Effect of COVID-19 on Mental Health of Teenagers

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The impact of the ongoing COVID-19 pandemic has permeated almost all aspects of ordinary life. Children appear to be at a lesser risk for severe COVID-19 clinical manifestations; however, it does not mean that they have been left untouched by the pandemic and the effects on them deserve attention [1]. Like adults, teenagers have dealt with psychosocial effects caused by the consequences of the pandemic [2]. In fact, teenagers may respond more strongly to the stress of the crisis than the general population [3].

To prevent the spread of COVID-19, most countries have implemented some form of lockdown and social distancing guidelines [4]. These have included closure of educational institutions, which has resulted in the disruption of the academic lives of teenage students. There is rampant uncertainty around the completion of curriculum, grading, and fulfillment of mandatory requirements for graduation. This academic interruption has been shown to increase anxiety levels in college students [5]. While many schools resumed classes virtually, the online delivery of lessons has run into challenges [6]. Many schools have struggled with scalability issues i.e. provide online sessions for thousands of students. There have been reports of hackers barging into these sessions. Many
disadvantaged students do not have access to the Internet at home and have faced obstacles in joining the online classrooms. Online examinations have further stressed students with many unable to submit their answers in time due to internet issues. Furthermore, educational facilities provide an environment where students can learn and work optimally. Classrooms are designed for focused studies and ensure that the attentiveness of a student is high. Virtual classes, on the other hand, are vulnerable to multiple distractions – other family members, household chores, electronic devices, etc. Such distractions reduce the focus of students on their education [7].

In addition to education, schools offer a variety of sports, extra-curricular activities, and events that reduce stress among teenagers and boost their mental and physical health. Such activities had to be canceled due to the pandemic. When children are out of school, they are physically less active, have irregular sleep patterns, and less favorable diets resulting in loss of cardiorespiratory fitness and weight gain [8]. Teenagers are not able to play outside with their friends as play areas have been closed as part of community-based mitigation efforts leading to distress. Teenagers are likely to become more demanding and may demonstrate irritation, annoyance, hostility, and impatience [9]. The lack of sports and other outside events has resulted in decreased physical activity. Teenagers are spending more time on social media and are accumulating unhealthy levels of screen time [10]. Decreased physical activity is likely to have long-term ill effects on their health and likely to cause an increase in their stress levels. Adolescents who use social media more than others and those who are more emotionally invested in social media experience lower self-esteem, poorer sleep quality, and higher levels of anxiety and depression [11]. Boredom, inadequate or inaccurate information, monotony, lack of in-person contacts with classmates and friends, and fear of infection can all potentially lead to more enduring mental health consequences for teenagers [12].

Teenage years are when children explore the outside world and begin to initiate freedom from family members. Interactions with peers during adolescence, which overlaps with teenage years, are of primary importance for social development [13]. Peer interactions provide a significant source of positive experiences for teenagers and are imperative to establish a sense of empathy and identity [14]. However, due to stay-at-home orders, this has been brought to a halt. There is a lack of personal space for teenagers, often leading to arguments and quarrels with other family members. Disease-mitigating steps like quarantine can be traumatic to a significant percentage of children. It has been observed that criteria for Post-Traumatic Stress Disorder (PTSD) were met in 30% of isolated or quarantined children and the mean posttraumatic stress scores were four times higher in children who had been quarantined than in those who were not quarantined [15].

In many countries, schools offer reduced price or free lunch to students from economically disadvantaged sections of society. Many times, the lunch provided at schools is the only full meal these students get to have in the entire day. In 2018 alone, school cafeterias in the United States served nearly 5 billion lunches, with nearly three-quarters of the lunches free or at a reduced price [16]. Closure of schools means not enough food for teenagers from food-insecure and marginally secure households. Hunger is related to poor health outcomes and learning impairment [17]. Since children’s nutrition is crucial for their development and their productivity and earnings as adults, the economic and health consequences of poor diets and insufficient food are lifelong – not only for the individuals but also for society [18].

The pandemic has significantly reduced opportunities for internships, volunteering, and training for teenagers due to lockdowns [6]. While many organizations have discontinued such programs altogether during the pandemic, others have shifted to online mode. However, online training is unable to provide the hands-on experience needed to operate equipment, work with chemicals, or to handle experimental animals. Additionally, ongoing experiments in schools or at research internships and other programs had to be put on hold or terminated and must be re-conducted once entry is allowed into the schools [6]. This puts many teenagers behind in their academic pursuits and disrupts the goals they have set to further their education further aggravating their stress.

Many students of weaker financial backgrounds or those from developing countries interested in studying abroad take loans to pursue their studies. While their education has been disrupted, they continue to owe loan re-payments to their lenders [6]. This has brought about anxiety and distress among such students
thereby adversely impacting their mental health. Further, students at many universities were directed to vacate their dorms at very short notice [19]. Many countries completely stopped flights leaving foreign students nowhere to go. Many tried to settle in with their friends or acquaintances further compounding problems for them.

Listening to constant upsetting news can trigger anxiety and increase stress levels among teenagers. Rampant fake news over social media sites has further aggravated the problem. Teenagers with underlying psychiatric illnesses may face additional challenges due to the breakdown of a family support system [20]. Companionship is vital for normal psychological development and the well-being of teenagers. Separation from their family members or caregivers might increase the risk of psychiatric orders and push them into a state of crisis [21]. Teenagers with single parents or those with parents working on the frontline of the battle against COVID-19 may suffer additionally if their parents need to be quarantined [9]. Fear of losing a loved one, especially a parent, aggravates the anxiety even more.

Teenage mental health has been negatively impacted by the widespread prevalence and uncertain duration of the COVID-19 pandemic and, therefore, efforts should be made to mitigate its deleterious effects [12]. Teenagers, their families, educational institutes, and public health authorities can take multiple steps to alleviate the detrimental consequences of the pandemic. Teenagers should maintain a healthy diet, get enough sleep, keep to a schedule, and help prevent the spread of the disease by washing their hands frequently and wearing masks [22]. They should attempt to find ways to relax by engaging in activities like exercising, reading, and meditation. They should avoid alcohol and drugs as these can weaken the body’s ability to fight infections and increase the risk of certain complications associated with COVID-19. They should talk to someone they trust about the feelings being experienced [22]. Teenagers stuck away from their families can use video calls and other modes of communication to avoid feelings of loneliness. Teenagers should take breaks from watching upsetting news and get their information from authentic sources, rather than relying only on social media.

Parents are the best resources for teenagers to seek help from during lockdowns. Parents can act as important role models for teenagers by maintaining a healthy lifestyle in terms of diet, sleep cycles, and exercise regimen themselves. Parents should monitor the behavior of their teenage children while giving them space and respecting their identity. They should have open dialogue with their children, help them develop self-discipline, and encourage a healthy diet and schedule [12]. Parents should encourage teenagers to strengthen bonds with them and adopt positive parenting interventions like imparting detailed information about COVID-19 transmission, precautionary measures, and educating teenagers about proper hygiene practice [9]. Public health agencies should raise awareness about the pandemic, its impact on teenage health, and remedial measures that can be taken to minimize its impact. Educational institutions should offer online stress management courses to their students [6]. They should also provide clear guidance on their plans for re-openings, future methods of instruction, grading metrics, and fulfillment of graduation requirements. Relaxation to mandatory admission requirements would go a long way to help teenage stress. Online platforms can be used by school counselors, social workers, government agencies, and other non-profits to address the psychological needs of teenagers. Teenagers who are infected or suspected to be infected with COVID-19 and need isolation should be provided with special attention to remediate their anxiety and other psychological effects [21].

Close attention needs to be paid to address the adverse effects of COVID-19 on teenage mental health. Additional studies are required to evaluate and avoid long term consequences. It is the shared responsibility of governmental health agencies, the community, and parents to ensure that mental health issues amongst teenagers caused due to the pandemic are adequately addressed [12].

CONSENT
It is not applicable.

ETHICAL APPROVAL
It is not applicable.

COMPETING INTERESTS
Authors have declared that no competing interests exist.
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