

THE IMPACT OF COVID-19 ON EDUCATION AND PROBLEMS HIGHER EDUCATION STUDENTS, PARENTS, AND TEACHERS FACE DUE TO DISTANCE LEARNING

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The Impact of COVID-19 on Education and Problems Higher Education Students, Parents,
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ABSTRACT

The coronavirus pandemic has caused enormous stress on students, parents, and teachers because of distance learning. Schools, educational institutes, and universities have been shut down and continued teaching through distance platforms. In this review article, we studied the impact of online learning and the psychological stress it causes on parents, teachers, and students. It is identified that stress levels, anxiety, depression, and other psychological disorders doubled from pre-covid to covid in all individuals. Students' leading cause of stress was lack of proper devices, technology skills, electricity and internet issues, social isolation, and financial crisis. Teachers' stress levels increased as they lacked online teaching skills, materials, devices, increased workload, and work-life imbalance. Families and

caretakers reported that they are scared of their children getting exposed to internet bullying, lack of technical skills in parents, fear of their child contracting the virus, and financial crisis.

KEYWORDS: Covid, Distance education, Students, Teachers, Parents, Psychological disorders.

INTRODUCTION

Global health has been a priority for nearly everyone on the planet for the past two years. That was due to the coronavirus pandemic. The first COVID19 case was identified in China, and from there on, it spread globally in a very short span (Amir et al., 2020). Millions of deaths were documented, and there was no treatment available to treat the virus. On January 20, 2020, the first case of Coronavirus was detected in the United States (Yu et al., 2021). As

of the year, the United States has crossed 20 million infections from SARS-CoV-2, and more than 3,46,000 deaths occurred in the USA(WHO). Globally, the cases rose to 83,832,334 and 1,824,560 deaths (Sazakli et al., 2021). World Health Organization (WHO) declared this a public health emergency. The only viable solution was for a mandated lockdown, including self-isolation, to limit the spread of the virus. This implementation included shutting down all the educational institutions.

The governments of all the countries made sure that learning was continued online (Abuhammad, 2020). The education system changed from in-person to online (Fawaz & Samaha, 2021). Approximately 1.6 billion learners in 190 countries are affected by changes in the education system (United Nations Educational, Scientific and Cultural Organization (UNESCO). Educational institutions had to reshape their teaching curriculum to meet the needs of students. Most of the content is delivered via live lessons or recorded or on T.V. (Bhamani, 2020). Until then, distance learning was practiced by a small minority of individuals, those homeschooled due to ideology or disabilities, who lived remotely. Many seek online education due to family or work constraints regarding adult learning.

Few educators are trained in online education methods. The sudden implementation of distance education identified certain stress, anxiety, and psychological distress in students, teaching staff, and parents. This review article analyzes the percentage increase in psychological stress before and during the pandemic in the categories mentioned above and the coping methods they followed to overcome it. Research has shown that populations at higher risk of getting the virus or who have a history of psychological disorders are more prone to falling under the category of getting affected again due to the lack of technological developments and satisfactory online education methods, triggering additional anxiety in students already experiencing trauma from the pandemic and lack of social interactions(Lee, 2020). With a sudden shift in teaching methods and a lack of technical knowledge, teachers reported increased signs of psychological distress, burnout, and anxiety (McLean et al., 2018).

Impact of COVID19 on undergraduate students

According to Statista there are almost 25,000 universities all over the world(Statista). According to the national center for education statistics, 37.2 percent of students are enrolled in non-distance education courses (National center of education Statistics). With the declaration of Coronavirus as a global pandemic on March 11, 2020, by the world health

organization, all the sectors changed from in-person to online, including educational institutions (Masalimova et al., 2022). To provide education online, institutions have introduced different electronic and communication tools such as zoom, skype, Microsoft teams, Facebook, YouTube, OneDrive, etc. (Masalimova et al., 2022). The distance learning platform is completely new for students. Rahman, (2021) stated that based on the study conducted in Assam, India, about 100 percent of them used google meet, whereas Saha 2021, said that in a survey conducted in Bangladesh, most of them used zoom meetings. In both countries, the next most frequently used media was YouTube, as teachers can easily upload videos and easily accessible to all (Kruse & Veblen, 2012). Facebook was used the least as students tend to distract soon enough by watching online content instead of looking at study materials. Various methods such as lectures, PowerPoint presentations, PDF or Word files, videoclips, audio recordings, assignments, quiz are used in implementing online modes of learning. The data presented in Rahman (2021) and Saha (2021) showed that lectures are the most used methods for delivering content to the students.

On an analysis of online classes duration, most of the students attended classes for one hour, followed by a few of them for 2 hours and very few students attended one class for more than 3 hours. The study was done based on the most used devices; 93.89% used smartphones, 51.67% used laptops, and 14.45% used tablets, 39.45% used desktops. The education did not halt, but students have faced many problems relating to lack of devices, improper internet, no proper electricity, and no suitable environment to attend classes. On the other hand, students equipped with good internet connections and have sufficient knowledge of e-learning tools did not face any problems and showed more interest in distance learning (Al-Salman & Haider, 2021).

Students from low-income backgrounds experience barriers like long-term education disengagement, lack of proper devices, poor technology management skills, and psychological challenges that impact their academic performance (Drane et al., 2020). A college education is crucial in improving social status. Getting a college degree is important for students from low-income families, improving their financial and social status (Adams et al., 2016). UNESCO documented evidence of inequality in supporting the underprivileged in low and low-middle-income countries. With the pandemic and lack of resources to continue their education, statistics have shown an increase in the dropout rate among low-income

individuals. When measuring the stress level among low-income students before and after the pandemic, there is a 25% increment.

The common barriers faced by students in remote learning are irregular electricity, poor internet connections, improper time management, lack of compatible devices, financial constraints, lack of emotional support, not efficient in understanding online classes, inappropriate study environment, no proper time management skills to complete the assignments on time, lack of pedagogic and technical skills in teachers (Alvarez, 2020; Rahman, 2021; Hall et al., 2021). Hall (2021) has suggested that students should adapt to learn virtually. Students also experienced stress due to financial crises. With COVID19, most of them lost jobs; this made it difficult for individuals to afford food (Patricia Aguilera-Hermida, 2020). Some university students held campaigns to reduce university fees. Some students had stress due to the feeling of isolation and were not sure when the universities would reopen. Some students found it challenging to finish the assignments on time. All these factors have increased stress levels in students (Govender et al., 2021).

Students from low-income families find it necessary to complete their education fast to support their families. With a pandemic, this process is slowly downed, and this further increases fear, anxiety, stress, loneliness, helplessness, and psychological distress (Cao et al., 2020). Coa (2020) conducted a study on the psychological impact of COVID19-19 on college students the researcher found the main reason for the increase in cases of anxiety in students is to fear of contract of virus and delay in their education, fear of employment. Students who have been living alone had increased levels of anxiety compared to the ones living with parents, whereas he found in the study that there was no impact on their gender. The study also revealed that living in rural areas and living with parents who have stable income is a protective factor against developing anxiety (Cao et al., 2020).

In a study conducted on distance learning in dental students in Indonesia, 67.1% said that distance learning did not give them the same satisfaction compared to classroom learning. The world-facing many uncertainties of COVID19, depression, and anxiety have gained the public's attention, with increasing cases of anxiety and psychological disorders (Lee, 2020; Rahman, 2021). Adapting to the new learning methods, improper delivery of education, lack of proper guidance and equipment made the undergraduate students more anxious and resulted in triggering psychological distress in them. In a study conducted in Dhaka city, they have asked undergraduate students to fill out the questionnaire related to different aspects of

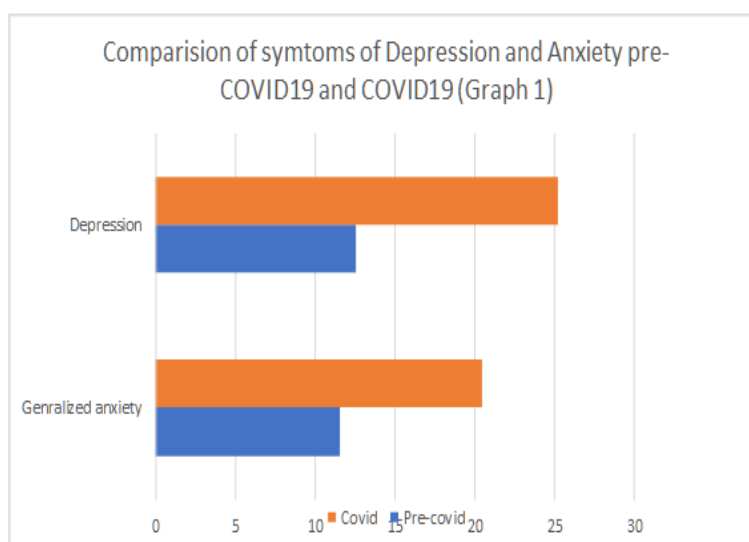
online learning and one of it was media used for distance education. After analyzing the data from the Google forms, they found that zoom was the most frequently used platform for online learning (Saha et al., 2021). Government has a budgetary allocation for digital learning and it is shown to be reduced from 2020 to 2021. Many developing countries such as India and Bangladesh, do not have a continuous power supply, 3/4th of the population lack proper internet connection. Purchasing devices that are compatible with appropriate apps, providing continuous power and internet connection is burdensome to low-income parents. The digital literacy rate was proven to be very poor that most of them among the age group of 7-35 years did not have any knowledge in using computers (Rahman, 2021; Saha 2021). But there are debates where online learning is supported in some areas, old age people, married women, students who want to pursue programs in a different university are already enrolled in one, for students who live in different countries. Online learning can also be cost effective as there is no accommodation or travel expenses, flexibility in timings.

Al-Salman 2020, accessed what type of courses are best suited online arts and humanities compared to science courses. Based on a questionnaire filled by students of Jordan University, it stated that art and the humanitarian course did not need much interaction with the tutor, and the easier in terms of content and assessment compared to science courses, which needed hands-on practical learning, intensive student, instructor discussions (Al-Salman & Haider, 2021). Scientists from the University of Roosevelt, the department of psychology, and the University of Pennsylvania, the department of psychiatry, conducted a study to find if perceived stress has anything to do with the student's financial background (Adams et al., 2016). For students coming from lower financial backgrounds college degree is important to change their social status in the future. According to current statistics, 24 percent of students belong to low-income families currently attending undergraduate schools. The number is expected to increase in the near future. For students that belong to low-income families or first-generation students, the dropout rates are found to be very high by the age of 25 whereas one in two for non-low-income or non-first-generation parents (Bansak & Starr, 2021). The unmet financial needs will force students to work part or full-time, spending less time on campus, hindering their academics. Because of COVID19, the financial crisis increased in all families due to recession, further increasing the dropout rate of students from low-income families. This study had 157 undergraduate students; results showed that financial burden on the student led to perceived stress, which affected their academics and caused psychological symptoms in students (Adams, 2016).

Coronavirus recession Financial stress Perceived stress reduced time spent on academics and on campus Psychological stress Closing of schools, because of COVID19 the biggest public-health intervention to restrict the spread of virus has become a curse to some young children and adolescents. Despite losing education, most of the children are at hunger losing the free meal plans provided in the schools, are becoming victims of domestic violence, increasing poverty in families as parents are spending more time caring for children preventing them from working and accomplishing the assigned tasks(Kim et al., 2021). Typical students are facing an impeccable number of issues due to e-learning, one can image the problem faced by students with disabilities. In students with attention deficit hyperactivity disorder, inattentive to the online classes has increased compared to offline as the child was thinking of it as an informal class (He et al., 2021). The attention of the student might also be reduced due to the lack of a proper class atmosphere. Parents of these children reported that there is a decline in his, her, their, etc. outcome of the students in online learning. Students with this disorder might also lack organizational skills and skills to learn and finish the homework on their own, improper time management, prioritizing of tasks(He, 2021). Children with these disorders showed a significant outcome in their education when there was a certain amount of care given by the teachers (He 2021). Because of COVID19 everything happening online, the students lost this care and deteriorated in their studies. With COVID19, digital media use maximized in students of all age groups, in students with attention deficit hyperactivity disorder due to lack of control the chances of addiction to the internet are high (*Predictive Values of Psychiatric Symptoms for Internet Addiction in Adolescents.Pdf*, n.d.).

Factors that increased stress in students due to distance learning

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| <ul style="list-style-type: none"> • Lack of compatible devices, • Electricity issues • No, proper internet services • Financial constraints • Lack of emotional support, • Inefficient pedagogy, teaching skills • No peer interaction |
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Graph 1: The data extracted from a meta-analysis of the prevalence of anxiety and depression symptoms in children during COVID19 shows that the rates have doubled compared to pre-COVID19 times. It means that 1 in 4 youth globally are experiencing symptoms of depression and 1 in 5 youth are expressing symptoms of anxiety (Global Prevalence of Depressive and Anxiety Symptoms in Children and Adolescents During COVID19-19 A Meta-analysis).

The Impact of COVID19 on teachers

Teachers play a key role in making changes to the education system (Pozo-Rico et al., 2020). In the start when they enter the profession, they have so much enthusiasm to keep efforts in altering the learning techniques for students to learn quickly, keeping efforts to build a greater society, making the purpose of their profession. Many studies were conducted on teachers' efforts to implement the change, which included technology integration to the education system. However, for many teachers who are used to teaching face to face, sudden change to online mode needs extensive training and technical support from the universities (Ivy, 2012).

Teachers are facing many adverse effects due to sudden changes in the teaching system from in-person to online. The conventional teaching mode was in person, talking face to face, clarifying the student's doubts in class (Kotowski et al., 2022). Because of COVID19 to restrict the spread of the virus, everything had to change online and one of them was education. Sudden transformation increased psychological stress in teachers (Kotowski et al., 2022). Stress can be defined as a nauseating feeling associated with anxiety, frustration, tension, and anger (Ozamiz-Etxebarria et al., 2021). Teaching was proven to be the most

stressful profession, with the pandemic that has brought unprecedented troubles that multiplied the stress in teachers (Yang et al., 2009). With the shutdown of schools from March 20, 2020, teachers are forced to shift to online teaching with little or no training. There were proofs that online teaching is not that hard compared to in-person teaching, but sudden change left teachers confused and stressed (McQuiggan, 2012).

Studies have found that teachers have been spending more time preparing for the online class and grading the assignments and less time for teaching. Before COVID19, there are very rare cases of teachers meeting online with students, but things have completely changed. Teachers are meeting with students almost nine times a week online, spending one to one and half hours online in front of the computer screens. This event maximized the stress and burden on teachers as there is no balance between work and family as pre-COVID19 times. Teachers who live in combined families had to take care of their children who are attending schools online, care for vulnerable family members might be the reasons for stress (Lizana et al., 2021). Based on a survey conducted on teachers of Cincinnati to obtain their perceptions about pre and post COVID19, results showed that the teachers were drastically affected since the start of the pandemic. 37% of the teachers struggled with work-family balance, 41% of teachers had kids at home that needed help, 29% of the teachers had kids at home that are learning remotely. Teachers usually have demands both at school and at home. With COVID19 and a sudden change in his, her, their, etc. lifestyle, imbalance in work-life, increased unpredictable stress on teachers to meet everyone needs (Kotowski, 2022).

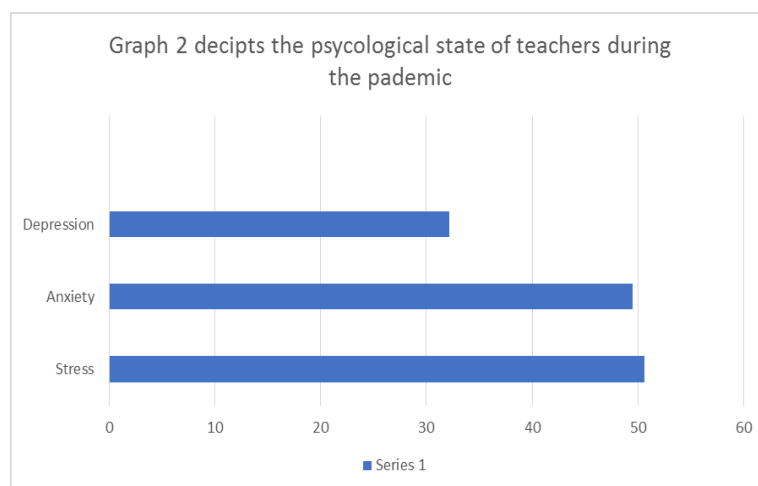
In addition to this, the introduction of technology into work has now increased the chances of tech-stress in teachers. Tech-stress can be defined as stress that is caused due to technology and causes adverse effects that affect a person's psychological behavior (Salanova et al., 2013). Chile had already reported issues of tech-stress in teachers due to the introduction of technology and communication in the classroom setting (Lizana, 2021). Teachers have the highest workload and that is no secret. They must prepare for classes, make materials to distribute to students, plan meetings, organize their work, spending extra hours meeting parents and guardians (Few teachers have health issues such as overweight, burnout, stress, anxiety, muscle disorders, or heart issues (Hindman & Bustamante, 2019) (A Systematic Review of Musculoskeletal Disorders among School Teachers). The workload, stress, or health issues, can impact the quality of life of the teachers (Yang et al., 2009). Stress and burnout impacting the quality of life of teachers show negative effects on their teaching

effectiveness. Training programs for teachers increase their knowledge on technology and skills to teach online. These training programs helped teachers to reduce stress, prevent burnout. Proper training can mitigate stress and train teachers to acquire skills, strategies, and resources and improve workplace satisfaction (Pozo-Rico et al., 2020).

Teachers with depression spend less time in organizing and planning their activities compared to teachers with these issues. Depressed teachers do have the ability to deliver the required content, instructions, and the overall quality of the class is impacted (McLean et al., 2018). Considering this depressed teachers have effects on student education, their social behavior (Hindman & Bustamante, 2019). Special education teachers are very few and have high attrition rates. Special education teachers work with students with mild to moderate disabilities and physical or mental issues (Cormier et al., 2022). The factors that can cause stress in these teachers may be due to work burdens, teachers' background, or dealing with students of extreme behaviors (Cormier, 2022). Cormier, 2021 did a study on 468 special education teachers of the USA to understand the impact of distance learning out of COVID19 on special education teachers. The results turned out to be 91% of them exhibited moderate to extreme stress, 58% of them showed symptoms of depression, 76% of them showed anxiety, 83% had mental exhaustion. The clinically diagnosable symptoms are higher than the average prevalence of U.S rates (Cormier, 2022).

Factors that increased stress in teachers due to distant learning

- Imbalance in personal-work life
- Teachers having kids at home that needs help
- No proper training provided by the educational institutions to teach online (lack of online teaching skills)
- Lack of technological and communication skills



Graph 2: A study conducted to determine the state of the psychological state of teachers in COVID19 pandemic showed that 50.6% of teachers showed symptoms of stress (with 4.5% reporting extreme stress and 41.1 severe stress), 49.5% reported anxiety (with 8.1% of teachers reporting extreme anxiety and 7.6% severe symptoms), 32.2% of them showed signs of depression (Ozamiz-Etxebarria et al., 2021).

The impact of distance learning on parents because of COVID19

Children alone find it hard to overcome the sudden changes in learning. When collaborating with children in learning, parents improve their bond as they spend much time together. This allows parents to ease the pain that is caused by difficulties in learning online and reduces the symptoms of anxiety in children. It is suggested that parents learn intervention techniques to provide emotional support to their children in these tough times (Bhamani, 2020). A descriptive study conducted on parents of Pakistan said that online learning has impacted their child's daily routine. Going to schools daily will make the children understand the importance of having a daily routine, planning their day on finishing assigned tasks, playing sports, listening to teachers, communicating with friends, which will help them in shaping their future. After the pandemic and virtual classes' children lost a track of their daily routine, developed irregular lifestyles (Bhamani, 2020). Parents were also concerned that not only children, but teachers are also shifting from their traditional ways of teaching to something they are completely new. The teachers are not trained for this mode of teaching and assessment, which made parents more concerned about the uncertainty in children's education (Bhamani, 2020). It is obvious that this mode of learning can be troublesome as the change was abrupt and not gradual. Parents are concerned that any minor technical issue like power cut, or internet issues hinder the student from attending the class. Parents were facing issues if there was more than one school-going kid from a home because of the possibility of clashes in their class (Bhamani, 2020).

Parents spent more time with their children in clarifying doubts, before COVID19 students used to spend ample amounts of time in school and got all the doubts clarified, now all this is diverted to parents where few of them have a work of their own (Davis et al., 2021). A few strategies used by parents are keeping a strict schedule, developing a home-based timetable that will keep children's complete assignments on time, having a proper biological cycle, keeping them from spending excess time on his, her, their, etc. internet, and social media (Agaton & Cueto, 2021). Parents also engaged their children in different creative

activities such as cooking, dancing, singing whatever was feasible at that movement. Even though parents tried their fullest in keeping children active, students thought of it as a vacation and did not what to do anything on time. They considered lockdown as vacation, slept, and woke up at their times, played videogames, spend long hours on his, her, their, internet. Parents were also scared of children's physical well-being. Children became sedentary, gained weight with no outdoor physical activities (Kim, 2021).

Kim (2021) posit said that parents showed mild to moderate depression is 17.5% and 29% of mild depression, which is double the average rate of depression in southern South Korea. The main factors identified that maximize the stress levels are disruptions to work, imbalance in daily self-care routine, fear of contract to COVID19. Pandemic led to a huge recession, loss of employment, declining income, increase the cost of commodities increased rate of mental disorders, and suicidal behavior in parents. American parents with children showed a high amount of stress compared to adults alone. There has been a parallel relation between parents' stress and children's behaviors. The factors for higher parenteral mental risk were irregular sleep patterns and higher media usage by children. Children using media, staying on his, her, their, internet for a long time are at heightened risk to cyberbullying sexual exploitation. Governments and companies should help parents in guiding how to react and respond to harmful content on the media (Kim, 2021). Parents are starting to get called proxy educators since the pandemic and closure of schools. Parents are expected to learn teaching and technical skills to help kids in their studies, assess the emotional need of the students, and so on. Research has shown that an increase in stress and burnout in teachers impacted the student's education and well-increased teachers' dropout rate (Chambers Mack et al., 2019)(Mclean & Connor, 2015). But parents do not have a chance of abdicating their teaching responsibilities. It also shows that parents' stress can significantly impact their child's education (Davis et al., 2021).

Davis, (2021) studies the mental effects of parents with children who are facing difficulty in distance learning pedagogy. Anxiety, depression, and stress were measured using the patient health questinarrie and the generalized anxiety disorder scale. Findings revealed that high levels of stress are seen in parents whose children are having difficulties in adopting to distance learning. it is unsure of when the schools will reopen and go back to traditional learning; this stressful period may continue. Therefore, schools are suggested to provide mental health resources to proxy educators. Depression rates are found to be highest in

parents with low income. Because of COVID19, many people lost jobs, reduced income, causing distress. Parents who have children between 2-7 showed a high level of anger since the COVID19 outbreak due to job loss, Incomeloss, household illness, or maybe due to caregiving burden. A sample of parents with younger children showed higher depression rates than parents with financial or material hardships. When parents' emotional distress was recorded every week, the percentage increased all the time compared to the following week. Single parents reported the highest cases of depression.

Reasons for the increase in stress in parents:
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| <ul style="list-style-type: none"> • Loss of employment, • Increase in cost of commodities, • Fear of their child contracting COVID19 • Technical issues their children are facing due to the lack of proper devices and internet for online learning • Financial crisis in low and lower-middle-income parents • Fear of students' exposure to internet bullies or sexual harassment as they are spending increased time on the internet • Lack of technical skills in parents • Parents who have children with special needs |
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CONCLUSION

The change in the education system from face-to-face to online learning because of the pandemic impacted children, parents, and teachers in several ways. Children were finding it hard to adapt to new modes of learning, students from lower and low-middle socioeconomic classes lacked the equipment and proper environment to attend online courses, did not have adequate access to the internet, power cut, lack of emotional support, financial crisis all these factors increase stress, anxiety levels in children. Sudden change in teaching methods without training in a very short period put an unimaginable burden on teachers, maximized dropout rate, and recorded the highest number of depression cases. Parents supported online education to protect children from contracting the virus but were worried about the increased amount of time children are getting exposed to the internet; they are scared of their becoming a victim of cyberbullying, sexual harassment, health issues they would face in the future because of the sedentary lifestyle.

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