

# Exploring multidimensional impacts of COVID-19 on children in Nigeria

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## CITATION

Parveen R, Amuda YJ. (2024).  
Exploring multidimensional impacts  
of COVID-19 on children in Nigeria.  
*Journal of Infrastructure, Policy and  
Development*. 8(10): 6008.  
<https://doi.org/10.24294/jipd.v8i10.6008>

## ARTICLE INFO

Received: 24 April 2024

Accepted: 7 June 2024

Available online: 20 September 2024

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**Abstract:** Since an outbreak of COVID-19 in the late 2019 in Wuhan in China, the pandemic and contagious nature of coronavirus did not spare Nigeria as the most populous Africa nation from being affected. Statistical records have shown that a large number of citizens were affected and overwhelming literature has explored different dimensions of the impacts of COVID-19 in the country. However, there is a less attention in exploring legal, economic, health and ethical impacts of the pandemic on Nigerian children. The paper primarily aims at filling this gap in the existing body of knowledge. Systematic literature review (SLR) and content analysis of secondary data of online peer-reviewed, scholarly articles among others were used as methodology. The findings revealed that, the general economic impact of COVID-19 that affects trade and small & medium scale business activities of parents also directly or indirectly affected their children. The health consequence of COVID-19 affects provision of nutritious foods that would help their balanced diet and growth. It is further noted that the ethical impact of COVID-19 affects their right to education as a result of lockdown during the first phase of the out-break. It is however reiterated that, there has not been adequate legal framework to address the multifarious im-pacts of COVID-19 on the Nigerian children. In conclusion, this paper has novel contribution specifically showing concern for children during the period of COVID-19 pandemic in the country. It is therefore suggested that efforts should be galvanized by the stakeholders in addressing multifarious challenges of the impact of COVID-19 on the Nigerian children as explored in this study.

**Keywords:** COVID-19; legal; economic; health and ethical impacts; Nigerian children

## 1. Introduction

The impact of COVID-19 in Nigeria has been profound, affecting various aspects of the country's economy and society. The pandemic led to a drastic drop in income for many Nigerian households, pushing them towards poverty. Furthermore, the overreliance on oil resources in Nigeria exacerbated the negative influence of COVID-19 on the oil and gas sector, highlighting the urgent need for economic diversification (Ansari et al., 2022). Undoubtedly, 1.6 billion students affected globally, including Nigeria, due to school closures. Prevalence of COVID-19 among children in Nigeria is 47.5%. Indeed, the Nigerian children had good COVID-19 knowledge and preventive measures. This contributes to low level of prevalence in Southern Nigerian children. More specifically, Nigerian children also faced multifarious challenges of COVID-19 which has made them to receive attention at the global level because they are being exposed to challenges and vulnerabilities that beyond their physical and psychological capabilities (US Government, 2020). Sexual harassment, child trafficking, death rates, lack of healthcare facilities among others are culminated abuse that could be regarded as social perplexity that need more attention in the recent time. Other challenges faced by children are: poverty, malnutrition, hunger and many others

(UNICEF, 2020). This is important to be addressed because, at the international level, UNICEF (2020) has been advocating for addressing the child-related challenges (Aborede et al., 2021).

The foregoing focus of attention in solving the problems faced by the children in the country is not limited to the international level. In Africa generally and Nigeria particularly, children are more vulnerable beyond imagination specifically with malnutrition, hunger and poverty (Aborede et al., 2020). More specifically, the Nigerian children are also faced serious challenges such as street begging. Literature contends that Child Rights Act (CRA) is an important document focusing on how the problems faced by the children could be addressed. Hence, there is need to address the multifarious challenges faced by children such as street begging by implementing the Child Rights Act (CRA) in the country (Aderinto, 2018). Over ten million children Almajiri children partake in street begging, recently, Anti-Slavery International (2020) advocates that there is need for an efficient way of combating forceful street begging in Nigeri (Ahmed, 2024).

In spite of previous efforts, the emergence and disastrous nature of COVID-19 has virtually affected or disrupted all spheres of human endeavours. More pathetically, the homeless children and those from poor background or low-income families are more prone to the negative consequences of the pandemic in the country. Prior to the emergence of COVID-19, many efforts and advocacies have been made in helping the vulnerable children that lack adequate protection and care in order to promote socio-psychological wellbeing of the children (Ugwu, 2020). More importantly, children like orphans do not receive adequate care. This challenge is more pathetic for children with the emergence of COVID-19 which creates and widens the vacuum of existing challenges faced by children such as: hunger, poverty, malnutrition, street begging, malaria, death rates.

Thus, it is essential paramount to solve these problems by filling the vacuum of the previous studies in the time of COVID-19 pandemic. The psychosocial and educational implications of the pandemic have also been significant, particularly affecting girl child education in Northeast Nigeria. To mitigate these effects, investments in sectors like agriculture, support for small and medium-sized enterprises, and enhanced economic and financial well-being are crucial for Nigeria's recovery and resilience against future crises. Hence, there is need in addressing the impact of COVID-19 from multidimensional approach. Therefore, this paper attempts to explore multidimensional impacts of COVID-19 on children in the context of Nigeria specifically from legal, economic, health and ethical perspectives.

## **2. Literature review**

This part explains literature review of related literature which are categorized into two parts namely: An overview of COVID-19 and Multidimensional impacts of COVID-19 (i.e., Legal, Economic, Health and Ethical impacts). Each of these is elaborated in the subsequent subheadings.

### **2.1. An overview of COVID-19**

The SARS-CoV-2 virus, commonly known as COVID-19, was officially

identified and documented towards the conclusion of the final month of 2019 within a major urban center in China. This novel coronavirus, COVID-19, is a category of transmissible pathogens that are notably instigated by the specific COVID-19 virus originating from Wuhan. On the 11th of March, 2020, the declaration by the World Health Organization (WHO) classified COVID-19 as a worldwide pandemic due to its high fatality rate and rapid transmission. The global impact of the COVID-19 pandemic resulted in significant disruptions and consequences across various sectors such as societal, industrial, and economic activities worldwide, presenting substantial challenges for agriculture, food security, public health, and other domains.

The outbreak of coronavirus is very pathetic threat to international health and it has given worry to World Health Organization (WHO) and consequently, it emphatically stressed the need for preparedness and response plans by different countries of the world including Nigeria (World Health Organization, 2020). The novel coronavirus is an infection that is ascribed with respiratory system (Omaka-Amari et al., 2020). Literature posits that the incubation period is 1 to 14 days; however, the manifestation of symptoms in some patients is about 5.2 days (Falokun, 2020). It should be reiterated further that, people with underlining health challenges are major ways of complications which may eventually leads to death (Ezigbo and Ifijeh, 2020). It is considered dangerous to the existence of human-beings because of contagious nature of the disease. In addition, it has virtually affected all spheres of human endeavours such as: socio-economic, education, health etc. As a result of the pandemic of coronavirus, it leads most of the households to desperation in providing basic needs to their families especially children (Headey et al., 2020).

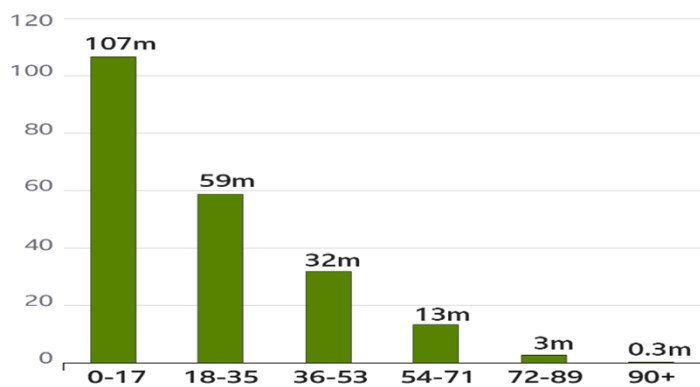
Hence, there is need to cater for the improvement of the conditions of children with prime target of post COVID-19 recovery. Literature contends that, Coronavirus is indirectly contributing to the child labour or all forms of child abuse due to the fact that children from poor households tend to seek for food and financial support from others. Undeniably, the rich people in the society might be the advantage of pandemic in exploiting the less privileged families and children (Headey et al., 2020). More pathetically, in exchange for food and seeking for assistance, children might be exploited as a result of the current pandemic because poverty and food insecurity (Heady et al., 2020). This might lead to sexual, physical and emotional exploitations of the children which might still widen the gap that previous studies have been trying to bridged prior to the emergence of global pandemic of COVID-19. This scenario could be considered as a serious threat or challenge to the children's wellbeing (Ezigbo and Ifijeh, 2020; Headey et al., 2020).

Onwards, COVID-19 is a terrible experience that has virtually affected ways of life of people in different parts of the world. It is not disagreeable to say that children from poor family background found it difficult to survive the impact of COVID-19 as a result of the fact that, their parents find it difficult to generate income in order to feed them (UNICEF, 2021). It is no this note that, it should be advocated that, in order to address this impact of COVID-19, the government is expected to provide financial support and foodstuffs that would cater for their needs. In so doing the risk of the negative psychological impact of the pandemic would be drastically minimized.

An inference can therefore be made COVID-19 might have long-term impact on the children which the government should try as much as possible to address.

Literature posits that in the United Kingdom and the United States of America, the death of young persons who are healthy has generated serious concern about the impact of COVID-19 in the recent time (Burgess et al., 2022).

Undoubtedly, there is an increase in new cases of COVID-19 as well as death rates in different parts of the world including Nigeria. Several measures such self-isolation, social distancing etc. have been put in place in curtailing the impact of COVID-19 in the global level in general and in the Nigerian context in particular (Laborde et al., 2020). Undeniably, previous studies have explored different aspects or conditions of children such as poverty, nutrition, child-abuse, sexual harassment in Nigeria. **Figure 1** indicates that UN Population Division (2022) demonstrates that young population in the country is estimated as 107 million which needs adequate attention against the negative consequences of COVID-19.



**Figure 1.** Young population in the country (Source: UN Population Division (2022)).

Thus, the scenario of multifarious challenges is virtually almost the same in most of African countries. As efforts are being galvanized, it is necessary that children should not be excluded from the responses and activities to curtail COVID-19 in the country. Consequently, it has great effect on different facets of the society such as legal, socio-economic, health and ethical aspects. This paper therefore attempts to explore the multidimensional impact of COVID-19 on children in order to solve the problems facing the children in Nigeria.

## 2.2. Multidimensional impacts of COVID-19 in Nigeria

It is noteworthy to say that COVID-19 has multifaceted impacts in various parts of the world including Nigeria. More specifically, the study examines legal, economic, health and ethical impacts in the Nigerian context.

First, the legal impact of COVID-19 on children in Nigeria has been significant, with various studies highlighting different aspects of this issue. The pandemic has exacerbated challenges in areas such as healthcare allocation, education accessibility, and protection of vulnerable groups like internally displaced children. Despite existing legal frameworks aimed at safeguarding children's rights, the abuse of the girl child has increased, indicating a gap in effective implementation and societal norms that undervalue girls' rights (Ghomeshi et al., 2020). The challenges faced by internally displaced children, especially in accessing healthcare, education, and protection

during COVID-19, underscore the gaps in support mechanisms for this vulnerable group (Owolabi, 2022) The impact of COVID-19 on children in Nigeria has been significant, affecting various aspects such as education, health, and psychosocial well-being. Studies have shown that the pandemic led to school closures affecting millions of students, including girls, in Nigeria which has contributed to overwhelming studies on legal research relating to COVID-19 (Kazeem, 2020).

Second, the economic implications of the virus on Nigerian children, including poverty issues, safety needs, and learning, have been emphasized, calling for expanded social assistance and child-centered services in the country. The economic impact of COVID-19 on children in Nigeria has been profound, with significant disruptions in education, healthcare access, and overall well-being. The pandemic led to school closures, job losses, and increased poverty levels, particularly affecting vulnerable groups like the girl-child (Briggs and Numbere, 2020). Lockdown measures resulted in decreased affordability of healthy diets, limited healthcare services, and a rise in domestic violence against children and women, exacerbating existing inequalities (Dessy et al., 2021). The economic strain on families pushed many children into extreme poverty, hindering their educational opportunities and access to basic amenities, further widening the educational gap and impeding post-lockdown recovery efforts. Addressing these challenges requires a multifaceted approach, including social assistance for impoverished families, child-centered services, and alternative education pathways supported by government and non-governmental organizations (Stanley et al., 2020).

Third, regarding health-related issues of COVID-19, research indicates a high prevalence of COVID-19 among children in Nigerian hospitals, with a considerable proportion being asymptomatic, highlighting the need for active surveillance and contact tracing (Ineme and Iloma, 2021). The pandemic also resulted in reduced hospital admissions for children in emergency wards, with an increase in illnesses like acute respiratory infections and malnutrition, underscoring the indirect health impact of COVID-19 on children in Nigeria. The health impact of COVID-19 on children in Nigeria has been significant, with studies showing a high prevalence of the virus among children, including asymptomatic cases. The pandemic has led to a decline in the utilization of health services for children, resulting in increased mortality rates during the COVID-19 period (Fehintola and Fehintola, 2020). Furthermore, the similarity in clinical presentations between COVID-19 and malaria in children has raised concerns about delayed treatment for severe malaria, potentially leading to higher mortality rates. Additionally, there is a lack of focus on the psychosocial implications of COVID-19 on Nigerian children, highlighting the need for expanded social assistance, child-centered services, and parental training to address the mental health and learning needs of children during the pandemic (Olaseni et al., 2020).

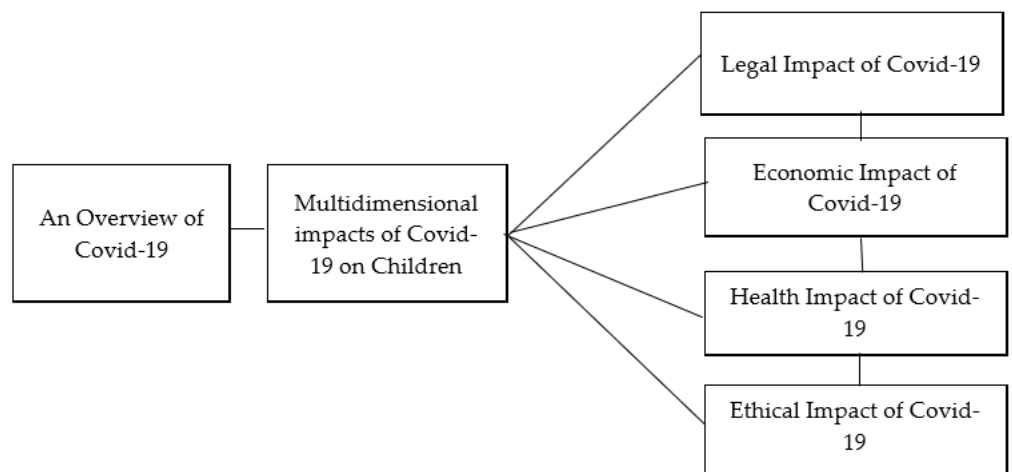
Fourth, ethical theory is importantly relevant in addressing this which explains that human social interaction is expectedly guided by actions of individuals which might be adjudged to either be ethical or not (Jegade et al., 2020). In addition, when actions conform with the norms of the society, such action may be considered as ethical but when it is contrary, it is considered unethical. Hence, actions are based on the intentions and everyone should be responsible for the consequences of his actions. Notably, deontology offers explanation pertaining to the fact that, norm is pivotal in

connection with the ethics.

Undoubtedly, an individual's action can be considered as morally upright which it manifests norms of a particular society. Thus, as a result of COVID-19 pandemic, efforts must be galvanized in ensuring that the actions of the children are in conformity with the societal norms. It should be reiterated that, everyone in the society should be conscious of his or her concern in discharging duties especially in helping the children to cope with the challenges of COVID-19 in Nigeria. It is not disagreeable to say that, the consequences of COVID-19 on the children are not only limited to socio-economic aspect but it also deals with its impact on children's psychological wellbeing (De Jong et al., 2019).

Similarly, the actions of the stakeholders who have been concerned in solving or reducing the negative impact of COVID-19 in general and on the children in particular should make sure that their actions and preventive measures are conformed with the norms and values of the society. It is on this note that literature posits that consequences of a particular action is considered on the basis of factors that go contrary to the norms and values of the society. And of such societal value are: pleasure, happiness, welfare etc. Hence, the current impact of COVID-19 on wellbeing of children is undeniably serves as a further underlining factor hindering the pleasure, happiness and welfares of the children as consequence of poverty, hunger and malnutrition which the exiting previous have clamoured for addressing it (De Jong et al., 2019; Jegede et al., 2020).

In a nutshell, the review of related literature demonstrates that COVID-19 has a legal implication which requires a framework that would address the challenge faced by the children during the Pandemic. Also, it shows that the economic conditions of many households especially the poor faced a serious setback. Similarly, the pandemic disrupted routine immunization programmes in several Nigerian states, leading to challenges such as insufficient supplies and human resources shortages. Household savings were significantly impacted, with healthcare financing relying heavily on personal income, while food insecurity was exacerbated by financial struggles during the pandemic. Similarly, it challenged the ethical aspects of parents' responsibilities within the family levels, which hindered their roles in the family especially for the children. **Figure 2** shows the diagrammatic conceptual framework used in this study.



**Figure 2.** Conceptual framework of the study.

### **3. Materials and methods**

COVID-19 was a serious threat to the global advocacy for Sustainable Development Goals (SDGs) as an initiative aiming to enhance various aspects of human activities, particularly in achieving Vision 2030 in numerous nations like Nigeria. Multifarious impacts of COVID-19 are explored in this study. The current investigation utilized content analysis (CA) and systematic literature review (SLR) as fundamental components of qualitative research. Reiteratively, systematic literature review (SLR), a method is widely employed in academic research as suggested by existing literature (Kraus et al., 2020; Khan et al., 2022; Kraus et al., 2022). Therefore, this study adopts systematic literature review (SLR) to gather evidence from existing literature relevant to this research. Several databases were utilized to compile and analyze studies for this research. The SLR approach in this study adhered to the methodology proposed by Kitchenham, where studies are referenced according to SLR guidelines. Prior literature has underscored the significant role of systematic literature review in entrepreneurship research, small-scale businesses, business model research, marketing, and circular economy practices and among others (Kraus et al., 2023). Notably, sources like Web of Science (WOS), ScienceDirect, and MDPI were accessed to retrieve various materials such as journals, references, research papers, library sources, and policy reports in Nigeria. The analysis of existing studies and secondary data in this research were between 2017 to 2021, focusing on the multidimensional impacts of COVID-19 on children in Nigeria. Based on the extant literature, legal, economic, health and ethical impacts are the themes generated for the analysis of this study which have been extensively discussed. A total of 66 articles were meticulously scrutinized in this study, and the findings of content analysis (CA) and systematic literature review (SLR) are detailed in the subsequent sections.

### **4. Results and discussion**

This section explains the overall results and discussion derivable from the extractions of secondary data used in this study. Fundamentally, four major themes (i.e., legal, economic, health and ethical impacts of COVID-19) explored in this study as indicators or multifarious impacts of COVID-19 are presented in the subsequent subheadings.

#### **4.1. Legal impacts on Nigerian children**

Indeed, many citizens violate the measures put in place in preventing COVID-19 in order to ensure that everyone is having safe distance. Various measures such as lockdown, social distancing, isolation, lack of basic social amenities among others might be considered as infringements to human right in third world countries where there is low level of literacy which leads complaints in some quarters about the issue of lockdown which literature considers as a challenge to access to justice in the country (Allix, 2021). As a result of this, there is question of fairness with regards to the application of the same sanctions against the violators of measures put in place to curtail the spread of the virus. For instance, in commercial centers and markets, people have deliberately exempted themselves from the lockdown (Ezeibe et al., 2024). As a result of negative perceptions on preventive measures against COVID-19 in many

low-income settings which made it difficult to implement various preventive measures against COVID-19 pandemic.

Similarly, the variance in the figures of cases and deaths arising from the pandemic indicates that, there is lack of adequate coordination in responding to the scenario of COVID-19. For example, there is a false impression about inaccurate figures of the cases and deaths. If the figure is high, citizens including children might have psychological disturbance but if the figure is low, they may have care-free attitude to the compliance of preventive measures by the citizens (Onayemi et al., 2024).

Hence, there are different argument and counter arguments regarding the strategies to be used in easing the lockdown and other measures. Thus, the legal matters arising from the issues of lockdown is that, schools and places of worship are shutdown while markets and commercial places remain active. The issue is that, it does this portray ethical value as an important factor in policy relating to preventive measures against the spread of COVID-19 in the country. However, in overall, the scenario of pandemic and strategies of preventive measures have affected socio-economic situation of low-income families. More essentially, literature acknowledge that COVID-19 could increase the numbers of people facing crisis which consequentially might affect children as well most especially in third world countries like Nigeria (World Food Programme, 2020).

Prior to the emergence of COVID-19, there has been advocacy for legal framework in addressing the multifarious or multidimensional challenges facing children at the global level. In this regard, UNICEF (2021) plays vital roles in the respect with its clamour for addressing the problems faced by the women and children. In addition, in Africa generally and Nigeria particularly, children are faced with several challenges and more importantly, their rights are not fulfilled as expected. As a result of this, the potentials of children are limited because their rights are not given prime importance. Since few decades ago, there had been agitation for addressing the legal issues concerning children's rights (Oamen, 2020). Since the outbreak of COVID-19 in the country, there has been concern that COVID-19 spurge can undeniably and seriously affects the right of children in the country. Hence, it is essential to note that in some countries, the governments have to take strict measures in implementing measures of facemasks, social distancing even on children as a way of safeguarding their right to health as established by the Nigerian constitution and Child Rights Act (Changani, 2001).

Further still, the law enforcement agencies have paramount roles to play by ensuring that there is an effective control of the pandemic in order to avoid the likely effect on the children. In so doing, the adults and children should be motivated to put more efforts in adhering to all preventive measures. Nonetheless, it is essential to posit that, the Police force as an important agency for the enforcement of law and order needs to accord or attach respect to children's rights while discharging its duties. Mandatory vaccination during COVID-19 is regarded as an integral part of legal issues emerging from COVID-19 as literature contends (Aidonojie et al., 2024).

In not shell, it has been explicitly noted that, as part of legal framework in addressing the impact of COVID-19 among children, there is need to take caution so as not to infringe the rights, dignity of the children. In case, there is an attempt to know



the background of the children while trying to collate data of whether they are from low-income families or, any information gathered should be treated with utmost confidentiality in order to desist from negative stigmatization to the children. There is need for an extant legal framework governing in order avoid the breach of confidentiality relating to the affairs of children. This is important because the negatively consequence of COVID-19 has manifested from children's inability to return back to school between 2019 and early 2021 whereby even after the school was reopen, not all the children returned to schools. This would consequently affect the children's fundamental human right to education in the country.

#### **4.2. Economic impacts on Nigerian children**

At the international level, it is not debatable to posit that, COVID-19 has interpreted many trade and business activities. This does not spare Nigeria unaffected. Literature posits that COVID-19 has affected production and manufacturing as a result of the fact the raw materials could be imported for small and medium scale business as the international travelling could not be done and lockdown was put in place as a measure to curtail the spread of the virus (Ryder, 2020). More pathetically, children are also affected most especially those from low-income families. It is noteworthy to say most of the vulnerable families as a result of COVID-19 that affect their economic condition may contribute to hopelessness of the children regarding their future undertakings (Diab, 2023).

Indeed, 37% of children with COVID-19 were asymptomatic which affected the economic conditions of many households. There is a connection between economy and education. Lockdown impacted child development, remote learning inequalities, economic challenges. Economic impact led to job losses, childhood poverty, educational difficulties. Indeed, COVID-19 lockdown widened education gap between rural and urban children. COVID-19 impacted Nigerian girl-child in education, protection, violence, health, economy. Remedies include investing in alternate education pathways, community engagement, support systems. Suspension of teaching, exams, academic calendar in early child education. Reduction of funding for early child education in Nigeria. Government has suggested solar radio and television for emergency learning period. Psychosocial and educational needs of children impacted by pandemic.

Furthermore, literature contends that, COVID-19 has been considered as one of hinderances to socio-economic development of the society. More specifically, it increases an experience of extreme poverty, malnutrition and hunger among the children and further makes the children to be more vulnerable (Olufunmilayo, 2020). Undoubtedly, prior to COVID-19, there are a lot of efforts and measures put in place to address the vulnerability of children especially the those partaking in street begging in the context of Nigeria as literature asserts (Jamaluddin, 2017). It should therefore be reiterated that there is a need for actionable or proactive measures in improving the economic condition of vulnerable households (Ojeyinka and Omaghomi, 2024), more significantly, in order to curtail short- and long-term economic impact of COVID-19 on children.

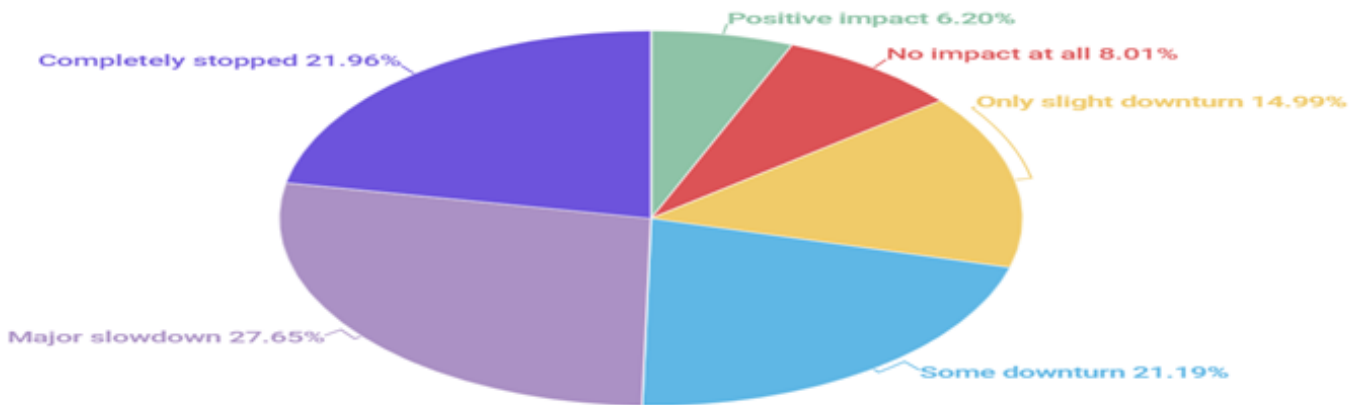
As a result of current inflation in the country, many households in different parts

of the country are struggling for survival while some others are showing desperation for their own daily feeding. As a result of families trying to feed their children during COVID-19, this can further expose children to more dangerous experience such as child labour, sexual harassment and even children marriage that many international and national agencies have been advocating for to be addressed (Robertson et al., 2020).

Literature posits that social protection measures such as cash and food are important to be put in place in the country specifically in order to address the vulnerability of children and their families. This is paramount in addressing the mitigation of the impact of COVID-19 in Nigeria. It is on this note that, Mercy (2020), the Acting Country Director of Save the Children International Nigeria posited that:

“As the numbers of COVID-19 cases rise in Nigeria to and the virus is spreading to different States, we are working hard to mitigate the negative impact this will have on the most vulnerable children, especially in fragile communities. Children are seriously affected when parents and caregivers are infected by the virus and taken away for care. We are working closely with the government to support efforts to contain the virus and keep children safe and protected amid the pandemic.” (Mercy, 2020).

The above quotation explains the concern about the negative impact of COVID-19 specifically on the vulnerable children especially in the Nigerian society. Undoubtedly, as a result of the fact that most parents as adults are affected by the virus, consequentially, it will also affect the children. It is on this basis that most of the households need the support and social protection services of the government in order to curtail the impact of COVID-19.



**Figure 3.** COVID-19 impacted on business/economic activities.

In a nutshell, the government also needs to pay more attention to the affairs of the children especially those whose parents are faced with the challenge of low-income and poor socio-economic condition. More significantly, the provision of food to the school children is a laudable programme of federal government even prior to COVID-19 pandemic. It is therefore essential to cater for children from the poor background as part of effort to respond to economic condition of the children from low-income families in the country. The socio-economic conditions arising from the impact of COVID-19 have more negative impact on the children which needs attention of social protection programmes by the government. Some families have decided to completely

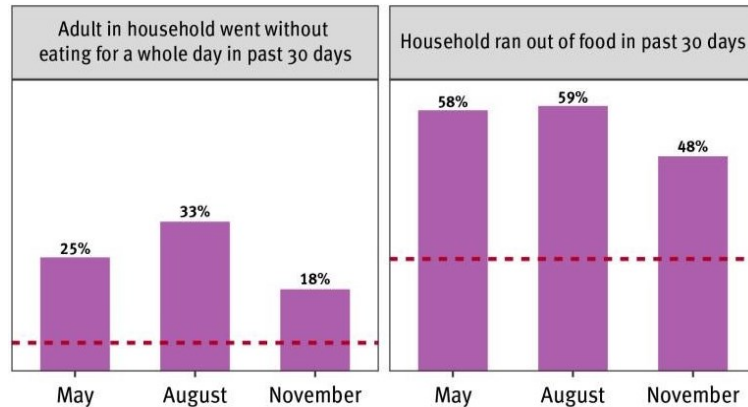
stopped their businesses (21.96%); positive impact (6.20%); no impact of COVID-19 at all (8.01%); Only alight downturn (14.99%); some downturn (21.19%) and major slowdown (27.65%). **Figure 3** shows COVID-19 impacted on business/Economic Activities.

### 4.3. Health impacts on Nigerian children

It is important to note that, the health condition of children needs to be given almost attention with the outbreak of COVID-19 because literature contends that, World Health Organization has listed Nigeria with one of countries with high-risk (Shakeel et al., 2023). Prior to the emergence of corona virus, literature posits that, Nigeria is being considered as the second highest number of countries with children’s death especially those under five years old (Shakeel et al., 2023). Also, UNICEF (2021) posits that majority of children that are born in Nigeria do not have access to good healthcare facilities. In addition, polio is one of the health challenges affecting the Nigerian children, however, the country was regarded polio-free nation in 2015. Unfortunately, it resurfaced in the year 2016 which might be as a result of adequate healthcare facilities predominantly in the northern part of the country. Indeed, another public health problem faced by the citizens in the country is tuberculosis and more importantly, malaria is considered by World Health Organization—WHO (2020) that causes poor children development in the country.

#### Hunger in Nigeria Persistent Through Pandemic

Red line indicates 2018–19 baseline value



**Figure 4.** Persistence of hunger through the pandemic (2018–2019 Baseline value). (Source: Human Rights Watch Analysis of COVID-19 National Longitudinal Phone Survey 2020, National Bureau of Statistics).

Similarly, there is a challenge of children’s vaccination even prior to COVID-19 pandemic. For instance, only 25% of children from urban areas are vaccinated fully while just only 16% from rural areas were vaccinated. More so, statistics shows that in 2015, 260,000 children who are under 14 years old were HIV positive in Nigeria. Onwards, street begging by children is a serious social problem in Nigeria. It should be reiterated that, there are almost 13 to 15 million out of children, 10 million are strongly believed to be predominant Almajiri children who are commonly associated with traditional Islamic school system in the northern part of the country (The Federal

Republic of Nigeria, 2019). This scenario is one of major sufferings hinder the overall development of children. For instance, records indicated that, over two million children are on the street in the city of Kano, in the northern part of country. Most of these children are from poor backgrounds. COVID-19 exacerbates child malnutrition in Nigeria. In other words, malnutrition contributes to increased impact of infectious diseases like COVID-19. Children face social changes, health protocols, and separation from parents. Children in Nigeria experienced high stress levels during the pandemic. Majority have asymptomatic disease, with few symptomatic cases. Declining immunization coverage, increasing risk of vaccine-preventable diseases outbreaks. Erosion of vaccine confidence among caregivers and healthcare workers. **Figure 4** shows the persistence of hunger through the pandemic in the country.

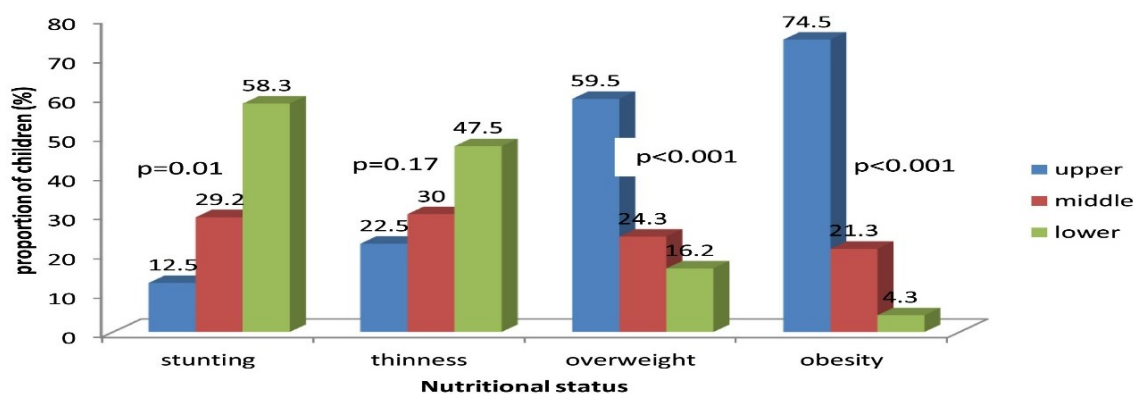
Based on the foregoing explanation It is not deniable to say that, literature contends that, there are diseases infected by individuals based on the age. Undoubtedly, adolescents and children are different as compared to adult regarding the infection. Various health challenges such as: polio, tuberculosis, malaria, HIV, child trafficking, and many others that the children are faced with (Allix, 2021), the emergence of COVID-19 might worsen the health condition of children in the country.

More pathetically, the scenario of street begging even during the time of COVID-19 is worrisome Respiratory symptoms are ascribed to the infection of coronavirus and more importantly, features of the COVID-19 were seen among children in rural areas as literature contends (Isibor et al., 2023). Hence, Children can also feel the symptoms of COVID-19 such as a cough or sore throat or sneeze. especially when there is an advocacy for lockdown and isolation as measures for preventing the escalation of the virus which consequently indicate psychosocial educational and economic impact of the virus (Mumini, 2023). Inferably, due to ease in lockdown, isolation and international travelling, and with persistence in forceful street begging, the children on the street are still being exposed to the risk of trafficking. All these culminated issues and challenges are being considered as impediments for their rights, safety and adequate healthcare needed for them.

It is therefore important to address the health challenges of children during pandemic. The reason for this agitation is that, the Constitution of Federal Republic of Nigeria in general and section 13 of Child's Rights Act (CRA) stipulated that right to health of citizens including children (Olaseni et al., 2020). In spite of existing advocacy for the improvement of healthcare facilities, it is essential to note that, the emergence of COVID-19 makes it more important than ever before, specifically in catering for the health of the children. In so doing, it should not be restricted to urban areas but children of the rural areas should be carried along in efforts to create different health facilities as well as provision for food (Nkporbu et al., 2020). It is noteworthy to say that, the existing inequality between the poor and the rich is still further entrenched with the outbreak of COVID-19 which has psychosocial implications as literature posits (Nkporbu et al., 2020).

It is essential to note that, in an attempt to ensure that children are protected, the health workers should be more motivated and encouraged with incentives towards staging health talks and public awareness pertaining to the compliance to preventive measures against COVID-19 among children in order to improve their mental health (Joseph et al., 2021). As adults try to maintain personal hygiene, children should also

be encouraged to maintain this in order to improve their health condition as literature contends (Joseph et al., 2021). It is significant to encourage all stakeholders to partake in the realization of children’s right to healthcare facilities in order to foster the level of compliance to COVID-19 regulations in Nigeria. **Figure 5** shows children’s proportion and nutritional status in the country.



**Figure 5.** Children’s proportion and nutritional status.

#### 4.4. Ethical impacts COVID-19 on Nigerian children

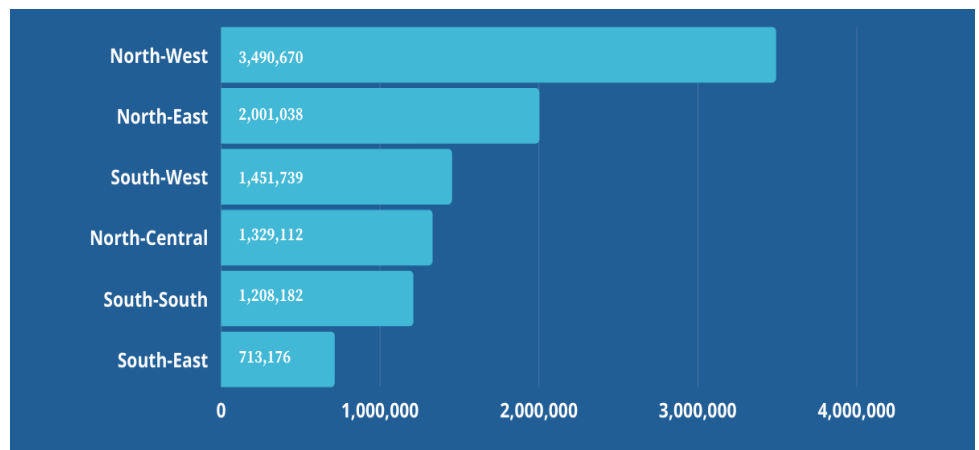
This part explains ethical impact of COVID-19 in the context of Nigeria specifically in relation to the children. Indeed, there is an ethical dilemma pertaining to the proper implementation of preventive measures against COVID-19 in the country specifically for mapping out movement in identifying disease transmission (Yetunde, 2021).

Undoubtedly, the ethical impact of COVID-19 on children in Nigeria has been profound, affecting various aspects of their lives. The impact of COVID-19 on children in Nigeria has raised several ethical concerns. The pandemic has exacerbated existing vulnerabilities among children, particularly those in extreme poverty, internally displaced populations, and the Almajiri children, leading to challenges in access to healthcare, education, nutrition, and protection (Aziegbe-Esho et al., 2021). The forced relocation of Almajiri children without proper care and the neglect of internally displaced children during the pandemic highlight ethical issues related to child rights, protection, and governance failures. Additionally, the disruption of education, increased risk of gender-based violence, and heightened food insecurity due to the pandemic have further emphasized the need for ethical considerations in addressing the psychosocial implications on children in Nigeria (Nneji et al., 2022). Efforts to prioritize child-centered services, provide social assistance, and ensure access to education and healthcare are crucial ethical imperatives in mitigating the impact of COVID-19 on children in Nigeria are being considered as strategies for preventing infectious diseases like coronavirus (Moses-Promise and Ugbenu, 2021). Addressing these ethical implications requires a holistic approach, including social assistance, child-centered services, parental training, and community engagement to ensure the well-being and rights of all children are safeguarded during and post-pandemic (Aziegbe-Esho et al., 2021).

With the current scenario of COVID-19, children deserve greatest happiness and pleasure. However, the negative impact of the pandemic if it is not adequately

addressed may even cause an inevitable pain to the children. The use or application of theoretical basis of ethical values can be instrumental in utilizing righteous virtues in rendering selfless service and demonstrating caring and love to the children. Nonetheless, literature contends that care as in integral part of ethics are moral principles inherent in human being; however, norms and values should be learnt in a more specific contexts such as in the case of COVID-19 pandemic in order to solve the problem of poverty and food insecurity (Aidonojie and Victoria, 2022). Thus, it is essential that both care and ethical values should be harmonized in helping the children to cope with negative impact of COVID-19 on their existence and survival.

Furthermore, every profession has code of ethics in discharging their duties; however, ethics of minimizing the negative impact of COVID-19 among children may not be compared with ethical code of conduct required in clinical and public health practices in Nigeria. Ethics in supporting children during pandemic demonstrates empathy in order to understand the feeling of human children regarding the lack of their human rights; socio-economic conditions (Gwenzi et al., 2020). Undeniably, pandemic has greatly contributed to negative impact of the pandemic on the overall conditions of the children; thus, their feelings and experiences during this period are important to be shared and necessary support should be given to them. Indeed, the ethical principles should be applied in providing necessary interventions to the children (Coker et al., 2021). The forgoing explications are essential considerations for ethical consideration in curtailing the impact of COVID-19 among children in the country. It is paramount to address the post COVID-19 challenges especially by solving the problem of out-of-school children in various geo-political zones in the country which are: North-West = 3,490,670; North-East = 2,001,038; South-West = 1,451,729; North-Central = 1,329,112; South-South = 1,208,182 and South-East = 713,176. **Figure 6** shows out-of-school children by geo-political zones.



**Figure 6.** Out-of-School children in various geo-political zones (Source: National bureau of statistics).

Indeed, as a result of pandemic, the choices of individually might be restricted but it should be not that there is need for a balance in ensuring that dignity of children is not deliberately eroded. Hence, due to the negligence to the condition of the children and with the disastrous nature of COVID-19, there is need for commitment in promoting justice and fairness to the children. In so doing, there is need to show care

and love to the children by demonstrating that there is need for promoting and encouraging equal treatment among the citizens (Ogundele et al., 2020). It should be reiterated that, in an attempt to curtail long-lasting effect of COVID-19 in general, there is no doubt that there is risk associated with it. Hence, the risk should be minimized especially in an attempt to minimize the impact of COVID-19 pandemic among the children. There is also a need for the government to gain public trust by being truthful, sincere and accountable to the citizens.

## **5. Implications of the study**

The COVID-19 pandemic undoubtedly led to significant global stress and affected virtually all aspects of human activity. The onset of the COVID-19 pandemic has spurred investigation into diverse avenues for the advancement of treatments targeting the coronavirus (Paladhi et al., 2022). In order to elucidate the phylogeny of SARS-CoV, numerous research endeavors have been undertaken, revealing that the pathogenicity stems from the spike protein. Diagnostic methodologies such as imaging technology and RT-PCR, when compared to biosensors, are associated with higher costs. The utilization of nano-biosensors presents a promising approach for monitoring the health status of both individuals and communities.

The scientific research community is not giving adequate attention to the impact of this lethal virus on education. A large number of educational institutions worldwide transitioned to online teaching during the pandemic, yet there were notable disparities in technological preparedness across different countries. This study endeavors to propose strategies for how the education sector should address the challenges arising from COVID-19 issues in support of online learning (Ukhurebor et al., 2024). Given that some of the repercussions have implications for education, proposed solutions should also encompass innovations to mitigate these effects through enhanced scientific research (Ukhurebor et al., 2024). Evidently, there remains much work to be done regarding the ramifications of the COVID-19 pandemic on education. Therefore, this review study seeks to examine the potential correlation between the pandemic and the education sector, while outlining a pathway for future actions (Aidonjje et al., 2022).

The online teaching and learning brought about by the COVID-19 pandemic had a detrimental effect on both students and the educational process, primarily as a result of insufficient readiness for this mode of instruction at the Junior Secondary School level in the specified geographical region. The repercussions of this situation are profound and hold considerable importance for the formulation of policies and implementation strategies within the realm of education (Aidonjje et al., 2022).

## **6. Conclusion and suggestions**

This paper has explored the multidimensional impacts of COVID-19 such as legal, economic, health and ethic impact of the COVID-19 pandemic on the children in Nigeria. The paper demonstrates that COVID-19 is disastrous and as result, there is need for adequate implementations of various provisions in protecting the rights of children. The paper has explicated the negative impact of COVID-19 on the children and the extent of this has been manifested in the multifarious health challenges faced

by children even prior to COVID-19 pandemic. The paper has argued that, the legal framework of Child Right Act (CRA) should be strengthened in helping the children from low-income families of homeless children in addressing psychological disturbance emanating from the scenario of COVID-19 specifically by giving them hope for a meaningful life. It has been further explained that, COVID-19 has caused children from accessing nutritious food intake because the pandemic has affected the family from low-income families. The paper has further argued that, support from stakeholders such as: government, agencies, Non-Governmental Organizations (NGOs), philanthropists among others can help in addressing the problem of vulnerable children specifically those experiencing extreme poverty, malnutrition and hunger. Also, it has been explained that improving healthcare facilities for children can reduce the problem of children death rates, polio, tuberculosis, malaria, HIV, COVID-19 among the children. Thus, health wise, there is psychological burden or disturbance to the children. In terms of health impact, children are not spare from feeling the impact of COVID-19 and more importantly, it increases the children's mortality rates in addition to socio-economic situation. It is also demonstrated that ethical approach specifically by showing care, love, empathy to the children during COVID-19 can raise the level of their happiness and joy which will consequently improve their psychological wellbeing. Indeed, the multifarious impacts of COVID-19 can be properly addressed within the purview of policymakers, legal experts, Non-Governmental Organizations (NGOs), socio-economic experts, health workers, ethical experts. This is necessary for proactive step in responding to the needs of children from multidimensional perspective in responding to the impacts of COVID-19 in the country. Therefore, the following suggestions are made:

- 1) The government needs to be more diligent in utilizing multidimensional approaches in addressing the problems faced by children during pandemic.
- 2) The government should put in place social protection programmes in order to address the challenges faced by vulnerable children through which the children will be safeguarded in the society during and post COVID-19 situations in the country.
- 3) There is need for provision of financial support to the families of uncared children in order to raise their socio-economic status of the children in order to curtail the challenges of COVID-19 pandemic in the country.
- 4) There is need for strategies and actions as part of efforts in responding to the pandemic of COVID-19 by ensuring that unprotected or vulnerable children are catered for.
- 5) The voice of the children should be heard and they should be considered as an integral part of control plans, preventive measures and responsive preparedness in curtailing the challenges of COVID-19 in the country.
- 6) There is need for adequate enlightenment and education in addressing ethical dilemma emanating from the impact of COVID-19 on the welfare of children in the country.

**Author contributions:** Conceptualization, RP and YJA; methodology, YJA; software, YJA; validation, RP and YJA; formal analysis, YJA; investigation, YJA; resources, RP; data curation, RP; writing—original draft preparation, YJA; writing—



review and editing, RP and YJA; visualization, RP; supervision, RP; project administration, RP; funding acquisition, RP and YJA. All authors have read and agreed to the published version of the manuscript.

**Acknowledgments:** The authors would like to acknowledge the support of Prince Sultan University for paying the Article Processing Charges (APC) of this publication.

**Conflict of interest:** The authors declare no conflict of interest.

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