and personal accomplishment as moderate. Burnout affects both men and women, married and unmarried. Burnout has nothing to do with whether or not they are content with their pay. Physicians who choose their profession freely have less burnout than those who did not.
Van Der Goot et al. (2021)	2021	Article	General health questionnaire (GHQ-12)	Autonomy and competence at work Work-related relatedness pleasure were connected with lower levels of psychological discomfort, whereas dissatisfaction was linked to greater levels of psychological distress. Need fulfilment was shown to be inversely connected to psychological distress,

Author	Year	Publication type	Methodology/Model	Findings
				whereas need frustration was found to be inversely related.
Pai et al. (2021)	2021	Article	Structural equation modelling path analysis variance inflation factor (VIF	During COVID-19 doctors have faced societal changes and emotional stressors, additional work pressures, and anxiety these factors affect doctors' families. According to factor analysis, the author discovered that marital status and number of children had a substantial influence on work-life balance. Work-life balance is unaffected by energy level, sleep length, or general health state. Female dentists also experienced irritation, anxiety, and changes in sleep habits, all of which had an impact on their mental and physical health.
Venkateswaran et al. (2020)	2020	Article	Canonical correlation analysis linear regression models	Workplace quality, pay, and welfare policies may all contribute to a pleasant and easy work situation. When job satisfaction and work-life balance improve, so does life satisfaction. Workload, stress, and heavy workload, as well as a lack of collaboration from superiors and coworkers, all contribute to job unhappiness.
Kelker et al. (2021)	2020	Article	Well-being index physician work-life study brief resilience scale Chi-square, fisher's exact Wilcoxon tests	Despite being a tough bunch, the majority of frontline emergency medicine practitioners reported significant levels of stress, worry, panic, safety concerns, and relationship strain as a result of COVID-19. According to the findings, their relationships were also put under greater hardship during COVID-19. COVID-related burnout has been connected to personal safety, impact on dependent care, relationship strain, increased employment tasks, and feelings of isolation.
Al-Humadi et al. (2021)	2021	Article	Patient health questionnaire (PHQ-9) Maslach burnout inventory Chi-square	Physicians of all specialties continue to struggle with depression, suicidal thoughts, and burnout. Anesthesiology, internal medicine, and other non-surgical disciplines had the biggest rates of depression and suicidal thoughts. Compared to anesthesiologists and pediatricians, orthopedic surgeons have a better work-life balance and experience less burnout.

7. RECOMMENDATION

The relevant authorities should change the healthcare policy. The health of the healthcare workforce needs to monitor regularly and apply preventative tactics because they are the frontline workers. Some studies found that equipment is not enough for providing healthcare services so an adequate level of equipment and necessary assistance to the healthcare personnel. Front line workers faced a huge workload during COVID-19 so the government and authorities recruit more healthcare workers to reduce the workload. Government should implement new healthcare policies to avoid burnout of healthcare workforces and review the current healthcare

policies for increasing new healthcare facilities. In this COVID-19 pandemic front, line workers have faced lots of difficulties like psychological disturbance. So authorities should engage with their employees to provide safe, timely, and private psychological support solutions. Authorities and governments need to develop a framework to help clinical and educational supervisors proactively engage in a process of actively monitoring the healthcare workforce's well-being. Front line workforces all-time feel distressed for their health and family. So authorities and other concerned bodies should provide necessary incentives for health professionals on a local level. Public health strategies and financing should be integrated into larger social and economic development plans. Public funds should be focused to improve access to social safety mechanisms that are appropriately supported and fully functioning, such as kindergartens, nursing homes, public transportation, and public housing to promote gender parity and the requirements of healthcare professionals. The government and organizations should give further training, organizational aid, and support for healthcare practitioners' families, Personal Protective Equipment, and mental health services.

8. CONCLUSION

Our research shows that the pandemic's uncertainty in terms of healthcare workforce policy, enough equipment, job security, depression, future income, and family support is strongly linked to burnout and work-life balance. Workload, worry, fear of harm, uncertainty about future earnings, panic attacks, sleep disturbance, job stress, fear, and exhaustion are all linked to physical and mental health problems. The professional and social life patterns are altered with COVID-19. As a result, it affects both personal and professional life. The healthcare profession is currently under a lot of stress as a result of a higher number of COVID-19-affected patients. The medical staff lacked the required instruments as well as psychological support. As a result, to retain healthcare personnel, organizations and governments should monitor and give this vital help. During COVID-19, burnout was at an all-time high in the health workforce. According to the authors of this article, healthcare workers require both incentive help and appropriate equipment. Quality of work, income, and welfare policies may all contribute to a pleasant and easy working environment. Life satisfaction increases as job satisfaction and work-life balance improve. Workload, stress, and pressure at work, as well as a lack of participation from superiors and coworkers, all lead to job dissatisfaction. As a result, the government and other institutions modified their healthcare policies. In the healthcare business, new policies must be implemented. More healthcare staff are required to keep pace with the growing number of COVID-19 patients.

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REFERENCES

- Abdelhafiz, A. S., Ali, A., Ziady, H. H., Maaly, A. M., Alorabi, M., & Sultan, E. A. (2020). Prevalence, associated factors, and consequences of burnout among Egyptian physicians during COVID-19 pandemic. *Frontiers in Public Health*, 8, 590190. <https://doi.org/10.3389/fpubh.2020.590190>
- Aggarwal, I. B., Ganjiwale, J., Parikh, A., Trivedi, N., Kaur, S., Chennamaneni, R., . . . Iyer, P. (2021). Coping with COVID-19 pandemic lockdown—The lady doctors perspective. *Indian Journal of Medical Sciences*, 73(2), 164-169. https://doi.org/10.25259/ijms_319_2021

- Al-Humadi, S. M., Cáceda, R., Bronson, B., Paulus, M., Hong, H., & Muhrad, S. (2021). Orthopaedic surgeon mental health during the COVID-19 pandemic. *Geriatric Orthopaedic Surgery & Rehabilitation*, 12, 1-7. <https://doi.org/10.1177/21514593211035230>
- Arkanudin, A., & Rupita, R. (2021). Burnout knowledge of female nurses during the COVID-19 Pandemic: Study at Dr. Agoesdjani hospital in Ketapang Regency, Indonesia. *Randwick International of Social Science Journal*, 2(4), 509-515. <https://doi.org/10.47175/rissj.v2i4.330>
- Asmundson, G., Paluszek, M., Landry, C., Rachor, G., McKay, D., & Taylor, S. (2020). Do preexisting anxiety-related and mood disorders differentially impact COVID-19 stress responses and coping? *Journal of Anxiety Disorders*, 74, 102271. <https://doi.org/10.1016/j.janxdis.2020.102271>
- Billings, J., Ching, B. C. F., Gkofa, V., Greene, T., & Bloomfield, M. (2020). Healthcare workers experiences of working on the frontline and views about support during COVID-19 and comparable pandemics: A rapid review and meta-synthesis. *MedRxiv*, 1-19. <https://doi.org/10.1101/2020.06.21.20136705>
- Centre for Health Workforce. (2021). *What is the health workforce?* Retrieved from <https://www.chwsny.org/the-health-workforce/what-is-the-health-workforce>
- Di Gennaro, F., Pizzol, D., Marotta, C., Antunes, M., Racalbutto, V., Veronese, N., & Smith, L. (2020). Coronavirus diseases (COVID-19) current status and future perspectives: A narrative review. *International Journal of Environmental Research and Public Health*, 17(8), 2690. <https://doi.org/10.3390/ijerph17082690>
- Dinibutun, S. R. (2020). Factors associated with burnout among physicians: An evaluation during a period of COVID-19 pandemic. *Journal of Healthcare Leadership*, 12, 85-95. <https://doi.org/10.2147/jhl.s270440>
- Fitzpatrick, K., Patterson, R., Morley, K., Stoltzfus, J., & Stankewicz, H. (2020). Physician wellness during a pandemic. *Western Journal of Emergency Medicine*, 21(6), 1-5. <https://doi.org/10.5811/westjem.2020.7.48472>
- Gautam, S. (2020). COVID-19: Air pollution remains low as people stay at home. *Air Quality, Atmosphere & Health*, 13(7), 853-857. <https://doi.org/10.1007/s11869-020-00842-6>
- Ghislieri, C., Molino, M., Dolce, V., Sanserverino, D., & Presutti, M. (2021). Work-family conflict during the COVID-19 pandemic: Teleworking of administrative and technical staff in healthcare. An Italian study. *La Medicina Del Lavoro*, 112(3), 229-240. <https://doi.org/10.23749/mdl.v112i3.11227>
- Hlubocky, F. J., Back, A. L., Shanafelt, T. D., Gallagher, C. M., Burke, J. M., Kamal, A. H., . . . McGinnis, M. (2021). Occupational and personal consequences of the COVID-19 pandemic on US oncologist burnout and well-being: A study from the ASCO clinician well-being task force. *JCO Oncology Practice*, 17(7), e427-e438. <https://doi.org/10.1200/op.21.00147>
- Hopman, J., Allegranzi, B., & Mehtar, S. (2020). Managing COVID-19 in low-and middle-income countries. *Journal of the American Medical Association*, 323(16), 1549-1550.
- Jiménez-Labaig, P., Pacheco-Barcia, V., Cebrià, A., Gálvez, F., Obispo, B., Pérez, D., . . . Remon, J. (2021). Identifying and preventing burnout in young oncologists, an overwhelming challenge in the COVID-19 era: A study of the Spanish society of medical oncology (SEOM). *ESMO Open*, 6(4), 100215. <https://doi.org/10.1016/j.esmoop.2021.100215>
- Karakose, T., & Malkoc, N. (2021). Psychological impact of the COVID-19 pandemic on medical doctors in Turkey. *Social Behavior and Personality: An International Journal*, 49(1), 1-10. <https://doi.org/10.2224/sbp.9890>
- Kelker, H., Yoder, K., Musey, P., Harris, M., Johnson, O., Sarmiento, E., . . . Welch, J. (2021). Prospective study of emergency medicine provider wellness across ten academic and community hospitals during the initial surge of the COVID-19 pandemic. *BMC Emergency Medicine*, 21(1), 1-12. <https://doi.org/10.1186/s12873-021-00425-3>
- Khalafallah, A. M., Lam, S., Gami, A., Dornbos III, D. L., Sivakumar, W., Johnson, J. N., & Mukherjee, D. (2020). Burnout and career satisfaction among attending neurosurgeons during the COVID-19 pandemic. *Clinical Neurology and Neurosurgery*, 198, 106193. <https://doi.org/10.1016/j.clineuro.2020.106193>
- Khan, A., Khan, I. U., & Khan, M. S. (2021). Effects of COVID-19 pandemic on working lives and psychological health of orthopedic surgeons in Pakistan. *Journal of Human Behavior in the Social Environment*, 31(1-4), 283-292. <https://doi.org/10.1080/10911359.2020.1822254>

- Kotera, Y., Maxwell-Jones, R., Edwards, A.-M., & Knutton, N. (2021). Burnout in professional psychotherapists: Relationships with self-compassion, work–life balance, and telepressure. *International Journal of Environmental Research and Public Health*, 18(10), 5308. <https://doi.org/10.3390/ijerph18105308>
- Li, B., Yang, J., Zhao, F., Zhi, L., Wang, X., Liu, L., . . . Zhao, Y. (2020). Prevalence and impact of cardiovascular metabolic diseases on COVID-19 in China. *Clinical Research in Cardiology*, 109(5), 531-538. <https://doi.org/10.1007/s00392-020-01626-9n>
- Lu, H., Stratton, C. W., & Tang, Y. W. (2020). Outbreak of pneumonia of unknown etiology in Wuhan, China: The mystery and the miracle. *Journal of Medical Virology*, 92(4), 401-202. <https://doi.org/10.1002/jmv.25678>
- Manikandan, G., Anuradha, V., Tiwari, R. V., Tiwari, H. D., Ahmad, F. N., Vigneswaran, T., & Reddy, N. M. (2020). Work-life balance of doctors during COVID-19: An original research. *Turkish Journal of Physiotherapy and Rehabilitation*, 32, 3.
- Maqsood, M. B., Islam, M. A., Naqvi, A. A., Al Qarni, A., Al-Karasneh, A. F., Iffat, W., . . . Alghamdi, S. (2021). Assessment of quality of work life (QWL) among healthcare staff of intensive care unit (ICU) and emergency unit during COVID-19 outbreak using WHOQoL-BREF. *Saudi Pharmaceutical Journal*, 29(11), 1348-1354. <https://doi.org/10.1016/j.jsps.2021.09.002>
- Moazzami, B., Razavi-Khorasani, N., Dooghaie, M. A., Farokhi, E., & Rezaei, N. (2020). COVID-19, and telemedicine: Immediate action required for maintaining healthcare providers well-being. *Journal of Clinical Virology*, 126, 104345. <https://doi.org/10.1016/j.jcv.2020.104345>
- Morgantini, L. A., Naha, U., Wang, H., Francavilla, S., Acar, Ö., Flores, J. M., . . . Eklund, M. (2020). Factors contributing to healthcare professional burnout during the COVID-19 pandemic: A rapid turnaround global survey. *PloS One*, 15(9), e0238217. <https://doi.org/10.1371/journal.pone.0238217>
- Nadkarni, T., Patel, S., Pawar, A., & Bodhanwalla, M. (2021). Impact of COVID-19 pandemic on the life of Indian doctors: Time for introspection? *International Journal of Medicine and Public Health*, 11(2), 85-89. <https://doi.org/10.5530/ijmedph.2021.2.15>
- Ofei-Dodoo, S., Loo-Gross, C., & Kellerman, R. (2021). Burnout, depression, anxiety, and stress among family physicians in Kansas responding to the COVID-19 pandemic. *The Journal of the American Board of Family Medicine*, 34(3), 522-530. <https://doi.org/10.3122/jabfm.2021.03.200523>
- Osita, F. C., Onyekwele, P. N., Idigo, P. I., & Eze, S. U. (2020). Work-life balance and employee performance: A COVID-19 experience of hospitals in Anambra State, Nigeria. *Global Journal of Management & Social Sciences*, 3(1), 120-129.
- Pabalkar, V., & Prakash, S. (2020). Occupational stress among Indian doctors during COVID-19. *European Journal of Molecular & Clinical Medicine*, 7(9), 1862-1880.
- Pai, S., Patil, V., Kamath, R., Mahendra, M., Singhal, D. K., & Bhat, V. (2021). Work-life balance amongst dental professionals during the COVID-19 pandemic—A structural equation modelling approach. *PLoS One*, 16(8), e0256663. <https://doi.org/10.1371/journal.pone.0256663>
- Park, S. Y., Kim, B., Jung, D. S., Jung, S. I., Oh, W. S., Kim, S. W., & Chang, H. H. (2020). Psychological distress among infectious disease physicians during the response to the COVID-19 outbreak in the Republic of Korea. *BMC Public Health*, 20(1), 1-7. <https://doi.org/10.1186/s12889-020-09886-w>
- Riley, T., Sully, E., Ahmed, Z., & Biddlecom, A. (2020). Estimates of the potential impact of the COVID-19 pandemic on sexual and reproductive health in low-and middle-income countries. *International Perspectives on Sexual and Reproductive Health*, 46, 73-76. <https://doi.org/10.1363/46e9020>
- Salem, J., Hawkins, L., Sundaram, A., Gates, J., Suleman, S., Mistry, M., & Chakravorty, I. (2021). COVID-19 and the impact on doctor wellbeing and training: A mixed-methods study. *The Physician*, 6(3), 1-8. <https://doi.org/10.38192/1.6.3.2>
- Sanford, J., Agrawal, A., & Miotto, K. (2021). Psychological distress among women healthcare workers: A health system's experience developing emotional support services during the COVID-19 pandemic. *Frontiers in Global Women's Health*, 2, 614723. <https://doi.org/10.3389/fgwh.2021.614723>

- Shanafelt, T. D., & Noseworthy, J. H. (2017). *Executive leadership and physician well-being: Nine organizational strategies to promote engagement and reduce burnout*. Paper presented at the Mayo Clinic Proceedings Elsevier.
- Singh, A. K., & Misra, A. (2020). Impact of COVID-19 and comorbidities on health and economics: Focus on developing countries and India. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(6), 1625-1630. <https://doi.org/10.1016/j.dsx.2020.08.032>
- Torrente, M., Sousa, P. A., Sánchez-Ramos, A., Pimentao, J., Royuela, A., Franco, F., . . . Provencio, M. (2021). To burn-out or not to burn-out: A cross-sectional study in healthcare professionals in Spain during COVID-19 pandemic. *BMJ Open*, 11(2), e044945. <https://doi.org/10.1136/bmjopen-2020-044945>
- Van Der Goot, W. E., Duvivier, R. J., Van Yperen, N. W., De Carvalho-Filho, M. A., Noot, K. E., Ikin, R., . . . Lammers, A. J. (2021). Psychological distress among frontline workers during the COVID-19 pandemic: A mixed-methods study. *PLoS One*, 16(8), e0255510.
- Venkateswaran, P. S., Felix, C. E., & Umamaheswari, R. (2020). Linkage between the overall work-life and life satisfaction of nurses at hospitals in coimbatore district at COVID-19. *Indian Journal of Natural Sciences*, 10(61), 1-9.
- Wu, Y., Wang, J., Luo, C., Hu, S., Lin, X., Anderson, A. E., . . . Qian, Y. (2020). A comparison of burnout frequency among oncology physicians and nurses working on the frontline and usual wards during the COVID-19 epidemic in Wuhan, China. *Journal of Pain and Symptom Management*, 60(1), e60-e65. <https://doi.org/10.1016/j.jpainsymman.2020.04.008>
- Zeb, S., Akbar, A., Gul, A., Haider, S. A., Poulouva, P., & Yasmin, F. (2021). Work-family conflict, emotional intelligence, and general self-efficacy among medical practitioners during the COVID-19 pandemic. *Psychology Research and Behavior Management*, 14, 1867-1876. <https://doi.org/10.2147/prbm.s333070>

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