

**PERCEIVED MENTAL HEALTH IMPACT OF COVID-19 PANDEMIC
AND HEALTH RELATED QUALITY OF LIFE AMONG STUDENTS
NNAMDI AZIKIWE UNIVERSITY, AWKA.**

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ABSTRACT

The COVID-19 health crisis has reached pandemic scale spreading globally which gave rise to the need to examine the perceived mental health impact of covid-19 pandemic and health-related quality of life (HRQOL) among students in Nnamdi Azikiwe University, Awka. It was a cross-sectional survey design and four Research questions guided the study. The population of the study consisted of 5000 undergraduate students from Faculty of Education, Nnamdi Azikiwe University, Awka. The random sampling technique was used to select 300 undergraduate university students in 10 different academic departments under Faculty of Education. The researcher developed a questionnaire titled Perceived Mental Health Impact of Covid-19 Questionnaire (PMHICQ), which was used for the study. The instrument was subjected to both face and content validity by three experts. The reliability of the instrument was established using Cronbach alpha reliability method. The reliability yielded coefficient of 0.80 which indicated a positive and high reliability and the instrument was considered reliable and acceptable for the study. The data collected was analyzed using a mean score. The study revealed that undergraduate in the Faculty of Education, Nnamdi Azikiwe University has a good perception of covid-19, and experienced a mental health impact of covid-19 which affected them in one way or the other during the covid-19 pandemic. The study concluded that the perception of undergraduate students depends mainly on their beliefs that Covid-19 exists and was transmitted from one person to another and also their attitude, behavior and aspects of mental health of the students which involved Post Traumatic System Disorders, symptoms of depression, stress, anxiety, and that they were affected by covid-19, especially during the lockdown period. Based on

the findings of the study, it was recommended that prevention and intervention approaches to attenuate the psychosocial impact should be an integral component of crisis response during pandemic conditions.

KEYWORDS: COVID-19, MENTAL HEALTH, PANDEMIC, LOCKDOWN, HEALTH RELATED QUALITY OF LIFE

Introduction

As they continue to spread and lower human populations, infectious diseases are getting more and more common. Numerous disease outbreaks have affected the entire planet and continue to pose a major threat to public health everywhere. A number of coronaviruses were identified as the cause of human respiratory infections prior to the 2019 outbreak, ranging in severity from the common cold to the more severe illnesses severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). Thus, COVID-19 is an infectious disease caused by a new coronavirus. Prior to the winter of 2019, the general public was unaware of this novel virus and illness; however, this changed in December 2019, when the virus started to spread more quickly from its epicenter in Wuhan, China. The COVID-19 pandemic is currently hitting a large number of nations worldwide (WHO, 2020). After it emerged, it showed signs of an outbreak that raised considerable public health concerns for the World Health Organization (WHO). By mid-March 2020, the disease had spread significantly over the world, affecting numerous countries, prompting the WHO to proclaim a global pandemic. Over 108 million cases had been confirmed globally by February 14, 2021, with 5.99 million of those cases occurring in the Eastern Mediterranean.

One of the most difficult infectious respiratory diseases in the world, including Nigeria, is still COVID-19. Since the bulk of the early cases had a history of being exposed to wet markets, zoonotic transmission was initially thought to be a likely cause. Compared to other age groups, the elderly have a higher morbidity and fatality rate from the COVID-19 virus. The population fatality rate, or the chance of dying from COVID-19 among the general population, increased dramatically with age,

with rates of 0.82% for those over 85, 0.29% for those 75–84, 0.12% for those 65–74, 0.05% for those 55–64, and 0.02% for those 45–54, compared to 0.003% for those under 45 (Center for Disease Control and Prevention, 2020). Approximately 79% of COVID-19 deaths reported by August 29, 2020 occurred at ages 65 and above. In 2020, there were approximately 1,574,125 coronavirus cases reported worldwide, with an estimated 145,096 deaths from these cases. 63% of the global frequency was shared by the African region. Nigeria shared 6 percent of the global frequency among the 5 African nations that the Africa CDC reported in 2020. As of June 16, 2020, at 10:40 a.m. CEST, there were 16,658 confirmed cases of COVID-19 in Nigeria, 10,885 active cases, 424 fatalities, and 5349 discharges (NCDC, 2020). The first COVID-19 case was reported in Nigeria on February 28, 2020.

The term "pandemic" originates from the Greek words "pan-" meaning "all" plus "demos," which mean "people or population" and "pandemos" meaning "all the people." An epidemic of a disease that spreads throughout nations or continents is called a pandemic. Compared to an epidemic, it impacts more people and claims more lives. Once it was evident that COVID-19 was a serious sickness and that it was spreading swiftly over a large territory, the WHO proclaimed the outbreak to be a pandemic. As the number of cases increased rapidly, the WHO classified COVID-19 as a pandemic in March 2020. COVID-19 has been another example of the widespread social unrest, economic losses, and general misery that are known to accompany pandemics. According to the findings of an article review, aging is a risk factor that is connected to the severity of COVID-19 patients, however. Additionally, it was observed that the pandemic had a negative impact on students' mental health, increasing the prevalence of Generalized Anxiety Disorder (GAD) and Major Depressive Disorder (MDD). Their mental health conditions, such as stress, depression, and frustration, may be significantly impacted by this.

International and governmental health agencies responded to this worldwide health emergency by enacting lockdown and quarantine policies to slow the virus's rapid spread. Much public fear and subsequent mental health difficulties have been

brought on by the pandemic (Xiong et al., 2020), as was also the case at the beginning of the Middle East Respiratory Syndrome (MERS) coronavirus outbreak. Furthermore, the public's mental health is likely to be impacted by the extreme amounts of misconceptions and misinformation surrounding COVID-19, as well as by the unprecedented contemporary travel restrictions and executive orders to quarantine travelers.

This in turn could have an impact on health-related quality of life (HRQOL) (Huang & Zhao, 2020). During the COVID-19 pandemic, people experienced stress, anxiety, fear, sadness and loneliness and mental health disorders, including anxiety and depression, can worsen. Surveys show a major increase in the number of United States adults who report symptoms of stress, anxiety, depression and insomnia during the pandemic, compared with surveys before the pandemic. Some people have increased their use of alcohol or drugs, thinking that can help them cope with their fears about the pandemic. In reality, using these substances can worsen anxiety and depression. As the COVID-19 pandemic unfolds, physical distancing and social restrictions were introduced, and because of these, it was found a great impact on students' lives and their mental health. The stresses and restrictions make college students more likely to develop mental health problems that may affect their academic success, social intelligence, future careers, and personal opportunities. Both short-term and long-term factors affecting young people were social isolation, changes in the provision of treatment services, and the near-total loss of all structured professions (e.g., School, work, education). The World Health Organization declared COVID-19 a global pandemic, forcing many higher education institutions to take steps to promote student safety. Although there is no systematic review of the effects of COVID-19 on mental health, however some studies related to pandemics (including bird flu and SARS) have shown adverse effects on the mental health of affected people. Therefore, the development of COVID-19 was predicted to cause general psychological reactions such as tension, fear, anxiety, and mental disorders such as acute stress disorder, post-traumatic stress disorder, depression, and suicide. Interestingly, students who reported at least one

effect showed a higher level of resilience and a self-reported health score, but with less need for support. Concerning exercise, those who exercised constantly had lower levels of depression and anxiety, higher quality of life, and higher self-assessed health scores than those who did not exercise occasionally.

Health-related quality of life, or HRQOL, is the term used to describe how an individual or a community perceives their physical and mental health over time. The examination of HRQOL has gained significance in the context of public health surveillance, and these types of research are typically recognized as trustworthy markers of unfulfilled requirements and potential outcomes of treatments. Furthermore, letting an individual assess their own health is a more accurate way to forecast mortality and morbidity than a lot of unbiased health assessment tools. HRQOL analysis can offer the framework for interventions that can improve conditions for subgroups with contextually insufficient perceived aid. Thus, larger-scale repercussions may be avoided (Centers for Disease Control and Prevention, 2020). A study in Vietnam using a questionnaire to measure Health-Related Quality of Life (HRQOL) of the Vietnamese citizen and has illustrated that COVID-19 disease generated negative effects on health-related quality of life (Tran, Nguyen, et al., 2020).

A person's psychological welfare has been severely impacted by the pandemic, lockdowns, economic hardship, and uncertainty; as a result, certain countries have seen an increase in suicides and domestic abuse cases (Kamel, 2020; Pramukti et al., 2020). In addition to having a negative impact on jobs, education, and the economy, the pandemic has particularly led to a rise in mental health problems globally, even among individuals who are not particularly vulnerable (Lai et al., 2020) public response as of late (Shija et al., 2020). It is claimed that the prolonged epidemic, stringent isolation protocols, and the nationwide closure of educational institutions are having a detrimental effect on students' mental health. In fact, evidence points to the possibility that a new pandemic could break out as a result of the rising number

of mental health cases worldwide (Ornell et al., 2020). Research conducted by students (Khan et al.) and the general public (Lim et al.) has resulted in a noteworthy surge of studies demonstrating the detrimental effects of the pandemic on people's mental health globally.

Analyzing this phenomenon is not only appropriate considering the detrimental consequences of the COVID-19 pandemic and the lockdowns that ensued on people's mental health, but also vital to assist individuals in getting through this trying time. Given this worry, the purpose of this scoping review is to investigate, characterize, and further identify the risk variables related with COVID-19 among Nnamdi Azikiwe University students in the existing literature. In light of the nation's first COVID-19 case, this study will be the first to assess the psychological effects and mental health of university students in Anambra. It will investigate whether the pandemic had an immediate effect on students' mental health and health-related quality of life at Nnamdi Azikiwe University.

Statement of the problem

Recent research has demonstrated that the lack of understanding regarding the cause of COVID19 is the reason why the pandemic-related death rate continues to rise. A serious public health issue in Sub-Saharan Africa is COVID-19. The COVID-19 pandemic was reported to be 63% prevalent in 5 African countries (with 6% coming from Nigeria) by the Africa Center for Disease Control (CDC) in 2020. Among the populations impacted by the pandemic are university students, many of whom report disruptions to their personal and academic lives. A serious public health issue in sub-Saharan Africa COVID-19 pandemic was reported to be 63% prevalent in 5 African countries (with 6% coming from Nigeria) by the Africa Center for Disease Control (CDC) in 2020. Among the populations impacted by the pandemic are university students, many of whom report disruptions to their personal and academic lives. Lack of prevention and health protection, along with inadequate understanding, may be the cause of the high spread. The virus was propagated over a large geographic

area by a variety of contributing causes, one of which was temperature and weather changes. Population density, as defined by Liu et al. (2020), is the average number of people in a given geographic area. An overpopulation is known to accelerate the transmission of viruses, which can cause social alienation, loneliness, and isolation. Social workers, particularly those employed by academic institutions, were particularly impacted by the COVID-19 pandemic, which forced university closures. The majority of students were ignorant of the virus's spread, so when the government ordered that all social events be suspended, it shocked and confused them, leading to worry, anxiety, and post-traumatic stress disorder.

Previous research indicates that studies on the factors influencing the spread of COVID-19 prevalence have been conducted, but they were not conducted in Nigeria or focused on students attending Nigerian universities, particularly in Anambra State, Worldometer (2021). This has created a void; hence the purpose of this study was to investigate how the COVID19 epidemic has affected Nnamdi Azikiwe University students' mental health and quality of life in relation to their health.

Research Questions

The following research questions guided this study,

1. The factors that contribute to the spread of COVID19 pandemic among students in Nnamdi Azikiwe University Awka?
2. Nnamdi Azikiwe University students' level of knowledge on COVID19 preventive measures?
3. The perceived mental health impact of COVID 19 on Nnamdi Azikiwe University students and related quality of life?
4. The strategies that can help to mitigate the perceived mental effect of COVID19 pandemic on Nnamdi Azikiwe University students Awka.

METHODOLOGY

The cross-sectional research design was used as it would enable the researcher to assess the impact of COVID19 pandemic on mental health and health-related quality

of life (HRQL) among students of Nnamdi Azikiwe University, Awka. The area of study is Nnamdi Azikiwe University, Awka. Nnamdi Azikiwe University, Awka , The population of this study comprises of 301,657 students schooling in Nnamdi Azikiwe University, Awka. The area of the study is Faculty of education which consist of 11 departments with 5000 undergraduate students (Faculty of Education. UNIZIK, 2023). The sample size consisted of 100 undergraduate university students from 11 department selected using sampling random sampling technique, which involves randomly selecting 30 students from each department under faculty of Education in Nnamdi Azikiwe University, Awka. The instrument for data collection was an item-structured questionnaire designed by the researcher titled " Impact of COVID19 Pandemic on Mental Health (ICPMH)". The validation of the instrument was by three lecturers from the Department of Health Promotion and Public Health Education and Measurement and Evaluation. The reliability of the instrument and the reliability coefficient of 0.80 was obtained and was considered fit for the study. The data was collected and analysed using mean, frequency and percentage.

Results

Research Question 1: what are the factors that contributed to the spread of COVID-19 among students in Nnamdi Azikiwe University, Awka?

S/ N	ITEM	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree	Mean	Decision
	I understand that COVID-19 exist	131 (68.6%)	25 (13.1%)	8 (4.2%)	22 (11.5%)	5 (2.6%)	4.33	Agree
	High population density around a particular area influenced the spread of COVID-19 increasing anxiety in people	126 (66%)	29 (15.1%)	Nil (%)	31 (16.2%)	5 (2.6%)	4.26	Agree
	Pollutes air influenced the spread of COVID-19	165 (86.4%)	10 (5.2%)	Null (%)	11 (5.8%)	5 (2.6%)	4.67	Agree
	Age was a discriminating factor that influenced the spread of COVID-19	133 (69.6%)	33 (17.3%)	6 (3.1%)	7 (3.7%)	12 (6.3%)	4.40	Agree

Low temperature region led to high rise of COVID-19	126 (66%)	19 (10%)	25 (13.1%)	8 (4.2%)	13 (6.8%)	4.24	Agree
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Table 1: Factors that contributed to the spread of COVID19 among students in Nnamdi Azikiwe University, Awka

The results in table 1 above indicated the responses to factors that contributed to the spread of COVID-19 among students in Nnamdi Azikiwe University, Awka. The mean of the items ranged from 4.24 to 4.67 indicating that high majority of the respondents agreed with the items on Factors that contributed to the spread of COVID-19 among students in Nnamdi Azikiwe University, Awka. all of the items showed positivity for the items relating to the research question above. This implies that the respondents clearly understands that COVID-19 existed, and High population density, Low-temperature region, and Age were all factors that contributed to the spread of COVID-19 among students in Nnamdi Azikiwe University, Awka.

Research Question 2: What are Nnamdi Azikiwe university students’ level of knowledge on COVID19 preventive measures?

Table 2: Nnamdi Azikiwe university students’ level if knowledge on COVID19 preventive measures

S/N	ITEM	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree	Mean	Decision
	I know that social distancing can prevent the spread of COVID-19 pandemic	148 (77.5%)	33 (17.3%)	10 (5.2%)	Null (%)	Null (%)	4.72	Agree
	I know that frequent washing of hands and use of alcohol-based sanitizer can reduce the risk of COVID -19	133 (69.6%)	28 (14.6%)	6 (3.1%)	11 (5.7%)	13 (6.8%)	4.35	Agree
	I know that the use of facemask can help prevent the transmission of COVID -19	165 (86.4%)	23 (12%)	6 (3.1%)	3 (1.6%)	Null (%)	4.92	Agree
	COVID-19 stopped students from going to school	146 (76.4%)	29 (15.2%)	Null (%)	14 (7.3%)	2 (1.1%)	4.59	Agree
	Control measures stop students from engaging in sports and games	139 (72.8%)	36 (18.9%)	11 (5.7%)	6 (3.1%)	Null (%)	4.89	Agree

The results in Table 2 indicate the responses to the above question. the mean of the items ranged from 4.35 to 4.92 indicating that most of the respondents agreed with the items on the level of knowledge on COVI-19 preventive measures among students in Nnamdi Azikiwe University, Awka. All five (5) of the items showed positivity for the level of knowledge on COVID-19 preventive measures among students in Nnamdi Azikiwe University, Awka. This implies that the students of Nnamdi Azikiwe University, Awka were inclined to several preventive measures to reduce the risk of COVID-19.

Research Question 3: What are the perceived mental health impact of covid-19 pandemic on Nnamdi Azikiwe University students and related quality of life?

Table 3: Perceived mental health impact of COVID-19 pandemic on Nnamdi Azikiwe University and related quality of life.

S/N	ITEM	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree	Mean	Decision
	COVID-19 can affect my mental health	126 (66%)	33 (17.3%)	19 (10%)	8 (4.2%)	5 (2.6%)	4.39	Agree
	COVID-19 made a lot of students to think about their problems leading to depression, anxiety and stress	134 (70.2%)	19 (10%)	17 (8.9%)	11 (5.8%)	10 (5.2%)	4.34	Agree
	The pandemic affected students overall academic performance as all activities were shut down	149 (78%)	24 (12.6%)	17 (8.9%)	2 (1.1%)	Null (%)	4.69	Agree
	The COVID-19 pandemic made it difficult for students to maintain a stable relationship among peers	141 (73.8%)	23 (12%)	8 (4.2%)	7 (8.9%)	12 (6.3%)	4.43	Agree
	People with history of psychiatric disorder were highly affected	117 (61.3%)	26 (13.6%)	33 (17.3%)	5 (2.6%)	10 (5.2%)	4.23	Agree
	COVID-19 lockdown period resulted in the rush of academic and bulky work load afterwards	157 (88.2%)	32 (16.8%)	1 (0.5%)	1 (0.5%)	Null (%)	4.79	Agree
	I felt more tense during the lockdown	128 (67.2%)	36 (18.9%)	11 (5.8%)	5 (2.6%)	11 (5.8%)	4.44	Agree
	I felt that my personality safety was at risk	109 (57.1%)	35 (18.3%)	24 (12.6%)	9 (0.5%)	14 (%)	4.22	Agree
	I felt more depressed during the lockdown	99 (51.8%)	14 (6.8%)	25 (13.1%)	33 (17.3%)	20 (10.5%)	3.73	Agree

COVID19 period increased peer pressure	137 (71.7%)	36 (16.8%)	12 (6.3%)	5 (2.5%)	1 (0.5%)	4.53	Agree
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The results in Table 3 indicate the responses to the above question. The mean of the items ranged from 4.22 to 4.79 indicating that most of the respondents agreed with the items on the Extent of COVID-19's impact on the mental health of students in Nnamdi Azikiwe University, Awka. All six (6) items showed positivity for the Extent of COVID-19 impact on the mental health of students in Nnamdi Azikiwe University, Awka. It therefore concludes that COVID-19 had a great impact on the mental health of the student's depression, anxiety and stress affecting students overall academic performance as all activities were shut down and lockdown period resulted in the rush of academic and bulky work load afterwards which was mental draining.

Research Question 4: What are the strategies that can help to mitigate the perceived mental effect of the COVID-19 pandemic on students and their quality of life in Nnamdi Azikiwe University, Awka?

S/N	ITEM	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree	Mean	Decision
	University management should create an online counseling intervention platform on students' health	157 (82.2%)	22 (11.5%)	9 (4.7%)	4 (2.1%)	9 (4.7%)	4.80	Agree
	Social support groups should be encouraged among students	169 (88.5%)	22 (11.5%)	Nil (%)	Nil (%)	Nil (%)	4.88	Agree
	Weekly physical exercise should be encouraged to engage psychology distress and improve mental health	133 (69.6%)	33 (17.3%)	19 (10%)	Nil (%)	7 (3.7%)	4.51	Agree

Monthly webinar and seminar on improving the mental health of students should be adopted by the university management	129 (67.5%)	41 (21.5%)	9 (4.7%)	8 (4.2%)	4 (2.1%)	4.48	Agree
The university counseling team should create an awareness program on counseling and therapy for all students.	151 (79.1%)	31 (16.2%)	9 (4.7%)	Nil (%)	Nil (%)	4.74	Agree

Table 4: Strategies that can help to mitigate the mental effect of COVID19 pandemic on students and their quality of life in Nnamdi Azikiwe University, Awka

The results in Table 4 indicate the responses to the above question. the mean of the items ranged from 4.48 to 4.88 indicating that most of the respondents agreed with the items on strategies that can help to mitigate the mental effect of COVID-19 pandemic on students and their quality of life in Nnamdi Azikiwe University, Awka. All five (5) items showed positivity for strategies that can help to mitigate the mental effect of COVID-19 pandemic on students and their quality of life in Nnamdi Azikiwe University, Awka. It therefor implies that to mitigate the mental effect of COVID-19 pandemic on students and their quality of life in Nnamdi Azikiwe University, Awka, Social support groups should be encouraged among students, University management should create an online counseling intervention platform on students' health, and also create an awareness program on counseling and therapy for all students.

Discussions of Findings

The findings revealed that the respondents clearly understands that COVID-19 existed, and High population density, Low-temperature region, and Age were all factors that contributed to the spread of COVID-19 among students in Nnamdi Azikiwe University, Awka. Good knowledge of coronavirus infection is associated with positive attitudes and effective practices; therefore, concise knowledge of a disease affects individuals' preventive practices and attitudes (Kok et al., 2008). Thus, a Knowledge, Attitude, and Practice study are essential for understanding the level of awareness towards COVID-19 as it provides baseline information to

determine the type of intervention that may be required to change misconceptions about the virus (Zhong et al., 2020).

The findings in this study showed that the students of Nnamdi Azikiwe University, Awka were inclined to several preventive measures to reduce the risk of COVID-19. Covid-19 pandemic in Nigeria, government has put in place several measures to prevent, mitigate, and respond to the spread of Covid-19 across the country. These include lockdowns, movement restrictions, social and physical distancing measures as well as public health measures. The education sector was severely affected due to total closure of schools across the country. In an attempt to reopen schools, the federal government in collaboration with other relevant agencies (national agencies responsible for management of covid-19 and WHO) have developed guidelines and trained state education managers/administrators /school heads/teachers for safe reopening of schools and learning facilities after covid-19 lockdowns in Nigeria. (Onwurah, Okoye, & Ikegulu, 2023, WHO, 2019).

The findings of this study revealed that COVID-19 had a perceived impact on the mental health of the student's depression, anxiety and stress affecting students overall academic performance as all activities were shut down and lockdown period resulted in the rush of academic and bulky work load afterwards which was mental draining. The pandemic has brought about stress, anxiety, and worry for many students. Common causes of psychological stress during pandemics include fear of falling ill and dying, avoiding health care due to fear of being infected while in care, fear of losing work and livelihoods, fear of being socially excluded, fear of being placed in quarantine, fear of being separated from loved ones and caregivers, refusal to care for vulnerable individuals due to fear of infections, feelings of helplessness, boredom, loneliness, and depression due to being isolated and fear of re-living the experience of a previous pandemic (Kee, 2021).

The findings of this study revealed that to mitigate the mental effect of the COVID-19 pandemic on students and their quality of life in Nnamdi Azikiwe University, Awka, Social support groups should be encouraged among students, University management should create an online counseling intervention platform on

students' health, and also create an awareness program on counseling and therapy for all students.

Conclusion

The outbreak of corona virus has shaken the educational sector of Nigeria off its strength. In fact, looking at the trend of the pandemic, it could be something we are going to live with for a long period of time. Schools calendar have been disrupted, there is reduction in the economic development of the country which has affected the education finance as well. Since the family income depends on the economic growth of any country, most of the families in Nigeria are experienced economic hardship. This study provided unique insights into depression and the mental health issues of students, which have been rarely addressed previously. The result showed that employment anxiety, financial worries and lack of knowledge of COVID-19 led to depression, which has a negative spiral effect on students' mental health.

Recommendations

Based on the conclusion of the study, the following recommendations were made;

1. School authorities and NGOs should provide information on mental health and coping strategies related to the pandemic through webinars, workshops, or online resources to raise awareness about mental health issues and reduce stigma.
2. There should be regular wellness check-up for student's faculty staff or mental health professionals check on students to see how they are coping and offer support when needed.
3. The university authorities should implement flexible academic policies, such as adjusted deadlines or grading policies, to alleviate stress related to academic performance
4. Since it was observed that there were no proper plans in place to curb and manage the influence of coronavirus on the educational system, it is highly

recommended for the government and concerned educational personnel to ensure there a futuristic plan in case of another pandemic experience.

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