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## Abstract

This study examines the mental health patterns of children and adolescents as a result of Covid 19 and how they are affected based on physical and mental health. The participants were 20-30 students and adults from Lahore, Pakistan. Participants were given an interview-like questionnaire to collect descriptive raw data for qualitative analysis. The results of this study can be used to increase awareness of and appropriate responses to mental health issues. After COVID-19 was declared a pandemic in March 2020, many countries around the world requested a lockdown. The aim of this study was to review the literature on the effects of lockdown procedures – implemented in response to the COVID-19 pandemic – on child and adolescent mental health. Special needs, high media exposure and mental health problems prior to lockdown were significant risk factors for distress. Communication between parent and child helped prevent anxiety and depression. The COVID-19 lockdown has resulted in psychological distress and raised awareness of individuals who are vulnerable, such as those who currently or have previously struggled with mental health issues. It is imperative to address the mental health needs of children and adolescents who are at risk. Clinical guidelines must be developed to mitigate the negative effects of the COVID-19 lockdown and support public health initiatives for this population.

**Keywords:** Mental health, depression, Mental Problem, Pandemic, Covid 19, Obesity, illness, virus, children, adolescent, ADHD, Self-efficacy.

At the end of December 2019, a new coronavirus that causes pneumonia and other serious respiratory diseases was found in China. When it was first identified as a novel coronavirus, the World Health Organization (WHO) recommended terminology for the virus. The source of contamination is the severe acute respiratory syndrome virus. Coronavirus New York (2021) states that COVID-19 is categorized as a high-consequence virus that is airborne. It quickly spread throughout the world, affecting billions of people psychologically and physically. According to certain studies, the COVID-19 pandemic has resulted in growing disparities, primarily for adults. The pandemic's indirect effects, such as delayed or restricted access to medical care and school closures, disproportionately affect children and teenagers' public studies conducted in a few countries also indicate that Throughout the COVID-19 pandemic, kids and teenagers' emotional wellness issues were getting worse. Due to their reliance on numerous services that were largely discontinued during the pandemic's main wave, children with special medical needs represent an especially vulnerable group in this context (Baenas et al., 2020).

Research on how the pandemic affects kids and teenagers is crucial, and we have good reason to compare the way people lived before the pandemic. People of various ages alter their emotions, behaviors, and mentalities as a result of specific problems brought on by pandemics. The most recent estimates that are available indicate that, worldwide, over one in seven adolescents between the ages of 10 and 19 are thought to have a diagnosed mental illness. (Bobo E, et al., 2020) Suicide ranks among the top five causes of death for teenagers in their age group, taking the lives of nearly 46,000 of them annually. Large disparities continue to exist between funding and needs for mental health. Globally, mental

health spending accounts for around 2% of government health budgets, according to the report (Bentenuto et al., 2020). Anyone who goes through to a lockdown or quarantine will find them unpleasant and mentally upsetting. Young people may be more susceptible to the negative consequences of isolation, such as school closures, since lockdowns disrupt their social and physical interactions, and they are more likely than adults to experience mental health issues. A previous systematic review that looked at the psychological effects of isolation associated with exposure to infectious diseases on children and adolescents included only three publications on COVID-19.

To the best of our knowledge, this is the first comprehensive systematic review to focus exclusively on the impact of lockdowns in the COVID-19 pandemic response on child and adolescent mental health. This systematic review aims to provide a broad overview of the literature regarding the effects of incarceration of COVID-19 on various mental health outcomes among youth. Next, we look at risk factors and protective factors for developing mental health outcomes considering the containment of COVID-19.

## Literature Review

### Obesity during Covid 19

Given the very high obesity rates around the world, it is expected that a high proportion of the population infected with the coronavirus will have a BMI of over 25. In addition, obese patients are more difficult to intubate, diagnostic images may be more difficult to obtain (due to the weight limitation of the imaging device), and are more difficult to place patients, resulting in illness and concentration. Obese patients in need of treatment pose a patient management challenge that may not work in a prone

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position, such as caregiver transport or pregnant patients in the intensive care unit. Recent evidence is that obese patients are more likely to require hospitalization for COVID19, experience more severe symptoms, are more likely to be admitted to the ICU than the non-obese patients and receive invasive ventilation. Suggests that is high. The higher severity of COVID 19 in obese individuals is associated with possible pathogenic pathways of metabolic disorders, immunodeficiencies, and inflammation of adipose tissue, but remains largely unknown. In addition, obesity is associated with factors that may affect social deprivation, smoking, age, gender of men, and outcomes of COVID 19 patients. These results are consistent with recently published studies of patient-level data from the UK General Practice Database, where BMI is linear and at risk of severe COVID 19 when BMI exceeds 23 kg / m2. Is reported to increase, leading to hospitalization. Death not due to excessive risk of related illness. This outcome confirms what a number of recent studies have taught us. Since the start of the COVID19 pandemic, a significant number of people have put on weight as a result of issues like elevated sedentary behavior, stress, and job and income loss that make eating healthily more challenging. Among ethnic minorities, these rates are increasing at a faster rate. According to Nadine Gracia, MD, president and CEO of the Trust for America's Health, health policy organization that just examined CDC data for 2020, "obesity remains a major public health crisis." Additionally, she claims that the rise in childhood obesity portends a worsening trend. The pandemic made clear how the rising rate of obesity endangers people's health as well as the health care system. It increases a person's risk of COVID-19 hospitalization and death. Concurrently, the pandemic exacerbated numerous social and economic determinants that contribute to obesity. Families frequently find themselves unable to afford healthier food options when they lose their jobs or income. Obesity negatively affects the mental health of children and adolescents.

#### **ADHD directly related to Mental Health**

Individuals infected with COVID-19 exhibit varying degrees of symptom severity; globally, as many as 40% of patients remain asymptomatic, while others experience severe and occasionally fatal complications. It highlights the requirement for methods to estimate the likelihood that major symptoms will manifest. In the fight against pandemics, such actions could enhance the effectiveness of therapeutic, triage, and preventative initiatives. "Identifying risk factors for disease severity is important for identifying people who may need priorities in testing, close observation, early treatment, or hospitalization." According to a study by Merzonetal that was published in the Journal of Attention Disorders in April 2021. It is commonly known that COVID 19 infection tends to have a worse prognosis in older patients and those with medical comorbidities like diabetes and cardiovascular disease. Increased risk of death associated with COVID-19 in patients with a mental health diagnosis by double when compared to patients without one. Merzon et al.'s study looked at COVID-19 symptom severity patterns, particularly in ADHD patients. The sample was made up of 1870 Israeli patients (mean age: 29.03, SD = 14.80 years) with positive COVID-19 test results, ranging in age from 5 to 60. Of these, 231 had been diagnosed with ADHD using

the DSM-IV or DSM-5 criteria by a senior physician. The only medical condition—be it physical or mental—that could precisely predict the symptoms and indicators of a COVID-19 infection was ADHD. When compared to several other diagnoses (e.g., compared to 10.3% for cardiovascular disease and 4.3% for schizophrenia), ADHD was also linked to a noticeably higher increase in COVID-19 hospitalization rates (18.8%). Furthermore, individuals diagnosed with ADHD frequently had fevers higher than 38 °C and were suspected of having pneumonia. in contrast to those without ADHD. ADHD has cynical impact on mental health in Children and Adolescent

#### **2.3 Self-efficacy**

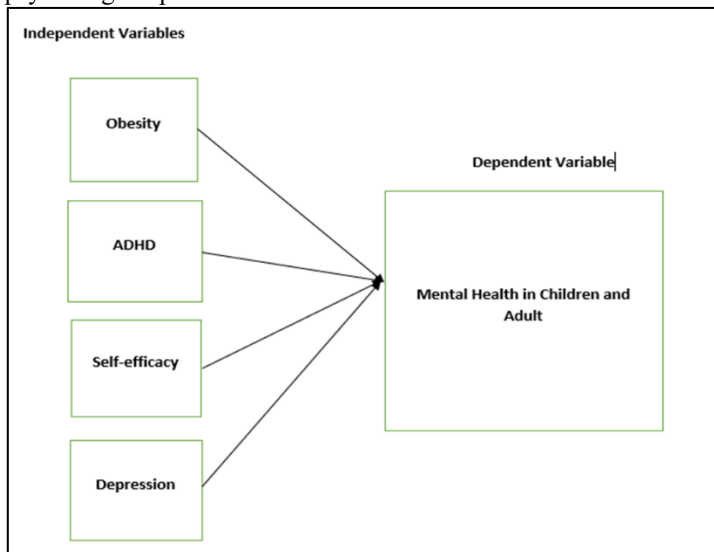
Personal health beliefs and healthy behaviors are critical for psychological well-being considering the COVID-19 outbreak. In order to examine the mediating roles that risk perception and coping mechanisms have on the association between self-efficacy and mental health issues, this study employed a health belief model. People who had high overall self-efficacy also tended to be less aware of their risks, to have more active coping mechanisms, fewer passive coping mechanisms, and fewer mental health issues overall. In addition to mitigating the impact of anxiety in reaction to the viral epidemic on some people's psychological well-being, self-efficacy plays a significant role in lowering depression and enhancing psychological well-being during COVID-19. Self-efficacy in these circumstances lessens people's distress. The conviction that you can act or accomplish goals is known as self-efficacy. It is a significant factor that shapes people's behavior and affects what they do and how long they stay. The belief that one can complete the tasks necessary to achieve a particular goal is known as self-efficacy. It is a judgement and belief in one's own abilities as opposed to the value of one's own existence, which is what self-esteem is not, and it is subject to reinforcement or exacerbation based on experience.

Çetin et al., (2020) Self-efficacy affects behavioral sustainability, performance, and individual choice in many domains, such as B. Health and academic performance. Self-efficacy has been found to have a moderating effect on general well-being in earlier research. For instance, a study conducted among Stanford Healthcare Centre residents revealed a correlation between improved psychological well-being and reduced emotional exhaustion and higher levels of self-efficacy. Self-efficacy and cancer-induced distress were found to be inversely correlated in another study involving cancer patients. Conversely, self-efficacy and quality of life or resilience in stressful situations were found to positively correlate in these patients. Self-efficacy has favorable impact on mental health in Children and Adolescent

#### **Depression causes mental health disease**

Coronavirus leads to a number of mental health issues in addition to genuine concerns about one's well-being. People in different networks may experience psychological effects from the new Covid. Therefore, maintaining people's emotional well-being and encouraging mental interventions that can enhance the psychological well-being of susceptible populations are vital during the COVID-19 pandemic. The pandemic affects the psyche of people's well-being, which may lead to mental emergencies. The efficacy of intervention strategies is boosted by timely,

identifiable evidence of people experiencing mental health issues. Clinical specialists and residents experienced mental shifts as a result of health emergencies such as the COVID-19 pandemic. These shifts are driven by feelings of fear, unease, melancholy, or uncertainty. Fear and anxiety in front of others affect everyone in general. According to mounting evidence, people housed in isolation and quarantine should feel extremely uneasy, furious, disorganized, and stressed. Overall, all of the studies that have examined the mental health problems associated with According to reports from the COVID-19 pandemic, individuals afflicted display a few signs of mental injury, including severe pain, anxiety, depression, mood swings, irritability, and lack of sleep, consideration deficit hyperactivity disorder, post-horrendous pressure, and fury. Additionally, studies have indicated that regular media transparency could lead to problems. (Chen S, Cheng Z, & Wu J , 2020) Over time, with the same experience, It is trying to forecast the psychological and energetic effects of COVID-19 with accuracy. To carried out in China, the primary country impacted by the novel virus's transmission, indicates that individuals' anxiety regarding the enigmatic virus may contribute to psychological problems.



**Figure 1:** Research Framework

### Research Methodology

The daily lives of children and teenagers have been significantly affected by the COVID-19 lockdown, which has resulted in more time spent at home, online learning and reduced personal social interactions. Children are not blind to the COVID-19 Pandemic's profound psychological effects. They are impacted by fears, uncertainty, big routine changes, social and physical isolation, and a lot of parental stress. Meeting their needs during this pandemic requires an understanding of their emotions and reactions. The reason of this research is to find the link through independent and dependent variables, as well as the effect these variables have on one another, for a final project to be presented in class. The following investigation will be qualitative in nature, with data collected through interviews. (Cheung Y, et al., 2008)

For this qualitative study, an interview method will be used. Specifically, it will provide a thorough description of child and

adolescent mental health throughout Covid 19. We'll look at both independent and dependent factors. We are employing the interview method to compare the replies from a sample size of 20-30 persons in Lahore and data will be collected for comparison purposes because we have limited time and exposure to students and adults who have been exposed to this virus. (Di Giorgio E, et al., 2020) For this study, data will be collected by interviewing a maximum of 20 to 30 people who have been afflicted by the virus, and they will share their expertise and experience in order to explain key aspects in the study. To collect data, an adapted open-ended questionnaire with variable-wise questions will be employed. In an interview, the questions will be asked in person. (Graell et al., 2020).

**Table 1:** Demographic (Gender)

Gender	Count of Gender Percentage	
1	18	36.73%
2	31	63.27%
<b>Grand Total</b>	<b>49</b>	<b>100.00</b>

In terms of gender, 36.73% are in category 1 (presumably male), and 63.27% are in category 2 (presumably female). The table provides a clear breakdown of the count and percentage of individuals within each gender category, offering insights into the demographic composition of the studied population.

**Table 2:** Residential country

13	17	34.69%
14	32	65.31%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

Have you traveled outside of your residential country during Coronavirus?

The responses are categorized into two levels: Category 1 (17 individuals), has traveled outside of their residential country during Coronavirus presenting 34.69% of the total count. Category 2 (32 individuals) The table provides a clear breakdown of opinions on this matter, offering insights into the diverse perspectives within the surveyed population.

**Table 3:** Visit of Clinic

	Count of Gende Percentage	
13	27	55.10%
14	22	44.90%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (27 individuals), has traveled outside of their residential country during Coronavirus presenting 55.10% of the total count. Category 2 (22 individuals) The table provides a clear breakdown of opinions on this matter, offering insights into the diverse perspectives within the surveyed population.

**Table 4:** Number of admissions in hospital

	Count of Gender Percentage	
13	15	30.61%
14	34	69.39%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (15 individuals), has been admitted to hospital during Coronavirus presenting 30.61% of the total count. Category 2 (34 individuals) The table provides a clear breakdown of opinions on this matter,

offering insights into the diverse perspectives within the surveyed population.

**Table 5:** Tested for Covid-19

	Count of Gender Percentage	
13	20	40.82%
14	29	59.18%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (20 individuals), has been admitted to hospital during Coronavirus presenting 40.82% of the total count. Category 2 (29 individuals) The table provides a clear breakdown of opinions on this matter, offering insights into the diverse perspectives within the surveyed population.

**Table 6:** Mental Health Affected

	Count of Gender Percentage	
13	30	61.22%
14	19	38.78%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (30 individuals), has got their mental health affected during Coronavirus presenting 61.22% of the total count. Category 2 (19 individuals) The table provides a clear breakdown of opinions on this matter, offering insights into the diverse perspectives within the surveyed population.

**Table 7:** Problem in work

	Count of Gender Percentage	
13	34	69.39%
14	15	30.61%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (34 individuals), had problems with work during Coronavirus presenting 69.39% of the total count. Category 2 (15 individuals) The table provides a clear breakdown of opinions on this matter, offering insights into the diverse perspectives within the surveyed population.

**Table 8:** No of Quarantine

	Count of Gender Percentage	
13	23	46.94%
14	14	53.06%
<b>Grand Total</b>	<b>37</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (23 individuals), had problems with work during Coronavirus presenting 46.94% of the total count. Category 2 (26 individuals) The table provides a clear breakdown of opinions on this matter, offering insights into the diverse perspectives within the surveyed population.

**Table 9:** Self-Isolation

	Count of Gender Percentage	
13	38	77.55%
14	11	22.45%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (38 individuals), has self-isolated themselves during Coronavirus presenting 77.55% of the total count. Category 2 (11 individuals) The table provides a clear breakdown of opinions on this matter,

offering insights into the diverse perspectives within the surveyed population.

**Table 10:** Contact with Covid-19 Patients

	Count of Gender Percentage	
13	35	71.43%
14	14	28.57%
<b>Grand Total</b>	<b>49</b>	<b>100.00%</b>

The responses are categorized into two levels: Category 1 (35 individuals), has contacted corona patients during pandemic presenting 71.43% of the total count. Category 2 (14 individuals) The table provides a clear breakdown of opinions on this matter, offering insights into the diverse perspectives within the surveyed population.

### Discussion and Finding

Our results imply that during the pandemic, people who travelled outside of their home country experienced higher levels of mental health effects and physical discomfort symptoms. People who went to clinics or were admitted to hospitals also had difficulties with their emotional health.

The COVID-19 pandemic affected social, mental, and economic spheres in addition to posing long-term health risks (Goldbeck et al., 2012). For the teenage population, particularly those who were sensitive to mental health issues, the pandemic was extremely difficult. A comprehensive research report has been created to good understanding the findings and the side effects of COVID-19 on these populations, with a particular focus on how the disease affects children's and adolescents' mental health (Amorim et al., 2020).

As we distributed our form to the public, especially to those who had suffered covid, we have found out how challenging the covid was in terms of isolation, physical health, and mental health. As we look forward to beginning the survey it is important to mention that the survey was distributed to public without any accordance to promote any racism/nepotism or inferiority to any group or class (Asanov et al., 2021). Those who have previously struggled with eating problems have been particularly severely impacted. After the lockdown, 41% of adolescents receiving clinical care reported having their eating disorder symptoms return. This was especially true for those with poor levels of self-direction and fewer flexible coping mechanisms. It's possible that not keeping track of weight during confinement contributed to this. Eating disorder sufferers find it difficult to stick to feeding schedules, and studies reveal a strong correlation between COVID-19 lockdown symptoms and disordered eating behaviors (El Asam et al., 2019). Given that eating disorders have the greatest death rate, in the framework of COVID-19, there must be a greater use of digital technologies to support persons who suffer from eating disorders (Conger & Conger, 2002). In order to identify people. It is critical mustnical practice to identify risk and protective factors for those who are more to poor mental health outcomes in order to create therapeutic approaches and public health policies that will mitigate the negative effects of lockdown on children and adolescents. Risk factors include irregular behavior, internet usage patterns, media exposure to COVID-19, and having a relative with first line COVID-19 employment duties (Cusinato et al., 2020). The structure of children's and adolescents' days is impacted by

quarantine. As a result, schools are crucial in preventing lockdowns because, as long as they don't overload students, they may provide their daily structure, which is perceived as protective. It is worth mentioning that the survey was filled by a total of 319 people with 61.8% male and 38.2% women. However, the survey comprises of results of people with other age groups as well. It is worth mentioning that the covid 19 was a disaster for everyone in terms of isolation, physical health and employment, but as we look deeply into the matter, we find out that there is one thing which has not been given much attention in news, advertisement etc. that is mental health. Forced lockdowns, isolation and illness have presented a big impact on people's mental health, especially the children and adolescents (Adibelli & Sümen, 2020). This research has enabled us to find out the real problems that the majority of people face in terms of mental health issues and this research is helpful for us to figure out possible solutions to most of the problems. Children's post-disaster mental health is influenced by their family environment, parenting styles, and coping mechanisms, according to earlier studies. But not everyone has been badly affected by the lockdown, and some relationships may have benefited from it. Parent-child conversation has been linked to life satisfaction and has been shown to protect against mental health issues in children, particularly stress, anxiety, and depression. The ability for families to spend more quality time together as a result of remote working may lead to perceived benefits in family relationships. However, this might be because mental strain for certain parents, particularly those who have children with SEND (Achterberg et al., 2021). When a youngster faces hardship, family ties may help with their adjustment. The results highlighted in this study have additional clinical ramifications. In order to minimize the psychological consequences of lockdowns on children and adolescents while ensuring their safety, governments should make sure that lockdowns last as little time as feasible. Along with making sure the information is correct, governments should also try to disseminate information on lockdown updates, preventative measures, and COVID-19. Age-appropriate tools, including better sleep hygiene, eating a balanced diet, adhering to routines, and mental problems, should be available to the public. These resources will teach young people how to stay healthy and avoid detrimental psychological impacts. It was observed that during the pandemic, both sleep disorders and sleep quality deteriorated. Thus, readily available materials for children's sleep hygiene (Abawi et al., 2020).

### Conclusion

Exceptionally the COVID-19 problems that elevated psychological stress have been associated, which normally satisfies the criteria for clinical peoples. Reducing the negative impact of COVID-19 on mental health is a top priority for global public health. This extensive study looked at risk factors and the general public's mental health during the COVID-19. In most investigations, negative psychiatric symptoms were found to be very common. A distinct risk to the mental health of teenagers and students is the COVID-19. Aside from decreasing the viral transmission curve, putting mental health prevention—including major depressive disorder, PTSD, and suicide prevention—first is

essential. There are certain restrictions on this review. To start, a qualitative and narrative description of the study's findings was given. A more objective systematic review to look at the prevalence of each psychological outcome was not possible because of the significant variation in the primary outcomes and assessment tools used across studies. Second, no causal conclusions could be made because all of the research that was looked at was cross-sectional (Idoiaga et al., 2020). Additionally, all studies were conducted independently by research participants using online surveys, raising concerns: individuals with poor internet access were probably left out of the study, leading to a bias in the population under investigation; lack of library resources and a restricted research budget were significant obstacles. In order to increase and spread awareness of mental health issues, the hypotheses put forth in this study can be developed and investigated in subsequent studies. We suggest raising the scope of this study to a higher level in order to produce better, more in-depth, and thorough research.

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