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Impact of Pandemic Situation on Students Psychology and Support to Combat

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Abstract: ***The extensive spread of the COVID-19 virus has resulted in not only a high danger of death but also a lot of psychological stress. Since the start of the coronavirus disease 2019 (COVID-19) pandemic, the number of cases and deaths has risen globally, and the closure of schools, universities, limited access to research labs, as well as a wide range of preventive measures, has left students feeling impotent, disconnected, frustrated, and uncertain of what would happen with their academic progress. Much psychological research has been done regarding the mental stage of students and to combat such a situation during this phase lots of online sessions, videos, series, different counselling sessions are been organized by many countries. The chapter includes the effect of a pandemic on student psychology, the effect on career as well as how different organizations are having their helping hand in combating this situation.***
Keywords: Pandemic, Psychological stress, Student, Counselling, Academic

I. INTRODUCTION

SARS-CoV-2 is a novel coronavirus which was first observed in Wuhan, Hubei, China in the end of 2019 as the global COVID-19 pandemic [1]. Symptoms of COVID-19 are primarily respiratory with acute respiratory distress syndrome eventually leading to death [2]. It is clear from many studies that the novel coronavirus (SARS-CoV-2) and the disease it causes (COVID-19) have greatly affected people's mental health and behaviour [3]. It has also been shown that COVID-19 can affect other organs, including the brain, and reports of neurological symptoms due to COVID-19 infections are emerging recently. People who are more sensitive to stress as a result of the COVID-19 pandemic appear to be at greater risk for anxiety, depression, and post-traumatic symptoms [4,5]. Also the pandemic emergency dramatically changed the lives of university students, who have active social habits based on relationships, contacts, sports, and university activities [6]. In many cases, these inexorable circumstances lead to stress, anxiety, and a sense of helplessness. In comparison with adults, research indicates that this pandemic may continue to have negative effects on children and adolescents for quite some time to come. Children and parents within this age group can be vulnerable due to a variety of factors such as their young child's developmental stage, present educational level, disabilities, mental health issues, poverty, and being quarantined because of an infection are all factors [7]. In this chapter, we discuss the effects of COVID-19 on psychology of students, its impact on academia and how to address such situations at national and international levels.

II. PANDEMIC CONDITIONS AND PREVENTIVE MEASURES

This virus spreads mainly from person to person, mainly through the respiratory secretions produced by an infected person when they cough or sneeze. It is possible for these droplets to land in the mouths or noses of nearby people or even to be inhaled into the lungs. Unfortunately, there are no medications that have been tested in controlled studies and have been approved by the FDA for this global pandemic [8]. As a result of prevention measures, cases are being limited as much as possible. The disease must be diagnosed, isolated, and treated early to avoid further spread. The best preventive strategies focus on the isolation of patients and the careful control of infection, including measures to adopt during diagnosis and treatment of an infected patient [9]. A summary of COVID-19 preventive measures is shown in Table 1.

Table 1. COVID-19 preventive measures

Preventive measures
Self-Quarantine
Closure of Institutions, Local shops, Malls, Temple, Transport etc.
No crowding
Strict use of Mask and sanitizer
Social distance
Work from home
No social gatherings like party, marriages, outing etc.

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III. IMPACT OF COVID-19 ON STUDENTS

COVID-19 has profoundly impacted children and adolescents around the world. In almost every country, strategies of social isolation and distancing have been implemented to prevent the spread of COVID 19 infection [10]. Accordingly, several countries began to implement containment or lockdown measures since January, 2020. One of the primary measures taken during lockdown has been the closure of schools, educational institutes, and activity centres. Those inexorable circumstances leading to stress, anxiety, and the feeling of helplessness were beyond normal experience for all [11]. According to some studies, this pandemic is likely to have greater adverse effects on youth and children than on adults. This age range bears the brunt of large-scale health impacts because of several vulnerabilities like developmental age, educational status, learning disabilities, mental health conditions and being economically disadvantaged. Another vulnerability factor is having a child/parent quarantined for infection or fear of infection [8].

A. Impact on Children Education

It is difficult to imagine the potential losses that the young generation may suffer from their lack of learning, and for the development of this generation's human capital [12]. Children view school as both a place of learning and an outlet for their energy. In addition to pedagogy and scholastics, schools provide freedom, an opportunity to interact with peers and seniors, and psychological comfort.

Education in schools has a great impact on promoting ethical behaviour, good health habits, physical activity, and healthy eating [13]. Whether it will be a short-term or long-term shutdown, captivity of children at home or in schools may negatively affect their mental and physical health and rip that sense of normalcy that schools used to provide. These long-term physical inactivity, irregular sleeping patterns, unhealthy dietary plans and longer screen time while on lockdown/school closure will ultimately result in overweight children and reduced cardio-respiratory fitness [14].

In both the developed and developing world, school is also a place of nutrition for many children living in destitution, so shutting it down will exacerbate food insecurity, which can be correlated with low academic achievement and health risks for students as a whole [14].

As a result of prolonged shutdowns, educational inequalities arise as well. In the event of this closure, the learning gap will be widened between children from lower-income families. It is very difficult for children from low-income households to access the audio-visual equipment they need to home-school and a good internet connection to do so [13]. Even in developed countries, millions of children lack basic amenities, including a stable residence, required reading material, and a place to do their homework, access to computers, smartphones, and media. A COVID-19 pandemic could have socio-economic consequences such as child abuse, drop-out from education, involvement in high-risk activities and a rise child labour [15]. This is a global crisis and, for some children, its effects will last a lifetime.

B. Impact on Education of Youth and College Student

The loss of dormitories and peer groups resulted in many university and college students having to leave campus immediately often without their belongings and being expected to continue academic work as usual, virtually. This disruption caused any student to be unfamiliar with their routine. The stress caused by the prolonged threat and the rapid evolution of the pandemic makes the experience unique [16]. Many studies related to physiological effect of pandemic on students have been carried.

1) *National Study:* Initially for 21 days, a national level "lockdown" was declared from midnight of March 25, 2020 to May 3, 2020, to tackle the rapid outbreak and control the spread to communities [17]. It is true that lockdown can be effective and significant strategies to distancing the population from the highly infectious and rapidly spreading COVID-19 virus, however, they also can have some psychological impact on the masses [18]. Online survey was carried out to study the mental health of Maharashtra students belonging to the age between 16-25years, during pandemic situation. Study says that more affect was seen on rural students as the hope for future source of support to the family. Female students found to be more concern regarding future and male found to be helpless [19]. Cross-sectional study was done across India by online survey on depression, anxiety and stress under this situation on students. There were significant associations between the emotional states and less time spent with their friends, this also led to rise in violence, irregular sleep, financial crisis, etc. [20]. Another cross-sectional study with 131 respondents for Google forms was done to find the mental stage of Indian students. More anxiety and depression was seen among female students which was moderate [21].

2) *International Study:* Changes in academic frameworks, tests, and a battle with limited resources have all been linked to anxiety, tension, frustration, and depressive illnesses during COVID-19's lockdown period [19]. Lots of international studies have been done regarding impact on student's education. 'Gap-year' concept is well known among different countries which got affected due to pandemic situation. Many students who planned to carry university education immediately after high school was unable to do so due to drop in a year or extension of degree [22]. 127 students among Smolensk State University were surveyed regarding the issues they faced while admitting during pandemics. Students those having idea of interested course or training did not face any issue while taking an admission, while those who did not have any goals face an issue due to reasons like less score, finance, lack of knowledge, surrounding influence etc. So in this case self-determination played a role among students [23]. COVID-19 pandemic school closures affect approximately 1.5 billion pupils in 195 countries, according to UNESCO [14]. Parents, students, and teachers all benefit from distance learning solutions, which include platforms, educational software, and resources. Some countries use radio, television, and the internet to provide classes. However, many students are not able to attend any classes or learn digital course because of problem with net connection, financial crisis, no digital appliances, lack of handling knowledge etc. [24]. According to many research, university students have a high prevalence of depression, stress, and worry. According to research conducted in Pakistan and Bangladesh, the prevalence of depression among students was 34% and 82.4%, and of anxiety was 45% and 87.7% [25]. Students among Nigeria were also found to be under stress and depression. Similar study was done among the 350 students of University of Gondar, Ethiopia found to be under depression, worry and stress due to illness, sudden change in routine, isolation, no get-togethers, financial crisis, etc. [26]. Thus COVID-19 has an impact on the entire educational system, including examinations and assessments, the start of a new semester or term, and the possibility of extending the school year [27].

IV. IMPACT OF COVID-19 ON PSYCHOLOGY OF STUDENTS

COVID-19 became a pandemic almost shortly after its emergence and dissemination. Besides death from coronavirus infection, the pandemic put everyone under excruciating psychological strain. The COVID-19 pandemic's circumstances, including nationwide lockdown, isolation, as well as delays in the current educational system, such as delaying of examinations and unexpected shutdown of classes, are predicted to have an impact on the mental health of students at many schools, colleges, and universities across the country [28].

The types of situations a student has in the classroom have a significant impact on their academic success, psychological health, and well-being [29]. Adolescents and college students who do not feel like they belong in their academic contexts, for example, may experience more self-doubt, be less inspired, and perform poorly in school [30]. Those who reported a lesser sense of belonging at their university experienced increased anxiety, tension, and mood disorders, according to a study of graduate students from minority races and ethnicities [31]. Having a larger sense of connectedness and support from fellow postgraduates, on the other hand, has indeed been linked to lower stress and improved life satisfaction in prior studies [32]. The majority of graduate students struggle with career balance, employment instability, concerns about completing their research on time, and financial worries [33]. Graduate students' mental health may deteriorate as a result of these challenges. Graduate students who said they suffered with work–life harmony also report greater levels of anxiety and depression [34]. Students' behaviours and attitudes toward education and school attendance might be affected by their absence from the study and learning environment.

At its peak, as per The United Nations Educational, Scientific and Cultural Organization (UNESCO 2021), the COVID-19 pandemic had a huge global impact on the lives and education of more over 1.6 billion students. The first country to be hit by the COVID-19 pandemic was China. As a result, various researches evaluating the effects of the outbreak on student's mental health have been published. Study explored the psychological problems and suicidal behaviour among senior high students. A total of 859 middle school students participated in this study. Stress, worry, Trauma, suicidal thoughts, and suicide attempts were found to be 71, 54.5, 85.5, 31.3, and 7.5% [35]. Some other cross-sectional research of 532 Chinese school children employed three different types of surveys from previous studies and found that approximately 20% of the participants' mental health had been impaired [36]. Further research of 584 Chinese youngsters found that 40.4% were vulnerable to mental health issues and 14.4% experienced Post - traumatic stress disorder. Their findings in the context of COVID-19 revealed that mental health was linked to educational attainment, employment, and the use of negative behaviours [37]. Ecuadorian high school students participated in a cross-sectional survey. The participants were interviewed over the phone for their survey, which focused on themes connected to remote learning technologies and their effects. In their study, they discovered that 16% of those who took part had scores that indicated serious depression [38].

Similarly, after just one month of lockdowns, a longitudinal research including 442 students from last year's high school in Greece found a 15.3% increase in depression, a 17% increase in severe sadness, a 25.7% increase in worry, and a 16.7% increase in extreme anxiety [39].

Several studies examining factors linked to the COVID-19 outbreak among college students found high anxiety and concern regarding educational disruptions, as well as the impact of the epidemic on daily life, as a result of disruptions in students' daily routines in terms of events, goals, and social connections [40]. Some factors have been mention in Table 2.

Table 2. University and psychological factors affecting their students

Sr. No	University or Country	Student/sampling number	Stress	Anxiety	Depression	Social interaction	Academic performance/ concentration	Reference
1	Large university system in Texas, United States	195	71%	-	-	86%	82%	[41]
2	Arizona State University in Tempe, Clemson University in Clemson North Carolina State University in Raleigh Oregon State University in Corvallis Pennsylvania State University State College University of Montana in Missoula The University of Utah in Salt Lake City	2534	14.6%	17.4%	5.7%	-	-	[42]
3	U.S. college students	200		60.8%	59.8%	34.1%	60.9%	[43]
4	Changzhi medical college, China	1143	30.1%	38%	-	-	76.6%	[44]
5	Public research university in Kentucky	2691	88%	-	-	-	-	[45]
6	Public and private university of Bangladesh.	15543	44.59%	-	-	-	-	[46]
7	Universities from Turkey	358	-	-	63%	-	-	[47]

V. COMBATING THE PSYCHOLOGICAL EFFECTS DUE TO PANDEMIC ON STUDENTS

College students suffer from a lot of anxiety. Educational attainment, pressure to win, and post-graduation planning are the top three concerns among students from all fields [48]. Students experience extreme anxiety as a result of economic uncertainties, family medical issues, infection concerns, the need to support and services for kids, and the challenges of distance learning [49].

Various combating techniques have been implemented to reduce the anxiety among students. Cross sectional study among nursing students were done, 244 students were selected to study their anxiety. Some methods to overcome students stress can be like staff helping students by maintaining stable syllabus, providing quality distance education, considering the students personal health issues, counselling them etc. [49]. To deal with the socio-economic effects of the COVID-19 curfew on pupils in North-Eastern Nigeria, radio education initiatives were implemented, and solar radios were provided to villages in the region [50]. Furthermore, state governments used family fun performance and giving food to learners at home as coping strategies [51]. Students at Nigeria's University of Ibadan coped by viewing movies, using social media, and engaging in online skills training [52]. Other strategies reported states that, spending additional time indoors, apart from other obligations, had advantages such as investing quality time with the family. Furthermore, it has increased the rate at which productive activities and household duties such as preparing new dishes, housekeeping, parenting, and enjoying life have been accomplished. As a result, students will benefit from the pandemic's benefits as well [52]. Similarly, a poll conducted by University of Plymouth professors in revealed that the lockdown's impact to domestic life could be long-term, since it has aided parents and their students in finding the right balance among job, education, and home life. Also, doing domestic and household duties during COVID-19 lockdown is an excellent way to keep families on track, according to the report [53]. According to few studies, many students adapted by frequently spending time online, media platforms, and videophone chats with relatives, colleagues, and co-workers [54]. Moreover, while the pandemic was ongoing, many American students used meditation, relaxation, and workout as coping tactics. Spirituality, such as rereading their bibles, Religious books, and worshipping, were also used as coping mechanisms due to the pandemic's dread and uncertainty [55]. Importantly, asana and meditating have been proven to reduce stress, increase general wellness, and research has shown that exercise and yoga improve immunity [56]. As a result, employing these techniques to mitigate the effects of pandemic constraints can assist students in maintaining their health while still at homes.

VI. CONCLUSION

The pandemic of COVID-19 brings people with it new challenges. The spread of viruses is not just affecting the health but also causing a psychological impact among students which further triggers stress, anxiety, worries, negative thoughts etc. Different studies related to psychological impact on students among different age groups have been done. Various combating strategies have also been implemented by universities and government. Many students have themselves diverted to some other work, meditation, yoga, exercise, cooking and learning other digital skills. The medical experts and administrations should devise a plan to ease the mental strain of the COVID-19 pandemic by giving emotional assistance to the entire population, but especially to students for further studies and better future during such situation.

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VIII. CONFLICT OF INTEREST

No conflict of interest.

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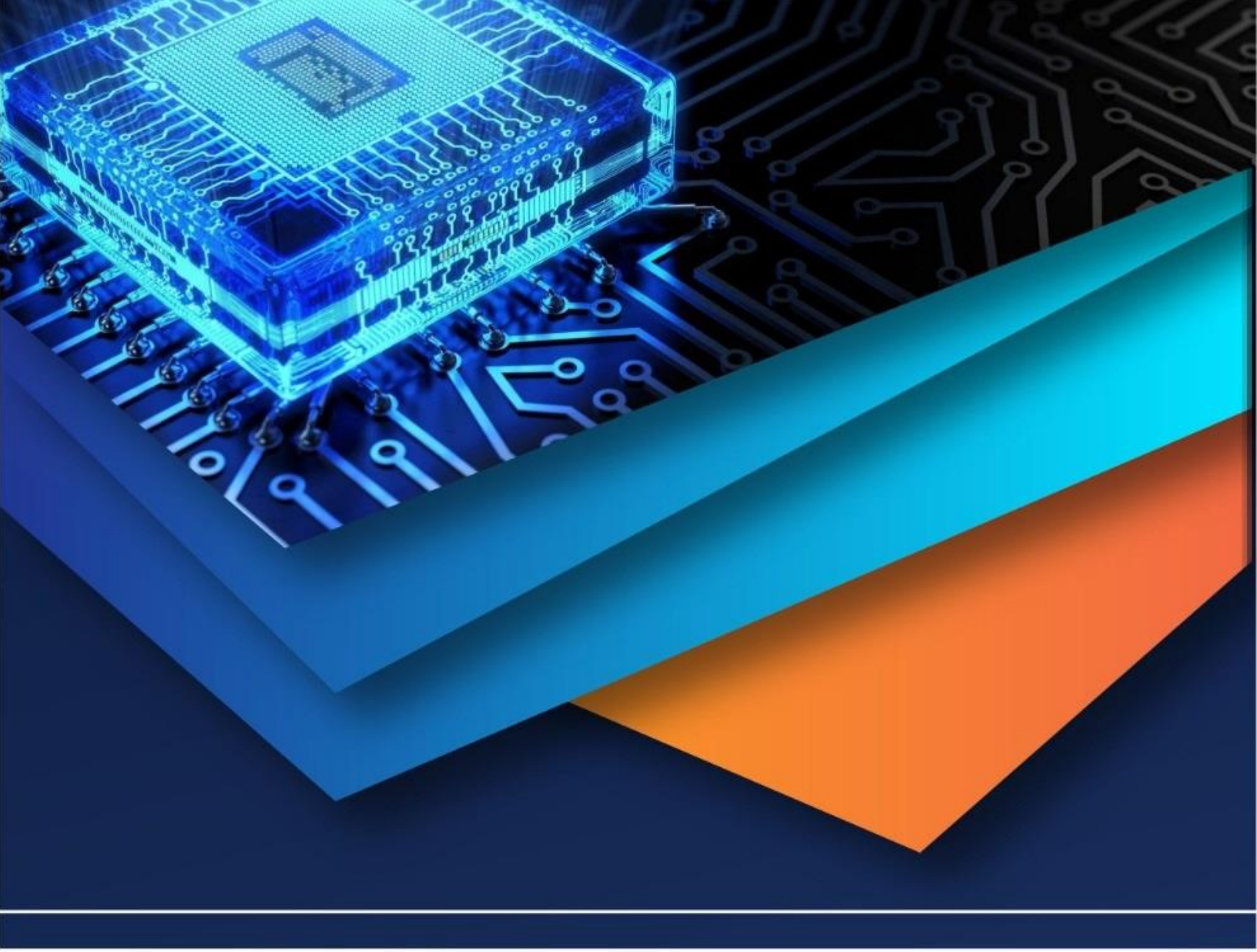

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