BEYOND PANDEMIC: THE IMPACT OF COVID-19 LOCKDOWN AND SOCIAL DISTANCING ON THE MENTAL HEALTH OF NIGERIAN CHILDREN AND ADOLESCENTS

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ABSTRACT
COVID-19 disease has posed a great challenge to human development due to the implementation of social confinement and distancing by most countries of the world in an attempt to curtail its spread. Researchers have documented that some effects resulting from the stressful experiences of COVID -19 pandemic such as lockdown and social distancing measure could be seen now while others would manifest in the nearest future. Despite this, there is paucity of studies on the impact of COVID-19 pandemic on the mental health of children and adolescents. It is against this background that this study investigated the impact of COVID-19 lockdown and social distancing on the mental health of Nigerian children and adolescents. Three hundred school-aged children and adolescents (101males and 199 females) from three federal government secondary schools in Oyo, Ogun and Lagos states were randomly selected to participate in the study. Descriptive research design of correlation type was used in the study. Data were collected through two standardized scales which were self- administered and was randomly distributed to participants in their various schools. Statistical package for social sciences (SPSSv16) was used to analyze the data collected; specifically Pearson Product Moment Correlation (PPMC) and multiple regression statistics. Three research questions were raised and answered in the study. The result showed that mental health was significantly correlated with COVID-19 lockdown ($r=0.640$, $p<0.05$) and social distancing ($r=0.198$, $p<0.05$); independent variables (COVID-19 lockdown and social distancing) when combined together have significant impact on the mental health of children and adolescents ($R=913$ & adjusted $R^2=831$) which means that the independent variables accounted for 83% in the prediction of mental health and each of the independent variables made a significant contribution to the prediction of mental health. In terms of magnitude of the contribution: COVID-19 lockdown has the most impact on mental health of children and adolescents ($\beta=3.898$, $t=13.348$, $p<0.05$) followed by social distancing ($\beta=1.870$, $t=26.657$, $p<0.05$). Developmental and counselling psychologists should adopt, adapt and design effective psychological interventions that would help to minimize the impact of COVID-19 pandemic on the mental health of Nigerian children and adolescents so as to ensure and promote their positive and healthy development.

Keywords: healthy development, children, adolescents, COVID-19 pandemic, mental health

INTRODUCTION
COVID-19 pandemic has become a worrisome global public health disease that has rocked the world since its first case was reported in Wuhan, China Hubei Province, in December, 2019. Consequent upon its spread worldwide, World Health Organization (WHO) Director General on 30th January, 2020 declared coronavirus disease (COVID-19) a Public Health Emergency of International Concern (PHEIC) and also on the 11th March, 2020 declared it as a global pandemic.

The major cause of coronavirus disease is severe acute respiratory syndrome coronavirus (SARS – CoV – 2).

At present, Covid-19 remains a major global health concern with the number of reported cases of deaths from the coronavirus outbreak. As at September 2020, over 28 million people from more than 200 countries have been infected and over 900,000 have died (WHO, 2020). However, children and adolescents are not at the highest risk of contracting COVID-19 for morbidity and mortality yet it poses threats to children's health and well-being through economic hardship, educational barriers, family stress and dysfunction, limited access to preventive healthcare and the accompanying preventive measures. The evidence that COVID-19 pandemic outbreaks could impede the healthy development of children and adolescents has been well-documented.

For instance, UNICEF (2020) observed that during the coronavirus disease (COVID-19) crisis factors such as limitations on economic activity, school closures, reduced access to health-care services and physical distancing increases the likelihood of children and adolescents becoming vulnerable and being exposed to violence and other violations of rights. Also, UNESCO (2020) reported that around 1.5 billion children and youth were affected by school closures in the first half of April, 2020 while the increased time on computers, laptops, phones for virtual learning has also prone many children and adolescents to visual strain, poor sleep, headaches, anxiety behavioural problems and executive deficits (Ojo**,** Falaye & Adetola, 2016). Consequently, COVID-19 pandemic is said to have adverse effect on children's neuro-cognitive and physical development, health, education, emotions as in self-regulation resulting from the accumulative stressful experiences and lack of access to health and social services (Narayan, Lieberman & Masten, 2021).

The COVID-19 pandemic is a scenario that has altered daily routines needed to preserve individual health. It is worthy of note that children and adolescents are the most vulnerable group in any given society and are severely affected by the challenges that emanated from COVID-19 pandemic. Bhatia (2020) noted that children are exposed, directly and vicariously to psychological distress thereby making them to become stressed and anxious. Some of these effects resulting from the stressful experiences of COVID-19 pandemic could be seen now while others may manifest in the nearest future **(**Clark, Coll-Seck, Banerjee, Peterson, Dalglish & Ameratunga, 2020**).** Thus, the pandemic has profoundly influenced the healthy development of children and adolescents.

Despite the adverse effect of COVID-19 pandemic on humanity and most especially on children and adolescents, there is paucity in research related to its effect on the mental health of children. COVID-19 pandemic could hinder the development of children physically, psychologically, emotionally, socially, academically and health-wise. Clark, Coll-Seck, Banerjee, Peterson, Dalglish and Ameratunga (2020) opined that due cognizance should be given to children and adolescents' mental health because science has proved that genetic predispositions are modified by environmental influences, such as those experienced during COVID-19 pandemic which may affect children's learning capacities, adaptive behaviours, lifelong physical and mental health; and productivity.

Moreover, WHO (2020) recommended rapid review in the development of guidelines for public guidance in dealing with COVID -19. Considering the vulnerability of children to effect of COVID–19 pandemic and based on the documented prevalence and consequences of COVID-19 on the positive and healthy development of children and adolescents which cannot be overlooked, it therefore becomes imperative to investigate the impact of COVID-19 on mental health of children and adolescents. The outcome of this study is to provide valid evidence that should benefit developmental psychologists to adopt, adapt and design effective psychological interventions that would help to minimize the impact of COVID-19 on the mental health of Nigerian children and adolescents thereby ensuring and promoting their healthy and positive development.

Child optimal development and well-being is the most important indicator of a country's vitality today and prospects for tomorrow. Researchers (Avan & Kirkwood, 2009 and Bellis, Hughes, Ford, Ramos-Rodriguez, Sethi & Passmore, 2019) have submitted that to ensure optimal child growth and development most especially for the development of strong and lasting neural connections in the child's brain and prevention of toxic stress, the child must be healthy during pregnancy, take balanced nutrition, have strong immunity to fight against diseases, ensure restful sleep, grow up in a family environment that is rich in positive stimuli and undergo a high-quality educational system. Dalton, Rapa and Stein (2020) noted that maternal anxiety and depression during pregnancy are related to impairments in children's neurodevelopment and predispose increased behavioural disorders. Also, threats posed by COVID-19 such as maternal infection and challenges faced during the pandemic such as mood change, stress and so on could lead to fetal losses.

Pandemic, such as COVID-19 poses some threats and risks on child development ranging from illness and diseases, social isolation, financial constraints, school shutdown, reduced social life and physical activities, changes to routine, sleep difficulties, exposure to disharmony at home, excessive screen use, unhealthy diet to the increased stress level of parents (Bhatia,2020). However, Liubiana , Veloso, Souza, Azevedo, and Giulio, (2020) submitted that this situation could become an adverse childhood experience (ACEs) and may generate toxic stress, with consequent potential losses for brain development, individual and collective health, and the long-term impairment of cognition, mental and physical health, and working capacity of future adults. Traumatic or stressful events that occur in childhood, such as abuse, neglect, domestic violence are often referred to as ACEs. Based on this, Bellis, Hughes, Ford, Ramos, Sethi and Passmore (2019) have suggested COVID-19 pandemic as another source of ACE.

Additionally, during the COVID-19 lockdown, it is logical that the most vulnerable are children and adolescents who do not understand what is happening and who, along with the concern and frustration of their elders due to messages and news pertaining to the pandemic and out of fear of contacting and spreading infections may present risk factors, such as anxiety and affective and post-traumatic stress disorders (Giallonardo Sampogna, DelVecchio, Luciano, Albert and Carmassi, 2020). Hence, it is evident that COVID-19 has directly or indirectly interferes in the quality of life of children and adolescents **(**Gordon & Burgess, 2020). Researchers have affirmed that pandemic are precursors to mental health decline (Jones, Mitra & Bhuiyan, 2021 and Kar, Menon, Arafat & Kabir, 2020) and that the public health measures adopted that the public measures adopted by government during Covid-19 outbreak, may later have developmental loss on children and adolescents (Wang, Zhang, Zhao, Zhang & Jiang, 2020)**.**

Moreover, during the COVID-19 lockdown, children and adolescents have the tendency of being exposed to unhealthy coping behaviours and developments. For instance, children are likely to engage in video, gaming, pornography, gambling and other internet-related activities as a mechanism and coping strategies to reduce stress and anxiety and alleviate depressed mood which was developed during the pandemic lockdown. The continuous longer stay on internet for these activities may lead to internet dependence or addiction. Moreover, children may experience cyber-bullying, cyber-gossip and violence due to increased usage of internet.

Ko and Yen (2020) discovered that COVID-19 lockdown has made some adolescents vulnerable to binge on playing video games and that has led to addictive behaviour and such behavioural addiction could result to attention deficit after the lockdown (Ko & Yen ,2020 and Yen, Liu, Wang, Chen, Yen & Ko , 2017). Moreover, excessive screen time was associated with increased stress, poor sleep, and increased risk of mental illnesses and Attention Deficit Hyperactivity Syndrome (ADHS) among adolescents (Ilesanmi, Afolabi and Adebayo, 2021). Sleeping is said to affects developmentally sensitive outcomes such as intellectual ability, emotion regulation, reward and motivation (Pearson, Holton, Govert & Liang, 2004; and National Centre for Infectious Diseases,

2004). Summarily, poor sleep may result to poor mental health with actual mood and anxiety problems.

Furthermore, consequent upon the closure of schools due to lockdown, many children and adolescents were deprived of both educational activities and mental health services. This is because most school-aged children do receive mental health care and support from schools through school guidance counsellors and social workers. For such children, they were unable to access their mental health service during the lockdown period. (Lee, 2020) reported that 75% of children and adolescents received mental health services from school settings while 25% received services from mental health clinic and children welfare centres. By implication, school closure has limited access to mental health services for some children and adolescents.

Researchers have reported that during the social confinement, children experienced an increased risk of domestic accidents, serious behavioural impacts and developmental disorders, such as selective autism, speech delay, social interaction deficits, and others **(**Avan & Kirkwood, 2009; Gordon & Burgess, 2020 and Narayan, Lieberman & Masten, 2021).Moreover, children are prone to nutritional risk (malnutrition) during COVID-19. For instance, Kar, Menon, Arafat and Kabir (2020) reported that lack of basic supplies such as food, water, and clothing led to frustration and has been consistently associated with anxiety, months after quarantine in previous epidemics. Similar finding that was reported during SARS and Ebola outbreaks include frustration, boredom, grief, anxiety and insomnia (Willen, Pordell, Goode, Jarteh, Miller & Saygar 2017; Braunack-Mayer, Tooher, Collins, Street & Marshall, 2013), addiction, disorders and depression (Reynolds, Garay, Deamond, Moran, Gold & Styra, 2008).

The significance of peer during late childhood and adolescence cannot be over emphasized. It is well documented that peers hold each other with high esteem during formative years most especially for identity formation and validation. Thus, peer interaction at this developmental stage is crucial. However, social distancing and lockdown has placed hindrance on peer interaction and socialization thereby impeding their social development and healthy relationship. Elias and Paradies (2016) opined that social isolation may have long-term effects on mental health and has been associated with mental health problems up to nine years later.

Social distancing placed restrictions on social gatherings and activities. There has been no positive interaction with sport coaches, music teachers, friends and peers due to social distancing measure put in place to reduce widespread of COVID-19 pandemic. Children and adolescents neither organize nor attend parties and in situation where they have to attend, nose masks must be used. It is evident that the direct and indirect psychological and social effects of COVID-19 pandemic are insidious and affect the mental health of young children and adolescents now and will in the future (Meherali, Punjani, Louie-poon, Rahim, Das, Salam & Lassi, 2021).

The impact of COVID-19 most especially for young people may be worse and long–lasting than the pandemic itself. Findings from previous studies revealed that varying degrees of mental health challenges such as anxiety and depression discovered among children and adolescents after the strict lockdown may have resulted from the stress experienced during COVID-19 lockdown and social distancing. Thus, the lockdown and social distancing is said to be associated with an increased rise of trauma and domestic abuse.

A research was done by Wang, Pan, Wan, Tan, Xu, Ho and Ho (2019) on the immediate psychological responses and associated factors during the initial stage of COVID-19 pandemic among 1210 individuals in 194 Chinese cities. Participants include female (67.3%), male (32.7) from families of three to five people with children. The result of the study revealed that 53.8% of respondents rated the psychological impact of the outbreak as moderate or severe, 16.5% reported moderate to severe depressive symptoms, 28.8% reported moderate to severe anxiety symptoms, and 8.1% reported moderate to severe levels of stress. Also, majority of respondents spent 20 to 24 hours a day at home (84.7%) and indicated that they were concerned about family

members contacting COVID-19. The study also discovered that majority of the parents were "very" or "somewhat worried" about a child contacting COVID-19 disease.

Additionally, Xie, Xue, Zhou, Zhu, Liu, Zhang and Song (2020) during the COVID-19 pandemic lockdown and school closures investigated mental health status among children in home confinement during COVID-19 in Hubei province, China. Using an online crowd sourcing platform, 1784 students participated in the study and 1012 are boys (56.7%). Result obtained from the study showed that 22.6% of the students have depressive symptoms, while 18.9% have anxiety symptoms. The study concluded that COVID-19 could lead to mental health problems in children and that more studies are needed on this pandemic.

In a review study conducted by Brooks, Smith, Webster, Weston, Woodland, Hall and Rubin (2020) on impact of unplanned school closure on children social contact. Most of the studies reported anxiety, stress, and depression. One of the studies reviewed, discovered that 230 out of the 1057 participants have fear while190 nervousness and 186 sadness. Another review study compared post-traumatic stress symptoms in quarantined parents and children with those who were not quarantined. Findings of the study revealed that children who had been quarantined have higher mean post-traumatic stress scores than those who are not quarantined. Among the post-quarantine stressors analyzed, financial loss was considered to be a risk factor for psychological disorders.

Ellis, Dumas and Forbes (2020) carried out a research among 1054 adolescents in Ontario, Canada in a cross sectional online survey with participants between 14–18years on psychological adjustment and stress among adolescents during initial COVID-19 crisis. The study discovered that stress-related to COVID-19 disease was associated the rates of depression among children and adolescents. In another research done by Chen, Zang, Liu, Gong, Guan and Luo (2020) on anxiety and depression during COVID-19 among adolescents in Guiyang, China using a cross sectional online survey with 1036 children (male 531, female 505), result from the work indicated that there was no significant relationship between anxiety, depression and COVID-19. A study carried out by Liu, Luo, Li, Li, Hong, Chen, Xiao and Xia (2020) on psychological and behaviour change during COVID-19 among children below 17 years in China using a cross-sectional online survey design. 34 adolescents participated in the study and result revealed that adolescents experienced anxiety, depression and psychological abnormalities after COVID-19 pandemic.

A cross-sectional online survey research was done by Ooseterhoff, Palmer, Wilson and Shook (2020) among 683 adolescents who are between 13-18 years in United States on motivations to engage in social distancing during COVID-19. Result revealed that specific motivations to implement social distancing practices led to anxiety symptoms, depression symptoms, burdensomeness and belongingness among adolescents. On the other hand, Duan, Sha, Wang, Huang, Miao, Yang and Zhu (2020) did a research on mental status of adolescents and COVID-19 related symptoms among students in China using a cross-sectional online survey design. The study recruited 3613 students; 1812 males and 1801 females who are between 7 to 18 years of age. Result showed that anxiety and depression symptoms found among the school-aged children are COVID-19 related consequences.

Furthermore, Saurabh and Ranjan (2020) conducted a study on compliance and psychological impact of quarantine in children and adolescents due to COVID-19 among 252 children and adolescents between 9-18 years in India. The result of the study revealed that there was worry, helplessness and fear of COVID-19 among children and adolescents. Also, a research was carried out on adolescent substance use during COVID-19 by Dumas, Ellis and Litt (2020). Participants of the study include 1054 Canada adolescents. Result indicated that COVID-19 was associated with an increase in the frequency of both alcohol and cannabis use among adolescents.

This study is anchored on bio-ecological model developed by Bronfenbrenner (1979). This theoretical framework contributes meaningfully towards explaining developmental changes across the lifespan. The theory submits that development is a function of interactions among contexts- the human systems (Ecosystem, Exosystem, Mesosystem, Macro system and Chronosystem). Bronfenbrenner and Morris (2006) opined that individual interacts with the contexts in which he or she is embedded, influencing and being influenced by them. The role of exosystem in child development as a construct in bio-ecological framework is germane to this study. Exosystem entails other settings in which the child does not belong to as a participant but nevertheless influences the child. For instance, children typically may not contact covid-19 but the pandemic have adverse effect on them through low family income, job loss, social isolation, loss of parent or caregiver, undue stress and anxiety experienced by the parents .It is important to emphasize that this theory is generic in its nature and its applicable to lifelong human development **(**Avan and Kirkwood, 2009).

Purpose of the Study

The main purpose of this study is to investigate the impact of COVID-19 lockdown and social distancing on the mental health of children and adolescents. Specifically, the study proffered answers to the following research questions:

1. Are there significant relationships between independent variables (COVID-19 lockdown and social distancing) and dependent variable (mental health) of children and adolescents?
2. To what extent does COVID-19 lockdown and social distancing jointly account for the mental health of children and adolescents?
3. What is the relative contribution of COVID-19 lockdown and social distancing on the mental health of children and adolescents?

METHODOLOGY

This study adopted a descriptive survey research design of correlational type. The population of the study comprises of all students in federal secondary schools in Oyo, Ogun and Lagos state. Simple random sampling technique was used to draw out three hundred school-aged children and adolescents (101males and 199 females) from the three selected federal government secondary schools (one from each of the three states) to participate in the study.

Procedure for Data Collection

The researchers obtained approval from the federal ministry of education to carry out research in the three selected unity schools. Thereafter, the researchers and two trained research assistants went to each of the schools and met with the administrators for adequate arrangement. The purpose of the research, age of participants and how to complete the instruments was explained to the participants. In each of the schools, the administration and collection of instruments were done on the same day. Out of the three hundred and sixty questionnaires distributed, three hundred (300) were duly completed and returned.

Measures

The following three standardized instruments were used for data collection.

1. **Mental Health Scale:** The mental health of the participants was measured using the Arab Youth mental health scale developed by Makhoul, Nakkash, Elhajj, Abdulrahim, Kaji, Mahfond and Afifi (2011). Initially, the scale has 22 items but was adapted to 11 items with scoring ranging from strongly agree, agree, undecided, disagree to strongly disagree for the purpose of this research. Typical items on the scale include: "*During last week, my sleep was interrupted because I was thinking of so many things including COVID-19".*

"During last week, I was having thought of death". The reliability coefficient obtained after test-retest using Pearson Correlation was 0.74.

2. **The Social Distance Scale**: The Social Distance Scale (v1) developed by Prachthauser, Cassisi, An Le and Nicasio (2020) was adopted for use in the study as a screening measure of adherence to social distancing in COVID-19 pandemic. It is a 14-item scale consisting of four subscales: Isolation from Community (IC), Work from Home (WH), Family Contact (FC), and Protective Behaviors (PB). Items were anchored on a five-point Likert scale scored from 0 to 4, with 0 indicating low levels of social distancing and 4 indicating high levels of social distancing. Examples of items found on the scale are: *"During the past months, I have stayed at least 6 feet away from other people when outside of my home." "During the past months, I have gone to small social gatherings with less than 10 people in private places, such as my friend's home."* The scale was trial tested and has a reliability coefficient of 0.83 using the Guttmann analytical method.
3. **COVID-19 lockdown Questionnaire**: COVID-19 lockdown adherence was measured using the UK COVID-19 questionnaire .The questionnaire has five subscales namely: health, behaviour, economic, social, and environmental changes. Each of the subscales was developed by different authors but the second sub-scale developed by Timpson, Haworth, Sassi, Mridha and Toledano (2020) was used for the purpose of this study. The sub-scale has eight parts but the first part that has 17-items was administered to participants of the study. Instruction and items found on the scale include: Tick the ones applicable to you during the official COVID -19 lockdown. "*I cancelled my usual social activities". "I did not leave my house all through the period". "I neither go shopping nor to grocery store for non-essential things".* For the purpose of this study, the reliability coefficient obtained after test-retest using Pearson Correlation was 0.77.

Methods of Data Analysis

Statistical package for social sciences (v16) was used for data analysis. Person product moment correlation was used to establish the relationship between the variables. Multiple regressions were also used to establish the joint and relative contribution of the independent variables to the prediction of the dependent variable. Research questions were tested at 0.05 level of significance.

RESULTS

The result of research question one which is sought to find the relationship between the independent variables (COVID-19 lockdown and social distancing) and dependent variable (mental health) is presented in Table 1.

Table 1: Descriptive Statistics and Inter-correlations among COVID-19 lockdown and social distancing on mental health

	Mean	SD	1	2	3
Mental health	17.2343	9.03999	1.000		
COVID-19 lockdown	33.1743	4.31907	.640**	1.000	
Social distancing	46.3114	12.78666	.198**	.247**	1.000

**.Correlation is significant at the 0.05 level (2-tailed).

Table 1 above reveals there was significant relationship between the independent variables: COVID-19 lockdown ($r = 0.640(, p < 0.05$); social distancing ($r = 0.198^{**}, p < 0.05$) and mental health of Nigerian children and adolescents.

Table 2: Multiple Regression Analysis on the Joint Contribution of the Independent variables (COVID-19 lockdown and social distancing) on the Dependent variable (mental health).

Multiple R	= 0.913
Multiple R2	= 0.833
Multiple R2 (Adjusted)	= 0.831
Standard Error of Estimate	= 3.71435

Source of Variation	Sum of Squares	Df	Mean of Squares	F-Ratio	P
Regression	23761.043	2	5940.261	430.567	.000
Residual	4759.746	297	13.796		
Total	28520.789	299			

Table 2 above shows that there was joint contribution of the independent variables (COVID-19 lockdown and social distancing) on the dependent variable (mental health) of the participants (R = 0.913, P < .05). The combination of the independent variables accounted for 83.1% (adjusted R2 = 0.831) of the total variance in the prediction of mental health among Nigerian children and adolescents. The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 Alpha level, F = 430.567, P < 0.05.

Table 3: The relative contribution of each of the Independent Variables to sexual risky behaviour among sin school adolescents

Variables	B	Std. Error	Beta	T	Sig	P
(Constant)	212.947	7.213		29.523	.000	<.05
COVID-19 lockdown	4.157	.311	3.898	13.348	.000	<.05
Social distancing	3.914	.147	1.870	26.657	.000	<.05

a Dependent Variable: Mental health

Table 3 indicates the contribution of each of the independent variables (COVID-19 and social distancing) to the prediction of dependent variable (mental health) among Nigerian children and adolescents. In terms of magnitude of the contribution: COVID-19 lockdown contributed most to the prediction of mental health among Nigerian children and adolescent (β = 3.898, t = 13.348, P < 0.05) followed by social distancing (β = 1.870, t = 26.657; P< 0.05).

DISCUSSION

Result obtained from the study showed that there was significant relationship between COVID-19 lockdown, social distancing and mental health of Nigerian children and adolescents. This corroborates the findings of Xie, Xue, Zhou, Zhu, Liu, Zhang and Song (2020) that 22.6% of the participants who are school-aged children have depressive symptoms, while 18.9% have anxiety symptoms due to COVID-19 pandemic lockdown and school closure. Consequently, Ellis, Dumas and Forbes (2020) reported a high level of depression symptoms among adolescents during the initial COVID-19 lockdown. The finding in this study is consistent with the result in the work of Ooseterhoff, Palmer, Wilson and Shook (2020) that specific motivations to implement social distancing practices led to anxiety symptoms, depression symptoms, burdensomeness and belongingness among adolescents. On the other hand, the result of this study contradicts the discovery of Chen, Zang, Liu, Gong, Guan and Luo (2020). Result from their work indicated that there was no significant relationship between anxiety, depression and COVID-19. Possible explanation for this could be that participants in the study may not be students since the research

is an online study. They may be out of school and do spend more hours at home even before the COVID-19 pandemic lockdown.

Another finding of the study is that there was joint contribution of COVID-19 lockdown and social distancing on the mental health among Nigerian children and adolescents. This supported the earlier findings of Wang, Pan, Wan, Tan, Xu, Ho and Ho (2019) that children during the initial lockdown and social distancing elicited psychological responses such as depression and anxiety symptoms. Moreover, the finding is in line with the submission of Brooks, Smith, Webster, Weston, Woodland, Hall and Rubin (2020) that most children experienced anxiety, stress, and depression, fear, nervousness and sadness during the COVID-19 lockdown and social distancing. This finding corresponds with that of Liu, Luo, Li, Li, Hong, Chen, Xiao and Xia (2020) who found that adolescents experienced anxiety, depression and psychological abnormalities after COVID-19 pandemic and isolation. By implication, COVID-19 lockdown and social distancing are indices of mental health among Nigerian children and adolescents.

Moreover, the result of the study revealed the contribution of COVID-19 lockdown and social distancing to the prediction of mental health among Nigerian children and adolescents. In terms of magnitude of the contribution, COVID-19 lockdown contributed most to the prediction of mental health among Nigerian children and adolescents followed by social distancing. This result is in line with the finding in the work of Duan, Sha, Wang, Huang, Miao, Yang and Zhu (2020) which discovered that anxiety and depression symptoms among the school-aged children are COVID-19 lockdown related consequences. Furthermore, this result corroborates the finding in the study of Saurabh and Ranjan (2020) that there was worry, helplessness and fear among children and adolescents during COVID-19 lockdown. Additionally, Dumas, Ellis and Litt (2020) reported an increase in the frequency of both alcohol and cannabis use among adolescents during COVID-19 lockdown. This is an indication of behavioural addiction which may be due to loneliness, depression and anxiety experienced during the lockdown. Children and adolescents most times engaged in addictive behaviour as a coping strategy (escapism) in stressful situations.

Recommendations

1. Children and adolescents health should be prioritized by policy makers to ensure that future lockdown do not have adverse effects on their mental health.
2. There is need for family support strategies during pandemic such as COVID-19. This should include; parental training in organizing play and physical activities, ensuring balanced diet, guiding for appropriate screen time and content use, mindfulness techniques, the transmission of a sense of security and resilience, affection, and reciprocity in relationships. Also, parents should create listening time and moments for children and adolescents to share anguish.
3. Schools should make adequate provision for satisfactory online teaching and learning; and specialized online counselling for children who suffer toxic stress and its consequences during pandemic. Thus, schools should be provided with mental health resources to cater for children and adolescents needs.
4. Accurate and up-to-date information about COVID-19 disease should be made available to public so as to alleviate anxiety as regards the pandemic among children and adolescents. This would help to minimize psychological toll of stigma
5. Developmental psychologists, counsellors, clinical psychiatrists and social workers should make efforts to build supportive environment for children and adolescents. This could be achieved by providing opportunities to express themselves emotionally during pandemic such as COVID-19.

6. Adequate provision should be made for age–specific coping strategies which would target the distinct needs of children and adolescents most especially during pandemic and epidemic so as to promote their healthy and positive development. On the other hand, due cognizance should be given to vulnerable children with pre-existing mental health issues such as, anxiety and depression, Attention Deficit Hyperactivity, Disorder (ADHD) and Autism Spectrum Disorder.

Conclusion

The COVID-19 lockdown and social distancing measure was adopted so as to reduce the spread of the disease and alleviate the fear of contagion. However, this measure similarly yielded negative effect on virtually every individual and most especially children and adolescents who are the most vulnerable to the stress-related consequences of COVID-19 pandemic. The risks to which children and adolescents were exposed most especially during COVID-19 lockdown and social distancing affects their mental health which if care is not taken may dig deep into their adulthood. It therefore, becomes imperative to be aware of the impact of COVID-19 lockdown and social distancing measure on the mental health of children and adolescents. The result of the study revealed that COVID-19 lockdown and social distancing have negative impact on the mental health of children and adolescents.

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