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A Review on Comparison of US Teens' COVID-19 pandemic struggles

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Abstract

Humans have had many pandemics. The psychological health of a society is severely compromised by pandemic diseases, which also kill millions of people. The student's ability to learn was also hindered. Acute severe pandemics have previously endangered people's health, but they have also harmed their mental health. These pandemics include the Middle East Respiratory Syndrome (MERS), the Spanish Flu, and SARS. Several cases of acute atypical respiratory illness were first reported in December 2019 in Wuhan, Hubei Province, China, due to a novel coronavirus now known as SARS-CoV-2. The virus it caused was designated as COVID-19. The pandemic is caused by human-to-human transmission. Coronaviruses, positive single-stranded, encapsulated, big RNA viruses, infect many animals and people. Tyrell and Bynoe initially described coronaviruses in 1966 after isolating them from cold patients. They were called "coronaviruses" because their spherical virions resemble the solar corona. The most severe consequences of the COVID-19 pandemic are the physiological and psychological repercussions on those who are unwell. Humanity is going through a process that must be managed with care. The scientific study of COVID-19 and its effects on individuals, both now and in the future, is essential. With the rising death toll, many countries have been forced to institute social isolation and lockdowns. Unfortunately, there is still a lack of effective targeted treatments. Epidemiological studies showed that this virus had serious consequences on the emotional, academic, and social development of teenagers. This research is the first to investigate the impact of the COVID-19 pandemic on young people.

Keywords: COVID-19, Pandemic, Difficulties, Teens, USA.

Introduction

At various points in human history, pandemics have been responsible for millions of fatalities and a negative impact on civilization. The World Health Organization defines a pandemic as a new disease that kills many people worldwide by 2020. Near the end of 2019, a third potentially fatal coronavirus was discovered in humans, following SARS-CoV-2003 and MERS-CoV-2012. After infecting over 118,000 people in 114 countries. SARS-coronavirus, a novel coronavirus, has emerged. Disease caused by coronavirus-2 (also known as SARS-CoV-2) in 2019 is called coronavirus disease (COVID-19). China was one of more than 195 countries hit by the COVID-19 pandemic. A total of 659,000,000 individuals were affected. Nearly 6.68 million people passed away and 632 million people recovered from their injuries. Everyone's health, well-being, and standard of living have been affected by the Covid-19 Pandemic. Even though it affected people of all ages, young children and teenagers were hit the hardest. Adolescents are a particular demographic with distinct personalities. Emotions tend to be felt more strongly by adolescents and teenagers. Teenagers who are kept at home under strict parental supervision may act out since they are not accustomed to living in such an environment. Because of the hormonal and psychological shifts that occur during adolescence, teenagers may be particularly vulnerable to the stresses of transition. The effects of social isolation and unnecessary deprivation on the mental health, employment options, and educational opportunities of young people in China have been demonstrated by several studies. Biological and psychological shifts brought on by the pandemic could take their lives suddenly. Social media plays an essential role in the lives of teenagers by facilitating communication between them and their peers and loved ones [1]. The COVID-19 epidemic has impacted individuals and communities all around the world, disrupting daily life and resulting in physical, emotional, and financial difficulties. Adolescents and teens have been especially hard hit by the pandemic, with many enduring severe disruptions in their education, social lives, and mental health.

School Closures' Effects on Education Include

The epidemic has had a substantial impact on education, forcing schools and colleges to close for extended periods of time. According to the National Center for Education Statistics (NCES), school closures impacted roughly 50 million public school pupils in the United States throughout the pandemic (NCES, 2021). Education interruptions have been especially difficult for teenagers, who have had to adjust to remote learning and changes in academic calendars. Many US teenagers have struggled with the lack of structure and support that traditional schooling provides because of school closures and

the switch to online learning. Some teenagers have reported challenges with time management, motivation, and resource access, resulting in poor academic achievement and increased stress. The COVID-19 pandemic disrupted the way that students learned. Millions of teachers and billions of students are impacted by the closures of schools and other restrictions. Children and parents both experienced negative psychological symptoms, such as anxiety and terror, because of social isolation and other COVID-19 restrictions [2]. The widespread closures affected more than 60% of the world's students. Millions more students were affected by regional closures imposed by other countries [3]. Millions of students could not attend institutions, workplace training programs, adult learning initiatives, or colleges. Numerous governments met the urgent need to provide schoolchildren with online and distance learning [4]. Despite the precautions taken, the children's learning process suffered. A significant concern for students who have lost their freedom because of COVID-19 is when face-to-face instruction will resume. 1.53 billion pupils dropped out and 184 national schools closed due to the COVID-19 epidemic, affecting 87.6% of all registered students [5]. Closing schools may reduce outbreak fatalities depending on how many cases and transmission drop and how many medical workers are available to treat the patients [6]. However, extended school closures hurt the learning and social interactions of the students. Schools provide in-person training. But because the illness made face-to-face instruction impossible, the education administration preferred that students have access to distance learning or online learning [7]. This presents a problem all by itself. because online education requires a top-notch infrastructure. Every student must have access to online or remote learning.

Disturbance in Social Life

COVID-19 has affected all Americans and others worldwide. In most of the US, coronavirus prevention has involved physical separation [10]. Adolescents may be particularly affected by the abrupt and protracted cessation of their social activities. Due to social media use, teens may be better suited to maintain social ties while apart [12]. Many youths have been compelled to exercise physical separation because of the pandemic, resulting in fewer social interactions and heightened feelings of loneliness and isolation. This has been especially difficult for adolescents who rely on social ties for emotional support and identity construction. Teenagers have been socially isolated because of the epidemic, as they are unable to participate in social activities such as parties, sporting events, and other social gatherings. According to Pew Research Center research, approximately 61% of teenagers in the United States reported feeling lonely or anxious because of the epidemic (Pew Research Center, 2021). Isolation has also increased screen time, which can have a harmful impact on teenagers' mental health.

Social Media Involvement

Adolescents' social media use also mattered. However, there is growing evidence that adolescent social media use, depending on how and when, may be harmful. The pandemic has intensified the discussion about social media's effects on youth. Parents, educators, and young people all require a deeper familiarity with social media. Adolescents pay close attention to both their own and their peers' peer status (such as their own and their peers' popularity levels) and peer norms (such as their peers' behaviors and attitudes), and they are more inclined to engage in behaviors that will lead to social benefits like rising popularity [13]. Most young children seek their parents for guidance and self-identity, whereas many people look to their romantic partners. Teenagers, on the other hand, rely heavily on their peer group for self-affirmation [14]. Adolescents' intense preoccupation with their peer group has biological underpinnings, even though it may seem extreme or peculiar to adults. Teenagers' increased sensitivity to social approval and rejection and propensity to engage in risky activities around peers are both influenced by pubertal hormones and brain development patterns [15]. Adolescence is a time when mental health issues are more prevalent among girls than among boys. By the time they are 18 years old, 20% of adolescent girls had reported experiencing clinical depression [16]. During this period, adolescent girls reported an increase in both unhealthy weight-related behaviors and eating disorders [17]. COVID-19 has affected young people's social and developmental activities. Schools, extracurriculars, and peer interaction will be postponed if parents follow state and CDC guidelines. Even though all ages experience loneliness, being cut off and unable to identify classmates may hurt teens [18]. School and other face-to-face developmental mismatches might affect teens' moods and well-being. "Social media" includes any digital media, from websites to mobile apps, that enables online communication and community creation. Teens don't just use Snapchat or Instagram. YouTube is one of teens' favorite social networking sites since they can upload and comment on videos [19].

Effects on Mental Health

The pandemic has also had an impact on the mental health of American teenagers, with many reporting heightened anxiety, depression, and stress. The pandemic's unpredictability, combined with social isolation and disturbed daily routines, has contributed to heightened mental health issues. However, earlier studies on how social media use affects teenage mental health often combined data from these many platforms, applications, and activities to assess relationships between "screen time" and well-being. Results have varied [20]. Many studies have linked social media use to depression, body dissatisfaction, disordered eating, and risky behaviors, but others have not [21-26]. Prior research on social media use and adolescent mental health mainly examined relationships between "screen time" and well-being, pooling data from these numerous platforms, programs, and activities. Expectedly, outcomes are inconsistent [20]. Others have found that using social media to enable in-person encounters with friends may improve children's mental health [27]. Social media can help COVID-19-afflicted kids stay safe. Today, kids get their news and health information from social media [28]. Social media makes it easy to find and distribute accurate information with fast, reliable sources. The COVID-19 Information Center appears at the top of Facebook-owned apps like Instagram, WhatsApp, and Facebook. When people search for or use the hashtag "covid," social media apps that encourage trustworthy information promote the WHO or CDC. Features and affordances determine the pros and cons of each social networking platform [29].

Adolescents are especially open to peer feedback, status, and connection due to biological and social changes [30, 31].

COVID-19 "fake news" on social media is one of the most obvious ways it can hurt teens. Due to the "fake news" situation, social media companies are providing fact-checking links, sites, and people to verify such stories. Social media could harm adolescents' mental health before the COVID-19 pandemic [32]. Social media used by children during the pandemic may exacerbate these risks. Social media posts on the issue are increasing, raising concerns about adolescent mental health. Social media harms adolescent mental health [22]. During the COVID-19 pandemic, sleep is crucial for immune function, mood regulation, and stress management [33]. Puberty causes major mental and physical changes, including later bedtimes [34]. Teens don't get enough sleep because their normal waking hours are later than school start timings. Even in virtual classes, COVID-19-related school cancellations may postpone waking times. Teens may now be able to go to bed earlier and wake up refreshed. Without schedules, teens may not get enough sleep, which is important for their health [35, 36]. Teens may also sleep in and take daytime naps. These activities may make it harder for young people to fall asleep at night, keeping them up later than their bodies need. Social media can worsen circadian cycles and sleep throughout the pandemic. Teens may spend more time on social media due to a lack of routines, sedentary behavior, and boredom. Teens scan social media on their phones with their faces nearby. Blue light from electronics boosts alertness. Blue light also hinders the body from making melatonin, which promotes sleep in the evening. Cell phones and other electronic devices used during the day and night may increase alertness and delay weariness, resulting in later bedtimes [37].

Effects on Psychology

People's mental responses to the panic and stress brought on by pandemics can vary widely. Psychological impacts of pandemics include sadness, PTSD, psychotic symptoms, apprehension of death, hopelessness, anxiety, and dread of losing loved ones, among other things [38]. PTSD, anxiety, depression, isolation, pain, fear, and shame are only some of the negative mental health conditions commonly seen in patients, as evidenced by prior pandemics [39-41]. Studies show that these situations frequently lead to symptoms of PTSD, stress, anxiety, etc. [42-45]. Acute stress disorder, schizophrenia, suicidal thoughts, increased alcohol and tobacco usage, fury, and the great dread of getting sick have all been linked to the COVID-19 outbreak [46-49]. Preexisting conditions, like ADHD, anxiety, depression, mood disorders, and behavior disorders, compounded the impact of the pandemic's psychological toll on children. Disabling conditions related to mental health is the leading cause of lost productivity among youth around the world. Globally, over 15% of children and adolescents struggle with mental health issues. Half of all cases of mental illness in children and adolescents occur by age 14. Without proper care and attention, a child's mental growth might be severely stunted. It is common knowledge that a child's mental health affects both their academic success and their potential for a happy and successful adult life. Although mental illness can affect children of any age, it typically has the most profound effects during adolescence. Depression is a crucial factor in the onset of mental disease and is one of the many conditions that can strike youth. Suicide was the third leading cause of death among adolescents in 2016, with an estimated 53,000 lives lost. This highlights the increased vulnerability of adolescents to developing mental health disorders.

Children are particularly vulnerable to the mental health effects of traumatic experiences like social isolation, learning about or witnessing the critical illness of loved ones who have the coronavirus, losing loved ones, or even imagining their death because of the virus. Childhood anxiety, panic attacks, sadness, and other mood and psychological disorders may develop more quickly under such situations. COVID-19 has also altered the everyday patterns of teenagers, adding to the stress and sleep problems that many already face. As a result, they may develop a substance abuse problem. Children worry if they see their parents working from home because they know that the illness poses a threat to their entire family and community. Uncertain cases of COVID-19 emerged in the United States during the 2020 pandemic. Given the current state of the US educational system, it is impossible to foresee how schools there would react to COVID-19 [50].

Several Potential Tactics

American education has, for better or worse, placed a premium on things like adaptability, flexibility, and local decision-making. Some believe the virus entered the country as early as December 2019, but the first confirmed cases of coronavirus weren't reported until mid-January 2020. Northern California and Washington State were the initial hotspots for the virus's spread [51]. At the end of January, the US Department of Health, and Human Services (HHS) declared a public health emergency, banning travel from China for everyone, including US citizens. By mid-March, more than half of the states had coronavirus after the first death in Washington state on February 29. By March 31, the US had 164,500 confirmed cases and nearly 3,000 deaths. The US government passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act on March 27, 2020. After a month, the US reported over 1,000,000 cases and 60,966 deaths. By May, the US reported 103,781 deaths and 1.77 million cases, about double the previous figure [52]. 125,000 deaths and 2.5 million illnesses were reported on July 1, 2020. Despite federal social isolationist measures, states have responded more to the pandemic. States, districts, and schools around the US had to rush to prepare for online learning because of the short time between closing schools and launching remote learning. Adolescents are especially open to peer feedback, status, and connection due to biological and social changes [30, 31]. COVID-19 "fake news" on social media is one of the most obvious ways it can hurt teens. Due to the "fake news" situation, social media companies are providing fact-checking links, sites, and people to verify such stories. Social media could harm adolescents' mental health before the COVID-19 pandemic [32]. Social media used by children during the pandemic may exacerbate these risks. Social media posts on the issue are increasing, raising concerns about adolescent mental health. Social media harms adolescent mental health [22]. During the COVID-19 pandemic, sleep is crucial for immune function, mood regulation, and stress management [33]. Puberty changes people mentally and physically. Teens have later bedtimes [34]. Teens don't get enough sleep because their normal waking

hours are later than school start timings. Even in virtual classes, COVID-19-related school cancellations may postpone waking times. Teens may now be able to go to bed earlier and wake up refreshed. Without schedules, teens may not get enough sleep, which is important for their health [36].

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According to North (2020), over 30 million jobs may have been lost between March and May, with the working class taking the worst hit because many of these jobs were not suitable for remote workers. If they can't afford Internet service, they may not prioritize it, denying their children access to online education. It suggested that low-income kids had fewer opportunities for teacher-student interaction and online learning resources. One study found that as many as 40 percent of the lowest-income students only reviewed their online coursework once a week [56]. The youngest pupils in elementary school and preschool (PreK) as well as those with special needs who need close adult supervision and assistance when using technology or doing schoolwork had the most trouble. Older secondary school students who are more self-reliant and technologically savvy typically do not need this level of oversight. For children who appeared to be having difficulty or dropping out, schools tried to communicate with their families on a more personal level.

Regional and Demographic Comparison

Teenagers in the United States have been affected differently by the COVID-19 epidemic, depending on their regional and demographic factors. The epidemic has had various effects on US teenagers depending on where they live. Teenagers in cities have had more disruptions in their academic and social activities than those in rural areas (CDC, 2021). According to a National Center for Education Statistics assessment, schools in urban regions were more likely than those in rural ones to close for extended periods owing to the pandemic (NCES, 2021). Furthermore, during the pandemic, teens in urban areas reported higher rates of anxiety and sadness than those in rural regions (CDC, 2021). The pandemic has also affected US teenagers differently according to their demographics. Minority groups have suffered disproportionately from the pandemic, with greater rates of COVID-19 infection and death (CDC, 2021). The pandemic has also highlighted existing inequities in access to technology and internet connectivity, with lower-income families and members of minority groups having more difficulty with remote learning (Pew Research Center, 2021). Furthermore, because of the pandemic, youth from low-income homes are more likely to face food insecurity and economic hardship (CDC, 2021). The COVID-19 pandemic has affected US teenagers differently according to their geography and demographics. While urban teens have suffered more disruptions in their academic and social activities, minority and low-income teenagers have confronted extra obstacles relating to health, access to technology, and economic hardships. These disparities underline the importance of providing targeted support and resources to ensure that all youth have equal opportunities to achieve during and after the pandemic. Teens from low-income families and communities of color have been disproportionately affected by the pandemic, with greater financial difficulties and limited access to online learning and mental health support resources. Teens in rural locations may encounter additional challenges, such as a lack of internet access and social support networks. Teens in urban regions, on the other hand, may have greater opportunities for online learning and mental health help, but they may also be more vulnerable to the virus and social upheaval. Teens from immigrant households, as well as those who speak English as a second language, may encounter extra language and cultural challenges in obtaining resources and help.

Discussion

To our understanding, this study examines juvenile mental health, social media, and sleeping habits. Discussed are school closures and COVID-19's effects on American youth. Its findings are significant. The statistics showed that the COVID-19 pandemic affected school days. Schoolchildren have increased anxiety and tension. This epidemic also affects adolescent addiction. Many kids find unhealthy ways to make friends and socialize after being told to remain home, having school closed, or employing creative at-home learning methods. These habits cause internet and phone addiction. Addiction harms adolescent brains. Despite warnings to stay indoors, teens used drugs during the pandemic. The epidemic raised adolescent drug use to 49.3%. An inability to effectively cope with stress has been linked to a lack of brain circuits, according to a previous study. The paucity of masks and disinfectants, the abundance of sensational news reports, and the increasing number of confirmed and suspected cases all contribute to widespread anxiety during an epidemic. Teens' pessimism increases anxiety as they mature. Secondary school students need less emotional care as

they mature and learn to be independent. Social isolation can aggravate anxiety. Children may have milder, asymptomatic COVID-19 cases than adults. Social seclusion and regular prevention measures are necessary for all ages since symptom-free and mildly unwell patients may spread the disease (CDC COVID-19 Response Team 2020). The school shutdown alone was predicted to lower coronavirus incidences by 5.6%. Recent modeling studies demonstrate that closing schools during COVID-19 outbreaks reduces fatalities by 2–4%. Influenza outbreaks imply that school closures may have relatively little effect on a virus with COVID-19's great transmissibility and apparent minimal clinical effect on students. Current evidence does not support a countrywide school shutdown to battle the virus. If these findings prevail, closing schools to combat influenza will have far fewer benefits than costs. Few studies collected relevant data after schools resumed, so we don't know what the long-term implications of school closures might be. Multiple studies have found that restarting classes after winter and spring breaks speeds up the spread of infectious diseases [64]. In addition, research shows that eliminating educational opportunities can have serious consequences for both business and society. School closures should be considered to limit the transmission of illness and asymptomatic viruses [64, 65]. Due to conflicting reporting by different countries, the research may exaggerate the actual number of cases and new cases. Some people never get tested for COVID-19 because it progresses asymptomatically or with mild symptoms. SARS-Cov-2 testing volume varies greatly across nations, which also affects confirmed cases. Healthcare system capacity and pandemic stage are crucial [66].

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Conclusion

The COVID-19 pandemic has had a huge impact on US teenagers, with many experiencing difficulties with education, social isolation, and mental health. While these difficulties are prevalent, they differ between locations and groups, emphasizing the need for specialized assistance and resources. Addressing the issues that US youth faced during the epidemic would necessitate a multifaceted approach that includes resource access, mental health assistance, and community-based interventions. Recent Italian studies indicated that the COVID-19 pandemic was emotionally draining and that certain groups, including health professionals, suffered mental health issues. To our knowledge, this study examines how COVID-19 has affected American adolescents. This study has psychological and societal effects. The data show that COVID-19 affected adolescents' lifestyles and mental health. As communities return to normal, governments and families must address the mental and physical effects of COVID-19 on children and teens. By helping youth cope with pandemic uncertainty and quarantine, school cancellations and home confinement can be less psychologically damaging. The data show that increasing COVID-19 awareness influenced authorities' decisions. Digital leadership is crucial for future leaders. The strongest evidence suggests that understanding how fake news spreads reduces its spread. Avoiding bogus news and panic attacks reduces anxiety. Applaud users' misinformation skepticism. COVID-19 has affected teens' mental health worldwide. During this epidemic, stress, worry, house confinement, and excessive internet and social media use may affect teens' mental health. COVID-19 affects adolescent mental health worldwide. Despite the uncertainty, adolescents require medical and psychological help to survive. To help children cope with the epidemic, find, and use all available tools and remedies. Teens' mental health during and after COVID-19 and other disasters needs greater study. Telemedicine may help adolescents' emotional needs if used more widely. Closing schools may contain the outbreak. However, closing schools has no consensus and little empirical support. School closure models and observational studies must support COVID-19 activities.

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Conflict of Interest

The authors declare no conflict of interest.

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