

## Effect of Coronavirus Disease (COVID-19) Pandemic on Different Aspects of Human Life: A Review Article

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### ABSTRACT

The COVID-19 pandemic is a major health crisis that has affected the lives of millions worldwide. This article aimed to assess the effects of the COVID-19 pandemic on the different aspects of human life. Throughout the pandemic, the worldwide lockdown has led to economic crises in many nations, resulting in a huge number of people losing their jobs and livelihoods. Social communication decreased and mental status was affected; as fear of the pandemic spread, many people developed sleep disturbances. During covid-19, was shown that the use of electronic media by people near bedtime increased. During lockdown due to COVID-19, increased nutrition intake reduced bodily activity, and hence increased body mass index, especially among children was observed. Food delays have also occurred, particularly among young people. This study reviewed and summarized full-text articles and concluded that COVID-19 has had massive effects on several aspects of human life, such as economic stability, mental health, nutritional intake, sleep patterns, and many medical conditions. Further studies are recommended to evaluate other effects that might help stakeholders in future planning for the health system, economy, and education.

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## INTRODUCTION

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Coronavirus disease (COVID-19) is a zoonotic disease caused by viruses that affect the respiratory system. The disease was categorized as a pandemic that led to a worldwide lockdown. This, in turn, offered an extraordinary opportunity to recognize the extent to which changes in individuals' activities can affect nature (Manenti et al., 2020).

Lockdown, a word usually used as a substitute for mass quarantine, is naturally based on stay-at-home or shelter-in-place orders issued by a municipal government or authority for maintaining social separation and restrictive measures. While, in some sense, it can lead to improvement in the reducing spread of disease, it also results in negative behavioral changes and mental health issues from social isolation. Some of the greatest unwanted apprehensions of persistent homestay include physical inactivity, weight gain, behavioral disorders, inadequate sunlight exposure, and social separation (Lippi et al., 2020).

The assessments of death and healthcare response constructs based on information from China and other developed countries, variance in causal health circumstances, and different healthcare system capabilities will likely result in diverse designs. Suspensions in applying policies to defeat the spread of the virus will result in dangerous results and reduced survival protection. Furthermore, the plans in the place will need to be preserved until actual medications are developed to avoid the risk of future infectious diseases (Walker et al., 2020).

In a study conducted by Runkle to assess the association between climatological factors and transmission of COVID-19, the result revealed that humidity exposure in a short period was positively correlated with the spread of the virus. The authors recommended that weather should be a factor in deliberations on how to manage infectious diseases (Runkle et al., 2020).

### 2. Socioeconomic effects of COVID-19

The world economy was plunged into chaos during the COVID-19 pandemic, which has had a devastating effect on both destinations and institutions. (Pappas, 2021) The national lockdown in India led to low fiscal status and influenced all sections of society. The pandemic affected population health, healthcare systems, and the population's nutritional status (Gopalan & Misra, 2020).

A study was conducted to evaluate the influence of three factors: socioeconomic, climatic, and transportation factors, with everyday increasing cases of COVID-19. The results revealed that worldwide networks affected the flight transport system and are the fundamental factor contributing to the speed of

COVID-19 spread in a diverse population (Coelho et al., 2020).

A study conducted in India on the effect of the COVID-19 pandemic on travel commerce found an expected spread of COVID-19 also was reflected in North India's travel commerce. Before the discovery of the COVID-19 disease, it was exaggerated that approximately 60% of professionals were employed and many relied on compensation timetables. The respondents (78.4%) were very optimistic, cheerful, and pleased to spend time with their families (Awasthi et al., 2020).

A study conducted in Zimbabwe about the influence of COVID-19 on businesswomen revealed that they are in the formal section were influenced by inter-province nomadic rules. The issue became serious, and widows and others were caring for various babies. There was a wide range of circumstances of stress associated with housework and low incomes, particularly regarding food provision (Chikazhe et al., 2020).

A study was conducted to evaluate the impact of the COVID-19 pandemic on store marketing indices in most economically developed nations, including Japan, Korea, Singapore, the USA, Germany, Italy, the UK, Hong Kong, Malaysia, and Thailand, The results revealed that the stores in most countries were affected, and some dropped rapidly when the virus spread. Asian countries experienced additional undesirable and unusual revenues compared to other countries (Liu et al., 2020).

The COVID-19 pandemic has led to economic crises worldwide. Societal separation, self-isolation, and tourism limitations have led to an abridged employee throughout all financial areas and have eliminated work for several occupations. Educational intuitions were closed, and the need for supplies and industrial goods was reduced. Furthermore, the requirements for medical materials have improved significantly (Nicola et al., 2020).

A study conducted in China to evaluate the effect of the COVID-19 pandemic on the travel business revealed that the outbreak of the coronavirus had a significant impact, many international travelers canceled their plans to visit China. The speed of the coronavirus outbreak in China has changed the lives of Chinese residents. Likewise, the economy has been affected by the lockdown (Hoque et al., 2020).

Another study conducted in China on the effect of the pandemic on individuals found that different ways were followed to stop or mitigate the negative effects of the pandemic, such as societal separation, transportation limitations, and lockdowns. These interventions negatively affected the economy and

individual activities. This new situation has influenced numerous manufacturing and travel agencies and caused certain activities to come to a grinding halt (Özkan & Ulema, 2020).

Researchers from India conducted a study to evaluate the severe impact of COVID-19 on health care and internet marketing and found that the contagion influenced several areas such as cultivation, health business, economics, information technology, and industry. Through securities of an innovative collapse and monetary disaster, important instants requested solid, prompt actions to be taken (Kumar, S. et al., 2020).

A study conducted in Indonesia to evaluate the influence of COVID-19 on the economy showed that the global economy was affected by COVID-19. Likewise, the Indonesian economy has been seriously affected by COVID-19. Extremely affected areas as a result of the COVID-19 contagion are transport, travel, employment, health, and other segments. (Susilawati et al., 2020).

A study conducted to evaluate the influence of the six social-distancing strategies on COVID-19 revealed that statewide stay-at-home instructions had the most significant effect in decreasing out-of-home movement and increased increasing the number of individuals spent with family. Restrictions on cafeterias and taverns were rated next and caused an increase in those staying at home by an estimated 1.4% theme (8.5%). The four other additional strategies did not expressively decrease movement (Abouk & Heydari, 2021).

### 3. Sleep disturbance

Sinha conducted a study in India the result revealed delayed sleep and onset of wakeup, as well as delayed meal times during the lockdown among younger people. Young people reported increased periods of sleep. Increased time consuming digital media was evident in all age groups, mainly males. However, females reported delayed sleep and onset of waking time and first meal timing with extended sleep time during the lockdown (Sinha et al., 2020).

Results of an online survey conducted in Italy revealed that during a lockdown, the use of electronic media by people near bedtime increases; this alteration did not disturb nap patterns. During home quarantine, sleep timing changed in people who had higher levels of depression and nervousness, and anxiety symptomatology increased sleep problems (Cellini et al., 2020).

A cross-sectional study conducted in Wuhan in 2020 revealed that during the spread of COVID-19, sleep disturbance was high among pediatric and healthcare workers in health settings. Insomnia was independently associated with being an only child, exposure to patients, coronavirus infection, and depression (Wang et al., 2020).

A study conducted in Italy found that depression and apprehension symptom occurrence was 24.7% and 23.2%, respectively; 42.2% had insomnia, and 17.4% reported moderate/severe sleeplessness. Other factors such as old age, non-attendance of work-related distress, and marital status exacerbated such a possibility. Women with prolonged disorders were associated with a greater occurrence of insomnia (Gualano et al., 2020).

An online survey conducted in early May 2020 showed a change in bedtime with fewer hours of night sleep and a rise in daytime sleeping. These effects were observable in the crosswise work-related groups except for healthcare providers. Sleep quality worsened in the crosswise groups. Decreases in sleep time were related to depressive symptoms. Lockdown leads to variations in sleep time and the amount and value of night sleep (Gupta et al., 2020).

A study conducted to assess anxiety-sleep association and quarantine such as actual sleeplessness management through the COVID-19 pandemic revealed amendments of logical behavior treatment features that can be practically applied and are intended for persons facing altered labor timetables, individuals with health apprehension, and individuals managing baby-sitting and home-schooling while identifying the common restrictions imposed on bodily exercise and societal communication. Sleep difficulties can be managed through home quarantine to reduce anxiety and avoid disturbances in societal interactions (Altena et al., 2020).

A study conducted in Bangladesh evaluated the hazard factors related to sleep disturbance throughout the COVID-19 lockdown. The results revealed that the occurrence of insomnia was higher among respondents aged 31–40 years. Sex differences were observed in male candidates, and no significant differences were observed in local heterogeneity. Employed individuals working remotely or doing distance learning throughout the lockdown found issues of insomnia. Improper work reflects the financial influence of COVID-19, which also leads to insomnia (Ara et al., 2020).

Research showed an increased prevalence of sleep disturbance among students. In nursing students, insomnia leads to low performance, destructive behavior, and nutritional differences. There was also negative behavior due to differences in nap methods. The mean time students spent in bed was 7.6 h (SD = 1.1 h) before the lockdown and 8.5 h (SD = 1.2 h) throughout the lockdown. The greatest changes occurred in the areas of sleep latency, sleep time, and sleep effectiveness (Romero-Blanco et al., 2020).

### 4. COVID-19 and psychological disturbances

An online investigation conducted in India showed that more than two-fifths of individuals experienced mental illnesses due to lockdown and

COVID-19. Of the respondents, 38.2% had anxiety and 10.5% had depression. A reasonable level of anxiety was reported for a majority of students (74.1%), and 71.7% reported poor mental well-being. There is a need for continuous mental health services in communities throughout the pandemic (Grover et al., 2020).

Home quarantine from suspected or actual COVID-19 infection had an adverse influence on both psychological and temperament and feelings. (Ammar et al., 2020) Depression results in severe sleep disturbances. The "depressed brain" takes longer to initiate sleep, shortens the period of dreaming, spends little or no time in "deep sleep" and is subject to hyperactive brain regions during sleep. Antidepressants rectify sleep disturbances and restore normal sleep architecture and presumably normal brain metabolism during sleep (Slaughter, 2006).

A study conducted in China to assess the burden of the COVID-19 outbreak on mental health and to explore its potential effects on the Chinese population revealed that the main challenge throughout the coronavirus pandemic was mental health issues and healthcare providers are in great danger of mental disease (Huang & Zhao, 2020).

A study conducted in Italy evaluated sleep quality during home quarantine. The results revealed that more than half of Italian residents had insomnia and alterations in nap patterns due to increased emotional suffering throughout the COVID-19 lockdown restraints (Franceschini et al., 2020).

Research conducted on Chinese adolescents showed that Chinese youth maintained an active lifestyle throughout the COVID-19 outbreak. Girls in grade three senior secondary schools had advanced levels of temper disorder. Increased physical activity was demonstrated to help manage feelings of anger among youths during the outbreak (Kang et al., 2020).

A survey conducted in Italy assessed sleep quality, sleeplessness, and apprehension symptoms apparent in Italian residents throughout the continued lockdown. The results revealed that females appeared to display longer-lasting pliability throughout the lockdown. Temporarily, men were observed to be the most susceptible to the imposition of restraining procedures. Crosswise obtainable signs of emotional distress and significant sleep turbulences next to the prolonged and demanding lockdown time remain during the COVID-19 pandemic (Salfi et al., 2020).

In an Australian study evaluating unhappiness, apprehension, and psychological health, results revealed correlations of experience with Australian wildfires unconnected to anxiety. COVID-19 outbreak-induced work and societal functional losses are strongly connected to a raised level of despair and apprehension symptoms and decreased mental health. These results suggest that increasing access to mental

health facilities is vital to lessening disturbances to work and societal functions and reducing COVID-19 outbreak-related influences on psychological health (Dawel et al., 2020).

De Sousa Moreira et al conducted a systematic review that used literature from the scientific databases of MEDLINE, EMBASE, and Network of Science to analyze the core effects of psychological and neuropsychiatric data, a study showed psychological and neuropsychiatric symptoms of acute respiratory syndromes in patients affected by COVID-19 throughout or post-infection (de Sousa Moreira et al., 2021).

An online survey conducted to determine the stages of anxiety, depression, and self-care symptoms throughout the COVID-19 pandemic in the overall population showed that 20.8% of the sample had symptoms of severe anxiety whereas 27.5% had symptoms of severe depression. The risk factors for increasing symptoms of anxiety and depression included being female, unmarried, having no children, having medical diseases, and having a history of psychological health. This suggested the crucial need for mental health care among participants (Galindo-Vázquez et al., 2020).

A study that focused on residents' mental health revealed the presence of queries related to the occurrence of mental health care delivered by psychologists and other health specialists who aim to decrease the undesirable effects of this emergency and assume a protective role (Faro et al., 2020).

A study conducted to measure the emotional influence of lockdown actions executed by the government suggested methods to combat the COVID-19 outbreak. The results suggest that continuous lockdown actions might have an increased effect on mental health over an extended period. It is important to continue to observe psychological suffering besides additional associated mental health complications among residents (Canet-Juric et al., 2020).

A study conducted to assess emotional disturbance among healthcare professionals revealed that contacting COVID-19 patients expects enlarged the feeling disturbances and approaches are not connected with the practice of intellectual reassessment. The study showed a maximum increase in anxiety levels among healthcare professionals. The study recommended that an appropriate strategy is essential for direct replies to decrease the high level of anxiety among healthcare professionals during the contagion crisis (García-Batista et al., 2020).

A study conducted in the United States revealed a significant increase in anxiety about parent exhaustion. Having relatives infected with COVID-19 increased the influence of digital emotion contagion (DEC) on parental burnout. An advanced level of

emotion regulation (ER) protected the association between feeling contaminated and worrying about COVID-19. Adjacent to that is a predisposition to an ordinal feeling contagion that may have an undesirable outcome for parents. Ordinal feeling contagion may increase parent exhaustion and is linked to anxiety (Prikhidko et al., 2020).

### 5. Nutrition intake and physical activities

A study conducted in Palestine revealed increased nutrition intake and increased body mass index of the pupils. The study revealed consumption of non-nutritive diets, and sleeping hours, as well as a reduction in exercise during the lockdowns. Weight gain is autonomously associated with increased nutrition intake (Allabadi et al., 2020).

In a study conducted in Italy to evaluate food intake, results revealed that people consuming vegetables and fruits had no divergence in body weight during the lockdown. In contrast, fried potato chips, red meat, and syrupy drink intake were significantly associated with increased body weight. Time spent doing sports activities decreased by 2.30 (SD 4.60) h/week ( $P = 0.003$ ) (Pietrobelli et al., 2020).

Throughout the COVID-19 lockdown era in March and April 2020, an analytical study was conducted on the developed USA, Canada, the UK, Germany, Republic of Ireland, Australia, New Zealand, and Singapore) to developing countries (e.g., India, Indonesia, the Philippines, Vietnam, Egypt, United Arab Emirates, Nigeria, and South Africa) the result revealed that limited movement had affected the public's nutritional and life manners as people were continuously caring for an immune-boosting diet and have substituted outside events with inactive inside actions (Mayasari et al., 2020).

Health system consultants around the world have implemented protective health procedures that contain isolation to lessen the outbreak of coronavirus between populations. Physical activities remained one of the reasons for moving outdoors in most nations. Therefore, it is necessary to avoid the dangerous influence of reducing exercise in elderly adults, which is very important to change their lifestyle and refine their protection. The influence of COVID-19 decreased physical activity in the elderly, which preserved their level of individuality affecting their physical and psychological health (Ghram et al., 2020).

A study conducted in the United Arab Emirates on indirect health effects of COVID-19 and unhealthy lifestyles throughout the lockdown revealed increased food consumption (31.8%), reduced bodily activity (30%), weight gain (29.4%), reduced sleep (20.8%), and increased smoking (21%). The authors recommended plans and interventions directed specifically to high-risk groups, suggesting an

increase in healthy lifestyle issues throughout the pandemic (Radwan et al., 2021).

The research was conducted to assess Japanese residents' exercise variations before and during the COVID-19 pandemic in the elderly home population. The results revealed a significant reduction in the overall exercise period throughout the COVID-19 pandemic compared to the period before the pandemic (Yamada et al., 2020).

The pandemic has led to food shortages and decreased revenues that influence nutritional varieties. Families spend approximately 50% of their wages on non-staple foods such as fruits, vegetables, and animal-sourced products. A study from Ethiopia supported this result that decreases in family nutritional intake are mostly in nutrient-dense foods such as fruit, meat, eggs, and dairy products. The decreased food variety, consumption of micronutrients, and food position raised adverse health costs (Laborde et al., 2020).

### 6. Education and COVID-19 pandemic

Preeti Tarkar conducted a study in India to evaluate the effect of the covid-19 pandemic on the education system, the result revealed that due to the pandemic, all schools, colleges, and universities are stated to be locked. The locked distracting the total education system. Education is altering from offline to online, and this alteration in education leads to many problems for policymakers, students, teachers, and parents (Tarkar, 2020).

The research was conducted to evaluate the impact of a pandemic on medical education the result revealed that faculty and medical students are coping with the alterations that have been made in the line has been altered with COVID-19 disturbing practices in hospitals, and medical schools. The transformation of in-person lessons with online counterparts is a clear requirement during this period but generates a defeat of cooperative experiences that has the potential to be a significant detriment to education. Several medical learners have also missed the chance for particular progress through consultation presentations (Ferrel & Ryan, 2020).

### 7. Other effects of the COVID-19 pandemic

A study conducted to investigate the influence of COVID-19 on patients with migraines revealed that compared to the era before the pandemic, 59.6% of participants reported a regular increase in migraines, 16% stated a regular reduction, and 10.3% reported a change to chronic migraines. COVID-19 has had a general adverse effect on individuals with migraines. (Al-Hashel & Ismail, 2020) The COVID-19 pandemic has influenced individual health. Air contamination remained throughout the pandemic, and the virus was also found in wastewater (SanJuan-Reyes et al., 2021).

This study assessed the influence of COVID-19 on patients with pneumonia in southern Iran. The results identified four clients in the initial days of COVID-19 co-infection with SARS-CoV-2 and the influenza virus. The co-infection of coronavirus and influenza A highlighted the necessity of considering the SARS-CoV-2 PCR assay, irrespective of other optimistic results for new pathogens in the curial test throughout the outbreak (Khodamoradi et al., 2020).

A study conducted to evaluate patients with autoimmune inflammatory rheumatoid arthritis showed that patients who received non-steroidal anti-inflammatory medications had higher proportions of health problems. However, insufficient information is available for other anti-rheumatic drugs. Patients who used induced treatments for autoimmune inflammatory rheumatism appeared to benefit from the treatment based on the immune system runaway and secretion of pro-inflammatory cytokines in severe disease methods (Grange et al., 2020).

Baysal-Kirac conducted study results revealed that COVID-19 is considered a global health problem that affects people worldwide. While the essential issue of the disease is to treat respiratory problems, current information recognizes the nervous system's clinical signs and symptoms, and nervous system problems are infrequently described with other coronavirus-related diseases and coronavirus-related neurological symptoms (Baysal-Kirac & Uysal, 2020).

A study was conducted in India during the COVID-19 national lockdown to evaluate its influence on ophthalmic practice and client management. The results revealed that ophthalmologists in India did not see their patients during the coronavirus disease lockdown. Almost all ophthalmologists closed operations. Only emergency facilities were open, and

27.5% of patients were able to receive services. A large number of ophthalmologists have changed their care to telephonic or other telemedicine methods to help patients (Nair et al., 2020).

A study was conducted to evaluate the effect of asthma, asthma medication, and asthma severity on the medical results of COVID-19. The results showed that the death rate for COVID-19 patients with underlying asthma (7.8%) was significantly greater than that of other patients. Asthma leads to raising the total medical costs of treatment and poor clinical outcomes of patients with COVID-19. However, primary asthma, medication usage, and asthma severity are not considered independent factors for poor medical outcomes of COVID-19 (Choi et al., 2020).

A study conducted to evaluate the influence of COVID-19 on patients with cardiac and kidney problems revealed fear as a common factor. Throughout the pandemic, strengthening the regular observation of patients with cardiovascular and kidney disease remains highly important. Ongoing care creates an essential level of management for patients with cardiovascular diseases (Pallarés Carratalá et al., 2020).

A study conducted to evaluate the serious risk factors of COVID-19 in individuals with other health problems revealed that the risk increased in countries with older residents, African countries with a high incidence of HIV/AIDS, and minor island countries with an increased incidence of diabetes mellitus. In addition, there was an increased risk with the high prevalence of chronic renal disease, diabetes mellitus, cardiovascular disease, and chronic respiratory disease (Clark et al., 2020).

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## CONCLUSION

This study reviewed and summarized full-text articles and concluded that COVID-19 has had massive effects on several aspects of human life, such as economic stability, mental health, nutritional intake, sleep patterns, and many medical conditions. Further studies are recommended to evaluate other effects that might help stakeholders in future planning for the health system, economy, and education.

COVID-19 is considered a global health problem that affects people worldwide. While the essential issue of the disease is treating the resulting respiratory problems, current information recognizes the nervous system's clinical signs and symptoms, and nervous system problems are infrequently described with other coronavirus-related diseases and coronavirus-related neurological symptoms. Health care professionals should be conscious that coronavirus can be related to neurological clinical signs and symptoms.

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