

ANALYSIS OF THE IMPACT OF COVID-19 POLICY MEASURES ON THE LIVELIHOODS OF PEOPLE WITH DISABILITIES IN NORTH-EASTERN NIGERIA

Muftau Olaiya Olarinde^{1*}, Sulaiman Y. Balarabe Kura², Hussainatu Abdullahi³, Abubakar Lawan⁵, & Ismaila Danjuma⁴

^{1,3}Department of Economics, Usmanu Danfodiyo University, Sokoto, Nigeria.

^{2,4} Department of Political Science, Usmanu Danfodiyo University, Sokoto, Nigeria.

⁵Department of Economics, Yobe State University Damaturu, Yobe State, Nigeria.

*Corresponding author's email: olarinde.muftau@udusok.edu.ng

Abstract

This study examines the impacts of COVID-19 policy measures on the livelihoods of Persons with Disabilities (PWDs) in the North-Eastern region of Nigeria. It utilises a multi-stage sampling method to select 1,200 PWDs in three states (Bauchi, Gombe and Yobe) out of the six states in the Northeast. Fifteen Key Informant Interviews and six focus Group Discussions were purposively conducted to obtain the qualitative data while a structured questionnaire was administered to 1,200 PWDs for the quantitative data. The study employs a mixed method of data analysis in the form of thematic analysis, and descriptive and inferential statistics. The result of descriptive statistics shows that about 54.86 per cent of the respondents were in the active age bracket, about 33 per cent rear livestock and 29 per cent owned landed property, while lockdown and social distance are major policies that had affected the livelihoods of PWDs. It was also found that cash transfer and food distribution were the major supports received by the respondents during the pandemic. However, findings indicate that about 68.32 per cent of the respondents did not receive any government support during the outbreak. The results from Ordinary Least Square (OLS) revealed that support from the government and NGOs are critical resilience strategies needed to guide against the worsening condition of livelihood status of PWDs. Similarly, level of education, gender and marital status have worsened the livelihood status of PWDs during the period. The study recommends adequate government support for the vulnerable group and inclusive policy that caters for the special needs of these vulnerable individuals in the event of future shocks like COVID-19.

Keywords: COVID-19 Policy, Disables, Livelihood, Mixed Methods, Nigeria

JEL classification: I12, I14, I15

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Introduction

The Novel Coronavirus is one of the most severe health disasters with varying degrees of impact across the globe (WHO 2023), destabilising global health conditions, and thus leaving a significant number of people indoors. The worldwide mobility restrictions and social distance policy imposed by the government to curb the spread of the pandemic further led to serious setbacks to the world economy (Yazdanpanah et al. 2021). These policies particularly the general restriction of movement have cut off the supply chains, lowered business productivity and collapsed businesses, resulting in a high rate of unemployment. The high rate of unemployment and spikes in the prices of goods and services have hurt the socioeconomic status of households, particularly in Nigeria.

For instance, it was reported that about 42 *per cent* of individuals in Nigeria who were working before the outbreak of the pandemic lost their jobs, 79*per cent* of the households experienced a reduction in income in Nigeria while 35 *per cent* to - 59 *per cent* could not afford to buy the staple foods (World Bank, 2020). In most cases, access to necessities becomes difficult, while food insecurity increases as COVID-19 lasts. For instance, by November 2020, 18.3 *per cent* of adult members of the family went a whole day without eating while the figure for those who skipped a meal per day stood at 56 *per cent* (Nathaniel & Tara, 2021). Thus, the negative effects of these measures have increased the number of vulnerable groups, worsened the inequality gap and further pushed many households into poverty.

The situation has been worse in semi-urban and rural areas where the majority of the individuals depend on daily income for survival particularly People with Disabilities (PWDs) and their families. Most PWDs in Nigeria are economically in the lowest cadres of SMEs and local production and selling (Inclusive Friends Association [IFA] & Save the Children [SCI] 2021). Their predicaments have made them vulnerable to various diseases and poverty which were eventually complicated by the measures implemented such as social distancing, restriction of movement, restrictions on mass gatherings and closure of schools and primary healthcare centres in the rural areas. Hence, the life of this vulnerable group becomes extremely difficult during the COVID-19 pandemic.

The increasing rate of vulnerability and worsened level of socioeconomic status of households demand social support measures to protect and prevent vulnerable individuals from falling into the poverty cycle and assist those that are trapped in poverty particularly PWDs, to escape. In response to these challenges, the Nigerian government both at the state and federal levels, including the Non-Governmental Organisations (NGOs) introduced various social protection programmes for vulnerable households, such as Conditional Cash Transfers (CCT), small business grants, AGSMEIS, special COVID-19 grant, food support or food transfer among others. However, scholars such as Akech, (2020) have argued that the government's initiatives in the form of social support were ineffective and marred by corruption, discrimination/inequalities, poor implementation, and further impoverished vulnerable households such as the PWDs rather than cushioning the negative impact of pandemic. In Nigeria, PWDs have been encountering different forms of discrimination and difficulties in accessing social amenities and basic services. Therefore, in addition to their existing underlying predicaments, the PWDs were mostly affected by economic and social challenges that came along with COVID-19 measures.

Several studies have been conducted on the impacts of the COVID-19 pandemic on wellbeing (Sosenrans et al., 2021; Sheunesu, Ayansola, Tendai & Mandla, 2023;), social and daily activities of PWDs and older adults (Reid et al., 2021) and on special education and state of mind (Samaila et al., 2020) and(Thompson, Chubo-Uzo, Rohwerder & Wickenden, 2021), however, none of these studies examined the impact of Covid-19 policy measures on the livelihoods of PWDs, indicating the limited scope of the majority of the existing literature. For example, Samaila et al (2020) limit their

analysis of the impact of Covid-19 on PWDs to educational achievement alone, disregarding other important socio-economic factors that are central to livelihoods such as income, social and physical capital. Similarly, Sosencrans et al (2021) attempt to expand the scope by incorporating health, well-being and access to services focusing on People with Developmental Disabilities while Holm et al. (2021) only consider the Psychosocial well-being of PWDs. It needs to be noted that there are six main domains of disabilities based on World Health Organisation Classifications of Functioning (NPC, 2019), thus focusing only on People with Developmental Disabilities makes the generalisations difficult and invalid. Most related to this study are the works of Chan et al., (2021) and Wong et al., (2021), however, the studies limit their livelihood's proxies to PWDs' employment and company characteristics, thus both studies were trapped in the problem of omitted variable bias such as social capital, income, and physical capital. In such scenarios, the results may be biased, and the conclusion could be misleading. The present study departs from existing studies by considering these important determinants (income, social support and charities) of well-being particularly during emergency periods that were previously neglected in the existing literature.

It is worth noting that little or no study examined the impact of the COVID-19 policy measures on the livelihoods of PWDs in Nigeria. Methodologically, the study equally extended the literature on the analysis of the impact of COVID-19 policy measures on the livelihoods of PWDs by combining the qualitative method with the quantitative method of data collection and analysis. The impact of the COVID-19 policy measures involved both observable and unobservable impacts such as psychological trauma. Measuring unobservable impacts of the pandemic and its depth may be difficult to capture using quantitative data only. Therefore, the adoption of qualitative techniques of data collection and analysis is predicated on the need to capture the depth and breadth of the impact of COVID-19 policy measures on the livelihoods of PWDs in the Northeastern part of Nigeria. It is in line with the above that this research attempts to examine the impact of COVID-19 pandemic policy measures on the welfare of PWDs. Aside from this introduction, section 2 reviews the literature, sections 3 and 4 present the methodology and results of the study, respectively. Conclusion and recommendations are in the last section.

Literature Review

Theoretical review

The word disability over the years has been conceptualised differently from different perspectives. According to Olki (1999), disability is a defect or failure of a bodily system which makes the person inherently abnormal and pathological. Bailey et al. (2015) noted that a person is regarded as disabled if he or she cannot do things normally as other people. The major types of disability include physical, cognitive, mental, developmental, and hearing disability. One of the most comprehensive definitions of disability is given by the World Health Organisation (WHO) and the International Classification of Functioning, Disability and Health (ICF). To these institutions, disability is seen as the result of interactions among bodily malfunction or limitations of some specific activities and the consequences of social participation (WHO, 2001).

Several theories and or models have been developed to explain the link between the state and the PWDs' livelihood. First among these theories is Social Darwinism by Fisher (1877), the biopsychosocial model of disability developed by George Engle in the 1980s (Petasis, 2019), Social model as explained in the publication of Union of the Physically Impaired Against Segregation (UPIAS) in 1976 (Oliver et al., 2004), medical model of disability and the economic model by Wells-Jensen and Zuber (2020) among others.

However, the framework for this study is built around the social model of disability, the model posits that disability is a social problem that emanates from an unfavourable physical environment and can only be treated through intervention (Oliver et al., 2004). While the social model tries to gloss over the biological malfunctioning of the body system as the cause of disability, they hold the view that disability revolves around the environmental mismatch for PWDs. Wells-Jensen and Zuber (2020) argue that the social model of disability identifies all problems that PWDs face in their physical and cultural settings rather than their bodies or their failure to believe, act or work effectively. Thus, the social model of disability is based on the notion that it is the society which makes people disabled with impairments and, therefore, any meaningful solution must be directed towards societal change and support rather than individual adjustment and rehabilitation (Barness et al., 2010). This view is further supported by the position of the Union of the Physically Impaired Against Segregation [UPIAS] (1976), which holds that it is the society that disables physically upright persons, or impaired healthy people, by regarding them as PWDs; hence, they are unnecessarily isolated and excluded from full participation in the society. Therefore, the social model of disability justifies the need for social support and inclusion to improve the well-being of PWDs during shocks such as the COVID-19 pandemic, however, the model failed to explain the role of the state in addressing the predicaments of the people who are naturally disabled. This study, therefore, adopts the social model as its theoretical foundation because of its emphasis on the role of the government in uplifting the livelihoods of physically challenged people during shocks, disasters, or uncertainties.

Empirical literature

Empirically, studies on the impact of the COVID-19 pandemic on the livelihoods of PWDs are scanty across the globe. On the welfare impact of the COVID-19 pandemic, Holm et al. (2021) carried out a comparative analysis of the impact of COVID-19 on the psychosocial well-being of PWDs and non-disabled people in the Finnish area based on a sample of 48,400 adults aged 20 years and above. The un-adjusted logistic regression results indicate that COVID-19 has cut off the social contact of PWDs, thereby significantly increasing their rate of loneliness and depression compared to the non-disabled. The strength of the paper lies in its large sample size which could have allowed for valid generalisation; however, the study only focuses on PWDs without giving preference to various domains of disabilities that are relevant in the generalisation of findings. In addition, the un-adjusted logistic regression techniques adopted by the study are prone to problems of model fits and thus produce unreliable estimates (LaValley, 2008). In an attempt to address the shortcomings associated with the study conducted by Holm et al. (2021), Assi et al. (2022) carried out another comparative study by estimating Poisson regression models based on Household Pulse Survey data by United States Census Bureau to determine the socioeconomic impact of the COVID-19 pandemic on PWDs proxy by food security. The authors established that adults with cognitive, vision, hearing, and mobility disability respectively report 39.5per cent, 30.8per cent, 14.9per cent and 23.2per cent food insecurity prevalence.

Further, it was concluded that adults with any type of disability experience more food insecurity than those without disability. There was also a different range of Prevalence Rate Ratio (PRR) for PWDs with a serious need for medical care, while those with multiple disabilities had a significantly higher relative prevalence of food insecurity, delay in healthcare and not receiving medical care compared to those without any form of disability.

Social exclusion of PWDs either in the formulation or implementation of policies meant to alleviate the livelihoods of the citizens has been one of the factors militating against access to available support by PWDs (Hillgrove et al., 2021; Sakellarios et al., 2020), which underscores their poor livelihoods status. For instance, Hillgrove et al. (2021) conducted a study on COVID-19 and PWDs by using a review of available results from rapid assessments of the impact of COVID-19 on PWDs in low and

middle-income countries in Asia and the Pacific. Findings indicate that PWDs experience less access to health, education, and social services, however, the validity of these results is constrained by the inability of authors to address the problem of heterogeneity in most of the review results. Another study focused, on the lack of inclusivity in policy formulation and implementation was responsible for the inability of the South African government to implement policies that align with the needs of PWDs during Covid-19, and there were many recommendations for disability-inclusive responses to Covid-19 that could not translate into practical implementation. Therefore, policies that aim at ensuring financial support, health and education for PWDs in the countries had detrimental effects on the well-being of PWDs (Sakellarios et al., 2020).

Several studies (Reid et al., 2021; Wong et al., 2021; Giagnac et al, 2021) have also been conducted on the link between covid-19 policy measures and some indicators of the socioeconomic status of PWDs. Focusing on employment status, Wong et al. (2021) examine the effect of the COVID-19 pandemic on PWDs, and their employers based on a sample size of 733 PWDs and 67 employers in the Mid-Western region of the United States. It was found that there was an increase in the rate of unemployment among PWDs due to their illness or disability and only 18.6*per cent* of the unemployed group enjoy unemployment benefits. For PWDs whose employment was not affected, 14*per cent* of the respondents (n=107) experienced a loss of income and worried about future economic uncertainties of the pandemic. As robust as these results are, the findings of the study could not be generalised due to the inability of the study to ensure representation of various domains of disability in its sample. Giagnac et al, (2021) addressed this shortcoming when examining the impact of the Covid-19 pandemic on health, income, and spending, as well as organisational support among workers with disabilities to those without any disabilities in Canada based on a sample of 3,066 participants. Their findings further established the earlier findings by Wong et al. (2021) that there is a significant difference in employment conditions of respondents with disabilities compared with those without disabilities. More specifically, they conclude that workers with physical disability reported more health concerns than those with mental health disability who reported more financial concerns and organisational support.

Providing more comprehensive empirical evidence on the impact of the pandemic and health status, Reid et al., (2021) noted that the restriction policy has created a significant gap in health services delivery for the PWDs and older aged groups during the COVID-19 compared with the non-disabled, resulting into increasing rate of mental health and related problems in all three domains of disability considered. The strengths of this study over other existing studies (Reid et al., 2021; Wong et al., 2021) lies in its ability to provide empirical evidence that considered the breadth and depth of the impact based on triangulation of quantitative with qualitative techniques. It needs to be noted that measuring the health impact of COVID-19 through the administration of questionnaires might restrict the feelings of the respondents to figures, however, the severity of the health impact could not be captured by qualitative data obtained through interviews such as key informant interviews.

Focusing on developing countries, Cheshire (2020) used a sample of 312 People with disabilities in Bangladesh and Kenya to study the impact of COVID-19 on the lives of PWDs based on qualitative data coded to generate quantitative data for descriptive analysis. Findings indicate that COVID-19 has negatively affected the lives of PWDs. Further, 92*per cent* of the respondents mentioned factors like limited transport, restricted movement, lack of available necessities, low income, and lack of jobs as the major challenges during the pandemic. It also shows that about 10*per cent* of the respondents in Kenya and Bangladesh were most concerned about the lack of access to assistive technology and flexible working opportunities.

Several studies have been conducted on the impact of COVID-19 pandemic measures in Nigeria (Balarabe, 2020; Samaila, 2020; Thompson et al., 2021), however, studies specifically focusing on

PWDs are hard to come by except for Thompson et al., (2021). For example, Thompson et al. (2021) carried out a qualitative study based on 10 PWDs to study the experience of people with disabilities during the Covid-19 pandemic in Nigeria, the finding indicates that PWDs have been further marginalised not only in terms of the outbreak of the pandemic itself but also by government response to curtail the spread of the virus. It was established that very few PWDs receive support from the government and PWD organisations because the majority of them were omitted. Specifically, many of the respondents faced food insecurity as they found it difficult to earn enough income to pay for food and medication. Examining the impact of COVID-19 on Nigerian households based on a sample of 404 households in Kano state, Nigeria, the result shows that 51 *per cent* of the respondents have experienced domestic violence during the lockdown, while nearly 95 *per cent* of the respondents were financially incapable and 97 *per cent* submits that their businesses had been negatively affected (Balarabe, 2020). Although the above studies focused on PWDs in Nigeria, however their sample size and techniques could not guarantee the robustness of their results. For example, Thompson et al. (2021) study suffered from the problem of a small sample size, relying on a sample size of 10 PWDs without conducting the power analysis for its justification. It should be noted that a small sample size limits the statistical power of any results making it difficult to detect true effects.

Using documentary review to examine the consequential impacts of COVID-19 on disability, in particular, special education practice in Nigeria. The finding indicates that school closure due to COVID-19 has resulted in increased cases of dropout of PWDs most especially those from low-income groups. It also indicates that due to their low economic status, most PWDs engaged on street begging for sustenance particularly those in the North-East region of the country (Samaila et al., 2020). In sum, most of the existing literature suffered from the sample size, lack of coverage of various domains of disabilities that affect the validity or robustness of most of the results and inability to generalise their findings for practical policy recommendations.

Methods and Materials

A brief review of the study area

The Northeast geo-political zone of Nigeria consists of six states and is situated within the latitude 60 28" N and 130 44" N and Longitude 80 44" E and 140 38" E with a total land mass of 272,395 Km² representing about 29.45 *per cent* of the total landmass in Nigeria (Mayomi, 2014). The region constitutes the vast arid expanse of the Sahara and the dense tropical forest along the Guinea Coast (Ibrahim, 2012). It is exposed to various environmental, climate change and related challenges such as flooding, drought and desertification which usually affect human livelihoods. The region is best known for agricultural production and relies heavily on rain-fed farming for sustenance.

The outbreak of the COVID-19 pandemic further threatened the sources of livelihoods of people (Nagarajan, 2020), in a region under the siege of the Boko-Haram insurgency that has resulted in an increasing number of displaced people, particularly in Borno, Yobe and Gombe states. NPC (2018) noted that there are a total number of 438,383 PWDs in the North-East, out of this figure, 341,803 are spread across Bauchi, Gombe, and Yobe states. Despite government efforts to rehabilitate the internally displaced people in the region, about 5,108 IDPs in specific terms have reported mental or intellectual disabilities spread across the states. In addition, the PWDs among the IDPs in the region sum up to 6,921, out of which 36 *per cent* reside in Adamawa, 30 *per cent* in Borno, 12 *per cent* in Yobe, 9 *per cent* in both Bauchi and Taraba and only 3 *per cent* in Gombe (UNHCR et al 2016).

Model specification

In this respect, we adopted the Ordinary Least Square techniques to analyse the cross-sectional dataset. The model to be estimated is stated as:

$$LH_i = \beta_0 + \beta_1 COVGS_{i..n} + \beta_2 EDU_{i..n} + \beta_3 GENDER_{i..n} + \beta_4 AGE_{i..n} + \beta_5 NGO_{i..n} + \beta_6 REG_{i..n} + \beta_7 MRS_{i..n} + \mu \quad (1)$$

Where: LH is livelihoods proxy by three different variables (level of income, value of landed property and charity). Each of the three variables was used as the dependent variable and this gives us three different estimated models.

COVGS represent governmental support during the COVID-19, EDU is the level of education of the respondents, GENDER stands for the gender of the respondents., AGE is the age of the respondents and NGO represents the non-governmental support available during the pandemic. REG and MRS represent the religion and marital status of the respondents, respectively, while $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are the parameters of the model, μ is the stochastic error term and $i \dots n$ represents individual 1 up to the last respondents.

Apriori, it is expected that livelihood will be directly related to governmental support, level of education, and support from NGOs, and indirectly related to marital status, and age. Gender, tribe and religion can assume any of the relationships.

Sampling techniques and size

This study relies solely on primary sources of data to collect both quantitative and qualitative data. The qualitative data were collected through the administration of copies of a structured questionnaire, while qualitative data were collected using Key Informant Interview (KII) and Focus Group Discussion (FGD). The essence of combining FGD with KII in this study is to get divergent opinions on the issues under discussion (list of FGD participants not attached but available on request). For the semi-structured questionnaire, the study adapted the Coronavirus Disability Survey (COV-DIS) developed by the University of Michigan Centre for Disability Health and Wellness to generate data about the experiences of PWDs during the outbreak of COVID-19 in the USA.

A total of 1200 questionnaires were administered. To arrive at the sample size, the study utilises a multi-stage sampling technique in its approach. In the first stage, a stratified sampling technique was adopted to stratify the Northeast into 6 States in line with the National Population and Housing Census (2006). Out of the 6 States, three (3) states (Bauchi, Gombe and Yobe) were systematically selected from the northeastern region. This is to ensure equal representation of each state in the selected sample. To this end, each of the selected states has been grouped into two strata- urban and rural to have a total number of 6 strata using the predetermined cut-off points. An area with a population of 20,000 and above is categorised as urban (NPC, 2019). Thus, the sample has been selected independently and proportional to their size in each of the 6 strata. To reach the target respondents, the respondents are stratified into different domains. In line with the World Health Organisation Classifications of Functioning, Disability, and Health, the PWDs are stratified into six (6) domains of disabilities; hearing, vision, speech impairment, learning disabilities, and physical, and mental disabilities (NPC, 2019). Out of 438, 382 PWDs in the Northeast, Bauchi, Gombe and Yobe states accounted for 341,803 PWDs. Specifically, Bauchi State accounted for 54,424 PWDs, while Gombe and Yobe states have 93,950 and 193,325 PWDs, respectively. Based on Yamane's formula four hundred (400) respondents represent an appropriate sample size from each of the states. In this vein, 400 respondents were selected from each of the states covered by the study, using probability sampling techniques, taking into consideration each stratum of the PWD domain (see Appendix VII). This gives a total number of 1,200 sample size respondents across the three states. Before the data

collection exercise, a pilot study was conducted in Sokoto state covering three LGAs located within the metropolis based on a sample size of 120 respondents (40 respondents per LGA). For reliability, the same set of instruments were consistently administered to the respondents by the trained research assistants to ensure consistency and accuracy. Earlier before the pilot study, experts thoroughly validated the questionnaires to ensure their relevance and alignment with the study objectives.

For the collection of qualitative data, 15 Key Informant Interviews and 9 FGDs were conducted across the three states in line with Mckenzie et al. (2021), and the Key informants were purposively selected. Hence, only leaders of an association/organisation and relevant members of the group who can give information about the entire association/organisation are identified.

Variables definition and measurements

The livelihood of PWDs is measured based on the total available capital proxied by three different variables (Gatiso et al., 2018). Whatever affect these proxies affect the total capital of the PWDs. These are the PWDs' level of income during COVID-19; the value of individual assets proxy by landed properties measured in monetary terms; and social capital measured by the amount of charity received by PWDs during the pandemic(Gatiso et al., 2018). Some PWDs are either self-employed or employed under the government/private sector, therefore income is conceptualised to be the amount of money earned by PWDs after providing certain services while charity is viewed as alms received from individual members of the community but not earned.

To estimate the influence of available support on the livelihood status of PWDs in the study area, we disaggregated available support into government support and non-governmental support (support from NGOs and registered Civil Society Organisations [CSOs]). Access to government support and community-based support during the COVID-19 pandemic were measured as binary variables, “1” for respondents that have benefitted from any of the support and “0” otherwise.

There are demographic factors that affect livelihood outcomes, these were captured by the age of respondents, measured in ordinal terms (using the Likert scale) ranging from 18 years and above, disability types measured in nominal terms ranging from 1-6, (mental/psychological, cognitive, physical/mobility, speech, visual, and hearing disability), while the gender of the respondent was also captured as dichotomous variable taking “1” for Male and “0” for female. The religion and tribes of the respondents were captured in nominal terms, measured on a Likert scale. The three dominant religions were captured, 1 for Islamic, 2 for Christianity and 3 for other beliefs, while the tribes of the respondents were captured ranging from 1 to 5, 1 for Hausa 2 for Yoruba, 3 for Igbos, 4 for Fulani and 5 for others. Religion encourages acts of charity and good deeds; therefore, it is believed that religion in the study area may have a significant implication on livelihood status. Marital status of the respondent was also measured in nominal terms ranging from 1– 4; 1 for married, 2 for single, 3 for divorcee and 4 for widow/widowers. Educational attainment was measured in an ordinal term ranging from 1 (for no school attended) to 5 for those who have completed tertiary education.

Results and Discussion

The study adopts both quantitative and qualitative methods of data analysis. This is predicated on the view that quantitative data might lack depth of coverage, therefore results obtained from qualitative results were used to corroborate findings from quantitative data. Qualitative data were analysed based on content analysis, while the quantitative data collected were analysed using descriptive and inferential statistics. Specifically, descriptive statistics in the form of charts, tables and percentages were used, for inferential statistics, the Ordinary Least Squares technique was favoured.

Descriptive results

Table 1 shows the age distribution of the respondents in the study area. This is to enable the researcher to examine the relationship between the age of respondents and their livelihood status during the COVID-19 pandemic.

Table 1: Age Distribution of the Respondents in Northeast geopolitical zone

Age of the respondents	Frequency	Percentage (%)
18 – 35 years	643	54.86
36 – 50 years	359	30.63
51 – 65 years	110	9.39
66 years and above	60	5.12
Total	1,172	100.00

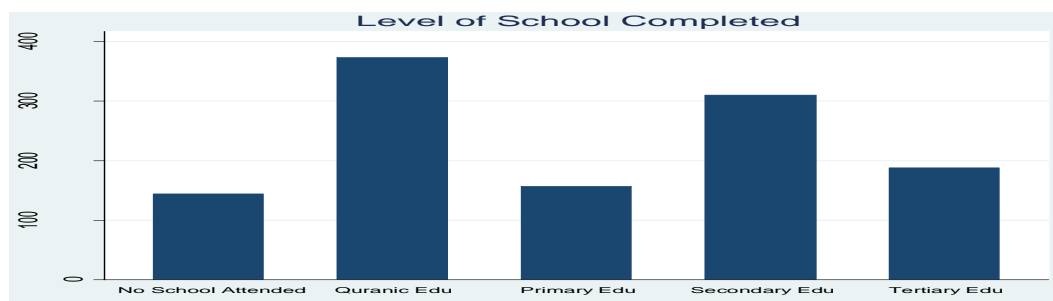
Sources: Author’s Computation using STATA 17, 06/05/2023.

It can be seen from Table 1 that about 54.86*per cent* of the respondents are between the ages of 18 – 35 years. This implies that most of them are in their active age. Ideally, youth of this age bracket are expected to be productive. Surprisingly, revelation from KII-BCH-5 indicates that the majority of PWDs in the study area rely on charity (see the response KII-BCH-5 below):

Normally, for most PWDs in the northern part of the country, about 80*per cent* depend on street begging to meet their day-to-day needs and other necessities of life. And because of this lockdown, they could not go out to beg. The money they were getting from the street begging is what they used to buy clothing, food, pay rent, etc. (KII-BCH5, 14/08/2023)

This implies that a greater percentage of PWDs between the ages of 18 - 35 years are into begging/collection of alms. This might be due to their underlying predicament. It can be inferred from the submission of the key informant (KII-BCH5) that most of the respondents are somewhat unproductive despite their youthful ages. This underscored the fall in the livelihood status of the majority of PWDs during the COVID-19 pandemic as their daily source of individual support was disrupted.

The distribution of the respondents according to the level of their educational attainment is presented in Figure 1 The figure shows that Qur’anic education recorded the highest score followed by secondary education.



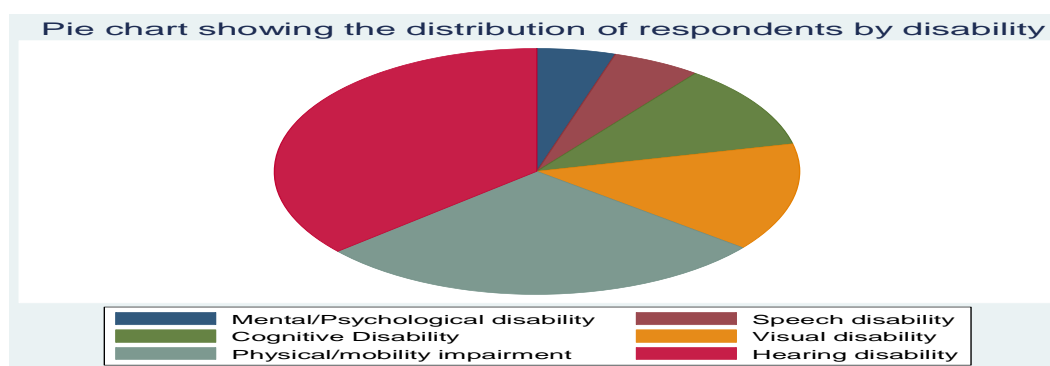
Source: Fieldwork, 2022.

Figure 1: Respondents’ Responses on Level of School Attainment.

About 373 respondents corresponding to 31*per cent* had attended Qur’anic education and 310 respondents (about 26.45%) are Secondary School Certificate holders. However, 16*per cent* and 13.40*per cent* are in the category of tertiary and primary education respectively. Only 114 (12.29%) of the respondents did not attend any school. This indicates that most of the respondents have attained one level of education or the other, and this indicates their commitment to education. The higher number of respondents with Qur’anic education is not surprising, considering the population of the study area where Muslims are the dominants. However, despite their level of education, most of the respondents are unemployed. During a session, a discussant opined that:

“.... some PWDs have attended Western education whereas some have NCE, Diploma and even Degree certificates but do not have a job. This compelled most of them to beg on the street for feeding. If the government can identify and provide jobs for them, the problem of street begging will be solved or reduced to a minimum level. It is very unfortunate that in most government employment, PWDs do not have special vacancies. It is very hard to have a 5*per cent* vacancy for PWDs.” (FDG-GMB1B, 17/08/2022).

The distribution of the respondents according to their nature of disability indicates that those with hearing disability recorded the highest percentage of 36.26*per cent*, followed by those with physical mobility accounting for 28.06*per cent*.



Source: Fieldwork, 2022.

Figure 2: Distribution of Respondents by Disability.

Respondents with visual and cognitive disabilities recorded 14.92 and 11.07 *per cent* respectively while the least in the group were those with speech and mental disabilities accounting for 5.49 and 4.82*per cent* respectively as shown in Figure 2. Despite their number, the impacts on the livelihoods of the respondents with physical/mobility and speech disabilities may be somewhat less than those with visual disability. This is predicated on the belief that those with visual impairments mostly relied on the street begging for sustenance which made them vulnerable to diseases during the pandemic while the lockdown cut off sources of livelihood. This is of great concern to them as revealed by a discussant during FGD:

“....We were particularly discriminated against due to our impairment. This is because, among the PWDs, blind people are the most discriminated group. We have to beg on the street to get money for food. In some places, People have been running from us because of fear of being infected”. (FDG-YB5A, 19/08/2022).

Analysis of the accessibility of government support during the COVID-19 pandemic as shown in Table 2 indicates that 68.26per cent of the respondents reported that they did not receive any governmental support during the COVID-19 pandemic.

Table.1. Governmental Support during the COVID-19 Pandemic in Northeast geopolitical zone

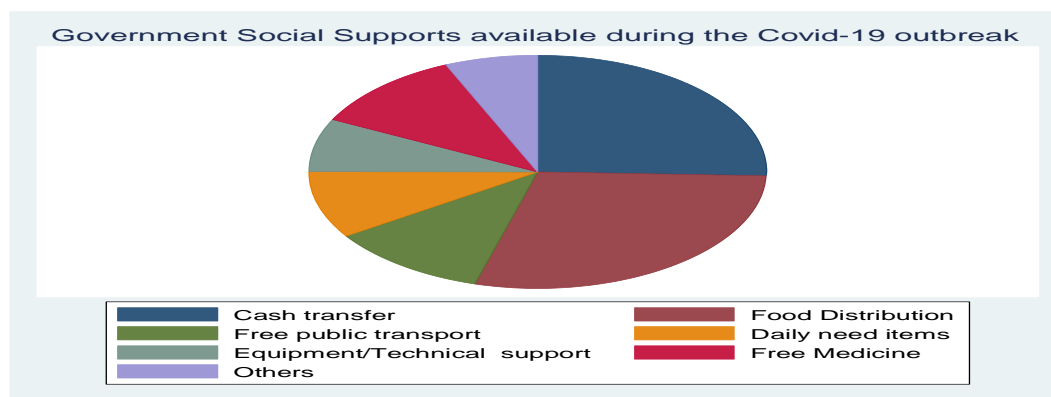
During the period of COVID-19, did you- get any governmental supports	Frequency	Percentage (%)
Yes	371	31.68
No	800	68.32
Total	1,171	100.00

Sources: Author’s Computation using STATA 14, 12/01/2023.

Only 31.66per cent of the respondents indicated that they have received certain forms of government support. Further, it was also revealed that no special provision was made for PWDs because most of the government support provided was meant for the general public despite their existing predicaments. Only a few among the PWDs were able to access the support meant for the general distribution. In one of FGD, a respondent opined that:

Despite the numerous governmental supports provided to the public as resilience to shocks from the COVID-19 pandemic, PWDs were not given any specific relief item to reduce their suffering but rather the relief items, were distributed among the rich and their relatives. There was a COVID-19 food distribution relief to all states by the federal government that targeted at least one bag of rice for each person in every state. The distribution in Bauchi was hijacked and diverted for personal interest, just a bag of rice was distributed to every group of ten (10) people both between the PWDs and the general members of the community. Things like this have complicated the situation and increased our suffering”.(FGD, Bauchi 15 August 2022)

Based on the foregoing, it can be concluded that many of the respondents do not benefit from governmental support during the pandemic. Concerning the types of government support available during the pandemic, Figure 3 shows the frequency of various types of support provided by the government during the pandemic.



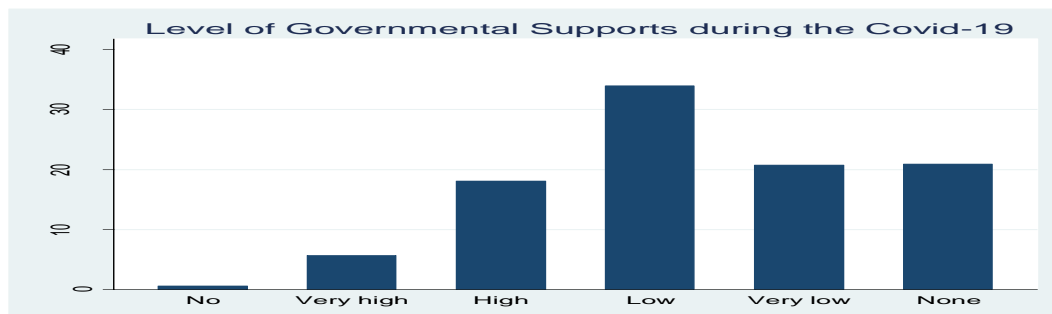
Source: Fieldwork, 2022.

Figure.3: Government Social Supports Available during the COVID-19 pandemic.

The result from Figure 3 shows that cash transfer and food distribution have the highest score among the respondents. About 807 respondents equivalent to 26.6per cent and 723 respondents equivalent to 23.97per cent respondents have enjoyed cash transfer and food support respectively. The smallest available support received by the respondents was social support with a frequency distribution of 15.03per cent. This implies Cash transfer and food distribution are the major supports available during the Pandemic. This was supported by the view of a respondent during KII in Gombe State, thus:

“...well, PWDs have received food support in Gombe state. I can remember that some of our people were called upon by the government for example, the Northeast Development Commission invited PWDs to take support and the Committee constituted by the Gombe state to investigate the impact of the COVID-19 on PWDs for allocating some shares of food items to PWDs and some politicians also have provided supports of food items and hygienic materials for PWDs. Again, the federal government through the Ministry of Humanitarian Affairs came with support items for some PWDs. However, of the supports only go too few among the PWDs just a fraction of the PWDs benefited as compared to the available number of the PWDs in general. Just like 100 out of 50,000 people in a state. It is quite little in comparison to the number of the PWDs. So, the penetration is not significant”. (KIIGMB-NGO AA, 17 August 2022).

The rating of available government support was also analysed using a bar chart as shown in Figure 4 which equally supports the view expressed by KIIGMB-NGO AA 17, revealing that about 35per cent of the respondents agreed that the available support is low.



Source: Fieldwork, 2022. Figure 4 Respondents’ Ratings for the level of Government Support available during the COVID-19 pandemic.

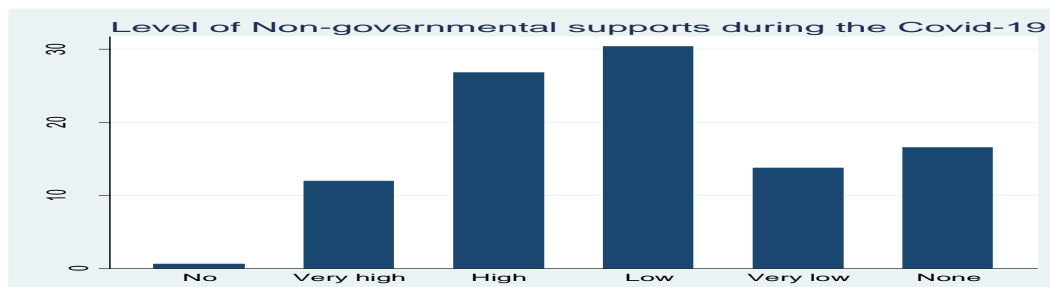
While 22per cent of the total respondents rated the available government support to be very low indicating that more than half of the respondents considered the governmental support not to be quite enough to impact on their livelihoods status. Only 19per cent and 7per cent rated the available government support to be high and very high respectively. These results disprove the opinion expressed during the FGD in Yobe state that many of their people have benefited from the Government support. FGD Yobe revealed that:

“... There was a special slot for a cash support scheme of ₦20,000 for six months which was given to PWDs. Many other people and

women PWDs have also benefited in particular”(FGD Yobe, August 2022).

The above indicates that the government has a special consideration for the PWDs in the implementation of cash transfers and that many of them have benefited from the support. However, the descriptive statistics as shown in Figures 5. and 6 , as well as the revelation coming from KIIGMB-NGO AA proved that the PWDs have not gotten adequate support during the pandemic. This implies that the implementation and distribution of social support lack inclusivity.

To analyse the non-governmental support available to PWDs during the pandemic, a bar chart was constructed on respondents’ ratings of the non-governmental support available during the pandemic.



Source: Fieldwork, 2022.

Figure 5: Respondents’ Ratings of Non-Governmental Supports during the COVID-19 pandemic.

It can be observed that about 27per cent and 13per cent of the respondents rated support from NGOs as high and very high respectively. In specific terms, 40per cent of the respondents are of the view that non-government support during the pandemic was either very high or high. However, about 30per cent and 14per cent rated the support from NGOs to be low and very low respectively. In sum, about 44per cent of the respondents indicated that the support coming from NGOs is low. To further establish the low level of support received by PWDs during the pandemic, below is a submission by a key informant:

“... Yes, we learnt that there was food distribution by the government, but I have not heard of any PWD that was given this support. However, I can recall one cash support of ₦5,000 that was given to a few of our members. Apart from this, t no support was given specifically for PWDs. Even the NGOs did not support us throughout the period.” (KII-GMB2, 18/08/2022).

However, the above submission was disapproved by a respondent during the FGD in Yobe state, confirming the receipt of cash support by the NGO during the pandemic:

“...Some of us have received cash support of about thirty-thousand naira for three months to each of us. This money was given by the Red Cross, not the government” (FGD-YB-20/08/2022).

What could be deduced from the above submission and the descriptive statistics result is that the non-governmental support provided during the pandemic does not cover many vulnerable groups in the study area.

Regression results

Ordinary Least Square regression analysis was conducted to test the hypothesis that there is no significant association between governmental support and the livelihoods of PWDs in the study area.

Table 3: Ordinary Least Square Regression Results

Dep. Variable:	Model 1 (Income)	Model 2 (Charity)	Model 3 (Value of Asset)
Govt. Support	0.5170*** (0.000)		1.2966*** (0.006)
Educational Attainment	-0.0263 (0.552)	0.1431** (0.023)	-0.3023* (0.092)
Gender	0.2814** (0.028)	0.739762 (0.654)	1.0805** (0.025)
Age	-0.0169 (0.802)	0.1099 (0.215)	0.8659*** (0.001)
NGOs Support	0.8013** (0.018)	0.1129** (0.014)	0.2329* (0.077)
Religion	0.7737 (0.804)	0.4589 (0.377)	-1.5359** (0.035)
Marital Status	-0.1721** (0.029)	-0.2334*** (0.007)	-0.4997 (0.205)
Family Support		-0.0770 (0.109)	
Tribe		-0.0152701 (0.567)	
Constant	8.6551*** (0.000)	7.8556*** (0.000)	10.6999*** (0.0000)
F-Values	4.64*** (0.000)	3.09*** (0.0000)	5.72*** (0.0000)
VIF	1.07	1.16	1.21
Ramsey Rest Test	0.13 (0.9410)	0.29 (0.8341)	3.75*** (0.0140)
R-Squared	0.0584	0.0610	0.3227
Adj. R- Squared	0.0458	0.0413	0.2663

Note: ***, ** & * represent Significant at 1%, 5% and 10% (***). Values in parentheses are the Probability values. Source: Author's Computation using STATA 14, 14/06/2023.

Specifically, Model 1 presents the OLS estimate of the impact of government support on a household's livelihood proxy by level of income. The result indicates that governmental support during COVID-19 has a significant positive impact on household income and assets. This implies that COVID-19 support (government support) has had a significant positive impact on the monthly income as well as on the value of assets of PWDs during the pandemic. This finding is in line with Mensah et al. (2023) and contradicts that of Thompson et al. (2021) in their study on the experience of PWDs during COVID-19 in Nigeria. Education has a negative impact on the level of income and available assets, while it positively impacts charity. It needs to be noted that the majority of PWDs either were not educated or only completed primary school education which limited their earnings capacity. As a result, their sources of income were cut off and they had to dispose of their landed property as a coping strategy as the pandemic lasted. However, those with low levels of education that depended on charity as the major source of income even before the outbreak of COVID-19, only have their sources of income as well as the available landed property moderately affected. However, this finding contradicts Adeosun and Owolabi (2021) and Usman and Lestari (2016) who noted that higher education contributes to high wages of households. Examining the influence of gender on the livelihoods of PWDs, the result indicates a positive and significant impact of gender on the livelihoods

of PWDs at a *5per cent* level of significance, with the exception of Model 2, where the impact is not significant.

In Models 1-3, age had no significant impact on the level of income and amount of charity received by PWDs during the COVID-19 pandemic with the exception of Model 3 where the impact is significant and positive at *5per cent*. In specific terms, an increase in the age of the respondents by one year will result in 0.8658 increases in the worth of landed property owned by the respondents. On average, it could be concluded that the age of the respondents is not a significant factor that influences livelihood status. In addition, the result presented in Table 3, support by Non-Governmental Organisations (NGOs) during the pandemic tends to exert a significant positive impact on the livelihood status of PWDs throughout Models 1-3. Interlia, submission by both the KII and FGDs that Non-Governmental Organisations (NGOs) are the most significant support received by PWDs during the Pandemic further corroborates the above results from the OLS. Religion of the respondents is not a significant factor influencing livelihoods measure in terms of income and charity while it negatively impacts the asset of the PWDs. This implies the older the age of the respondents the higher the amount of assets he or she acquires. The result in Table 3, Models 1-3equally indicates that marital status has a negative impact on their level of livelihoods in line with Simpson (2012). Marital status is an increasing function of family size, therefore people with larger family sizes tends to be much affected by policy measures introduced to curb the pandemic.

In Model 2, we regress the tribe of the respondents (another socioeconomic factor) and family support on the average amount of money received by PWDs as a charity, another proxy for household livelihood. It was established that tribe and family support have no significant impact on the amount of charity received by the PWDs during the pandemic.

Conclusively, based on model results obtained in Model 1-3 government support has a significant positive impact on the livelihood status of PWDs in the study area, while educational attainment, religion, marital status, and tribe, on average exert a negative significant impact on livelihoods of PWDs. This is in line with Phillip (2014) who has also found a significant impact of religion on the livelihood assets of pastoral Maasai in Monduli district, Tanzania. Gender and age of the respondents have a significant positive impact on livelihood, while family support and the tribe of respondents have an insignificant impact on the dependent variables as shown in Models 1-3.

The diagnostic statistics of all three models are robust to various tests. The F-statistics of Models 1 – 3 are 4.64, 3.09, and 5.72 respectively and significant, the Variance Inflation Factor (VIF) for models 1-3 are 1.07, 1.16, and 1.21 respectively indicating that the models are free from the problem of multicollinearity. Ramsey rest test was also employed to check for the problem of omitted variable bias. The result shows that the models are free from misspecification error except for Model 3 with a significant probability value of 0.0142.

Conclusion

The study examined the impact of COVID-19 policy measures on the livelihoods of PWDs in the Northeastern part of Nigeria using a mixed-method approach. The study relies on a sample of 1,200 respondents systematically selected across the three states based on multistage sampling techniques. The study acknowledged that various measures were implemented by the government to curb the spread of the COVID-19 pandemic and measures have negatively affected the livelihoods of PWDs in the Northeastern region of Nigeria. The study noted that to cushion the effects of the mobility restriction and associated measures, government and non-governmental organisations have provided various supports such as food distribution, cash transfer, and COVID-19 survival loans and the supports have significantly improved the livelihood status of PWDs during pandemic. However,

results from qualitative data indicate that these supports were not properly distributed as few among the PWDs were fortunate to benefit.

In line with this revelation, it is recommended that the implementation of social support policy meant to assist vulnerable groups needs to be intensified during future disasters or uncertainties, and most importantly the policy should be inclusive both in its design and implementation.

Government should provide educational support to people that are poor and schools for PWDs should be established in the various local government areas of the states in the Northeast of Nigeria.

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