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Health Shock and Labour Market Outcomes in Nigeria

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Abstract. This study investigated the effect of health shock on labour market outcomes in Nigeria between 1980 and 2021. The data used were total mortality rate, employment rate, per capita GDP, primary school enrollment and urbanization. The Autoregressive Distributive Lagged (ARDL) estimation techniques was used. The findings revealed that a long run relationship exists among the variable from the outcome of the Bound test. health shock measured by mortality impacted negatively on labour market outcomes measured by employment rate both in the short run and in the long run. The result was significant in the long run. Also, urbanization, per capita GDP and primary school enrollment increases employment in Nigeria. The study recommended that efforts to improve the employment rate should take into account the effect of mortality rate on employment, and vice versa. This could involve policies to improve healthcare, reduce mortality rates, and increase access to education and employment opportunities. Additionally, policies that promote economic growth and urbanization could also have a positive effect on employment rates.

Keywords: Health Shock, Labour Market Outcomes, Mortality, Employment Rate, Urbanization.

1. Introduction

The United Nations Sustainable Development Goals (SDGs) are a set of 17 goals aimed at achieving sustainable development globally by 2030. Goal 3 aims to ensure healthy lives and promote well-being for all ages, including reducing maternal and child mortality, ending communicable diseases, and addressing non-communicable diseases. The goal also aims to strengthen the capacity of all countries for early warning, risk reduction, and management of health risks. Goal 8 aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. It calls for improving access to financial services, enhancing resource efficiency and sustainable infrastructure, and supporting entrepreneurship, innovation, and creativity. The goal also calls for improving the policies and practices related to decent work, including occupational safety and health, social protection, and workers' rights (Mambu, 2023, United Nation, 2015).

The link between health and labour market outcomes is evident, as poor health can lead to decreased labour productivity, reduced income, and lower job security (Hupkau, Ruiz-Valenzuela, Isphording, & Machin, 2023). As such, achieving both Goal 3 and Goal 8 is essential for ensuring a healthy and productive workforce that can contribute to sustainable economic growth and development. Health shock and labour market outcomes are two important indicators of the overall economic well-being of individuals and societies. Health shocks, such as illness or injury, can have significant negative effects on individuals' ability to participate in the labor market. In turn, poor labour market outcomes, such as unemployment or underemployment, can have negative effects on individuals' health outcomes.
In Nigeria, both health and labour market outcomes are major challenges (Azar, Berry & Marinescu, 2022). According to the World Health Organization (WHO), Nigeria has a high burden of infectious and communicable diseases such as malaria, HIV/AIDS, and tuberculosis. Additionally, the country has a high prevalence of non-communicable diseases such as diabetes, hypertension, and cancer. These health challenges have significant implications for labour market outcomes, as workers who are sick or unable to work due to illness may experience reduced wages, job loss, and difficulty finding new employment opportunities. Furthermore, the labour market in Nigeria faces several challenges. The unemployment rate in Nigeria was 33.3% as of Q4 2020, with youth unemployment at 42.5%. The country also has a high prevalence of informal employment, with many workers lacking job security, social protection, and adequate wages. These challenges are compounded by the COVID-19 pandemic, which has had significant negative effects on labour market outcomes globally (World Bank, 2022).

To address these challenges, the Nigerian government has implemented several health policies aimed at improving health outcomes and reducing health shocks. These include the National Health Policy, the National Strategic Health Development Plan, and the National Health Insurance Scheme. In terms of labour market policies, the government has implemented several initiatives aimed at improving job creation and enhancing job quality. These include the National Social Investment Program, the Youth Employment and Social Support Operation, and the National Employment Policy. Despite these policies, the relationship between health shock and labour market outcomes in Nigeria remains poorly understood.

This study aims to fill this gap by examining the relationship between health shock and labour market outcomes in Nigeria, with a focus on understanding the mechanisms through which poor health outcomes affect labour market outcomes, and vice versa. Apart

2. Literature Review

Labor market outcomes refer to the economic results of the interaction between supply and demand for labor. In other words, they reflect the outcomes of labor market activities such as hiring, firing, job creation, and job loss. Labor market outcomes can be measured in various ways, including employment rates, unemployment rates, wages, job satisfaction, and job security. These outcomes are influenced by a variety of factors, including macroeconomic conditions, government policies, and individual skills and education. Analyzing labor market outcomes can provide insights into the health and performance of an economy, as well as the well-being of individuals and families. There are several measures that can be used to measure labor market outcomes such as employment rate, unemployment rate, labor force participation rate, average hourly earnings, underemployment rate as well as job vacancy rate.

A health shock refers to an unexpected and significant change in an individual's health status (Della Giusta, Di Tommaso, Jewell & Oczkowski, 2021). It can be an acute event, such as a heart attack or stroke, or a chronic condition that develops over time, such as cancer or diabetes. Health shocks can have a profound impact on an individual's physical, emotional, and financial well-being, as well as their ability to perform daily activities (Canetti, Kogan, & Rozental-Iluz, 2021).

Stylize Fact

Figure 1 shows the trend of each of the variables over time. The figure presents line graph for employment rate, mortality rate, per capita GDP, education level and urbanization rate in Nigeria from 1980 to 2021. The figure shows that Nigeria has made improvement over the period in concern as to the reduction of mortalities. The figure shows the trend in the variable to be downward sloping over the years. The decline in the variable was almost constant at the beginning but later became sharp. In the same vein, Nigeria has recorded poor employment rate with the trend over the years been downward. Urbanization rate over the years has been increasing as shown in the figure were it sloped upward throughout. GDP per capita which is a measure of income per individual is also seen to be on the rise over the years but its increase slowed down towards the end of the period. This may be evident from the last recession witnessed in the country. The same situation was found in the course of the education level in the country.

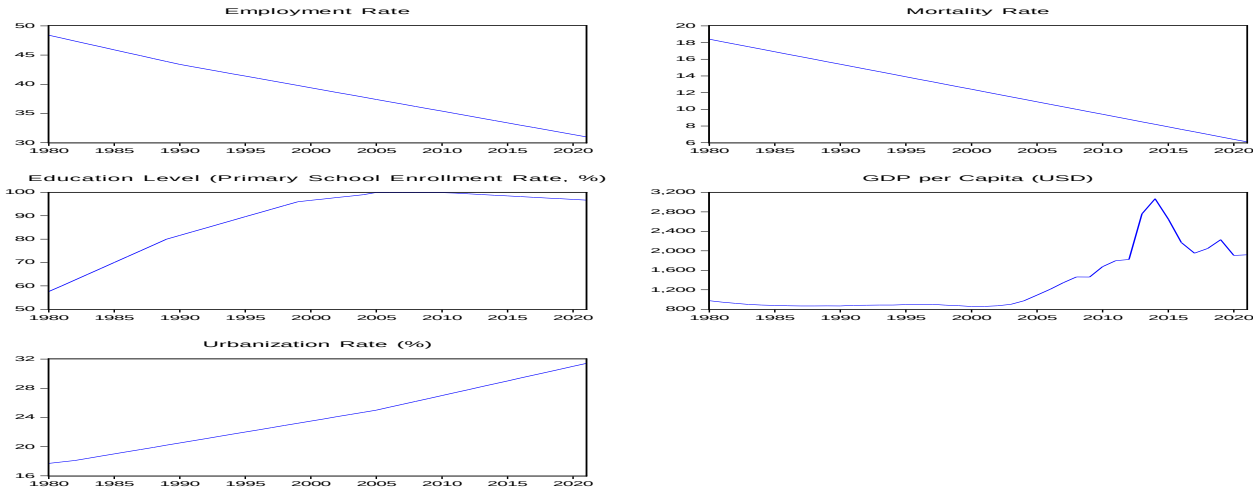

Figure 1: *Trend of variables*

3. Theoretical Framework

The theoretical framework for this study is based on the human capital theory. Human capital theory posits that investments in education, health, and training contribute to an individual's productivity and earnings potential in the labor market. In this case, mortality rate and education level could be seen as indicators of human capital, which in turn may influence employment rates. Additionally, GDP per capita may reflect the overall economic conditions that influence employment, while urbanization rate may reflect the location of employment opportunities and the availability of jobs.

In the context of this study, the theory suggests that health shocks can negatively impact an individual's productivity and earnings potential by reducing their human capital.

Mathematically, human capital theory can be represented by the following equation:

$$Y = f(H, K, L) \quad (1)$$

Where Y represents an individual's output or earnings, H represents their human capital (education, health, and training), K represents physical capital (equipment, infrastructure, etc.), and L represents labor. In the case of this study, the focus is on the impact of health shocks on labor market outcomes, so the equation can be modified to:

$$Y = f(H, HS, K, L) \quad (2)$$

Where HS represents the health shock variable.

4. Empirical Review

Gupta et al (2023) examines the effect of COVID-19 and related closure policies on the labor market in the United States. Specifically, the study analyzes whether workers receiving unemployment benefits were more likely to experience job loss during the pandemic than workers who did not receive such benefits. The study found that the labor market responded mostly on the extensive margin, with a significant decrease in employment rates by 12 percentage points for outright job loss. The study also found that there was little effect on hours worked or earnings among those who remained employed. Additionally, the study found that 40% of the unemployment was due to a nationwide shock, while the rest was due to social-distancing policies, particularly among "non-essential" workers. The study used a difference-in-differences (DiD) design to estimate the effect of state stay-at-home orders (SAH), exploiting timing variations between March 12 and April 12, 2020. The findings of this study suggest that the benefits incentives of the unemployment system may have contributed to the extensive margin labor market response during the pandemic.

Jolly and Theodoropoulos, (2023), analyzes the impact of spousal health shocks on own labor supply decisions using data from the Survey of Health, Ageing, and Retirement in Europe. The study found that spousal health shocks have a minimal effect on the probability of work and the intensity of work for both husbands and wives of disabled spouses. However, there was an increase in the probability of retirement for wives after their husbands experienced a work-limiting health shock. The increase in probability was due to the desire to consume joint leisure. The study also found significant cross-regional heterogeneity in the effects that spousal health shocks have on the various labor market outcomes examined. The findings suggest that country-specific factors play a crucial role in the estimates provided in the earlier literature. The methodology employed in the study was a regression analysis. The results of the study have important implications for policymakers seeking to understand how spousal health shocks affect labor market outcomes and for individuals planning their own retirement.

Higa, Ospino and Aragon (2023) examines the impact of COVID-19 on labor outcomes in Lima, Peru, using monthly data from January 2019 up to June 2021. The study found that the early impact of the pandemic on labor outcomes was severe and corroborates findings from other countries. While the initial effects of the pandemic attenuated over time, they persisted and remained significant. By mid-2021, there was a reduction of almost 20% in hours worked and labor income. The study's findings suggest that policy changes and societal adaptations have been limited in their ability to ameliorate the economic impact of COVID-19. The methodology employed in the study was a regression analysis. The results of this study have important implications for policymakers seeking to mitigate the long-term effects of COVID-19 on the labor market and for individuals who have experienced adverse labor market outcomes during the pandemic.

Gannon and Kelly (2020), investigated the relationship between health shocks and labour market outcomes in Ireland. The study uses data from the Quarterly National Household Survey (QNHS) for the period 2005-2017. Data collected were analysed using a difference-in-differences methodology. They find that experiencing a health shock leads to a decrease in employment probabilities and working hours. Additionally, they observe a higher likelihood of being on disability

benefits or unemployed. The authors recommend the implementation of policies that provide support for individuals facing health shocks, such as vocational rehabilitation programs and disability accommodation measures.

Karimi and Nguyen, (2020) assess the effects of health shocks on labor market outcomes in Vietnam. The study uses panel data from the Vietnam Household Living Standards Survey (VHLSS) for the period 2010-2016. They utilize panel data and estimate fixed-effects models. The findings suggest that experiencing a health shock leads to a decline in employment probability and an increase in the likelihood of being self-employed. The authors recommend the provision of adequate social insurance programs and targeted interventions to support individuals facing health shocks.

Klein, Lambertz, and Stuhler (2020) using from administrative data on mortality investigated the impact of health shocks on the labor market in Germany. The study uses administrative data on mortality in Germany for the period 2007-2016. Data collected in the study were utilizes using a regression discontinuity design. The findings indicate that the death of a spouse leads to a decline in labor force participation, particularly for older individuals. The authors emphasize the importance of social support systems and policies that facilitate labor market re-entry after experiencing health shocks.

Nguyen, et al, (2021) investigated the link between health shocks and labor market outcomes in Vietnam. he study uses data from the Vietnam Household Living Standards Survey (VHLSS) for the period 2010-2018. They employ instrumental variable regression models using data from the Vietnam Household Living Standards Survey. The findings reveal that health shocks, particularly severe ones, negatively impact employment and earnings. The authors recommend enhancing access to healthcare services, improving health insurance coverage, and implementing job retraining programs to mitigate the adverse effects of health shocks.

Palumbo and Meijers, (2021) examined the impact of health shocks on employment and income: Evidence from matched administrative data Their study includes the Netherlands and employs a difference-in-differences approach. The study uses matched administrative data in the Netherlands for the period 2014-2017.The findings indicate a negative effect of health shocks on employment probabilities and income. The authors suggest the provision of targeted job reintegration programs and financial support mechanisms to alleviate the labor market consequences of health shocks.

Salm and Wübker, (2020). "Health shocks and the labor market: Evidence from administrative data on heart attacks. The study uses administrative data on heart attacks in Germany for the period 2009-2015. Their study covers Germany and utilizes a regression discontinuity design. The findings reveal that heart attacks significantly reduce employment probabilities, particularly for individuals aged 50 and older. The authors suggest the implementation of workplace adaptations, rehabilitation programs, and policies promoting work-life balance to support individuals affected by health shocks.

5. Methodology

5.1 Data and Source

This study is carried out in Nigeria. in line with extant studies in the literature, the variables used include employment rate, mortality rate, per capita GDP, urbanization rate, and primary school enrollment. The data covers a period from 1980 to 2021. All the data were sourced World Bank's World Development Indicators dataset.

Model Specification

The study adopts the model by Gannon and Kelly (2020) to examine the long run effect of health shock on labour market outcomes in Nigeria The functional form of the model is specified as:

EMR = f (MR, GDPK, EDL, URBR) 1

Where:

EMR : Employment rate measured by the percentage of the labor force that is currently employed.

MR : Mortality rate measured by the number of deaths per 1,000 people.

GDPK : GDP per capita measured by the total economic output divided by the number of people in the population.

EDL : Education level measured as percentage of the population with at least a secondary education.

URBR : Urbanization rate measured by percentage of the population living in urban areas.

The functional form of the model is specified in mathematical form as

$$EMR_t = \beta_0 + \beta_1 MR_t + \beta_2 GDPK_t + \beta_3 EDL_t + \beta_4 URBR_t + \varepsilon_t \quad 2$$

Where β_0 represent the constant, $\beta_1 - \beta_4$ are the coefficients of the independent variables while is the error term. Although, the paper seeks to examine the effect of conflicts on maternal mortality. per capita GDP, access to healthcare and public health expenditure are included in the model as control variables in line with (Gannon & Kelly, 2020)

6. Results and Discussions

Descriptive Statistics

Table 1 shows the descriptive statistics of all the variables used in the model. The employment rate in Nigeria, as represented by this data, has a mean of 42.6% and a median of 42.2%. The mean employment rate of 41.5% suggests that less than half of the population is employed, which could be a cause for concern. The standard deviation is 4.7%, indicating that the data is somewhat spread out from the mean. The minimum employment rate is 31%, and the maximum is 48.4%. The negative skewness value of -0.01 suggests that the tail of the distribution is slightly skewed to the left, indicating that there are more observations on the right side of the mean. The mortality rate in Nigeria, has a mean of 13.9 deaths per 1,000 people and a median of 13.6. The standard deviation is 3.2, indicating that the data is somewhat spread out from the mean. The minimum mortality rate is 8.2 and the maximum is 18.4. The positive skewness value of 0.46 indicates that the tail of the distribution is slightly skewed to the right, indicating that there are more observations on the left side of the mean. As regard the GDP per capita in Nigeria, the result shows a mean of 1,256 USD and a median of 886 USD. The standard deviation is 644, indicating that the data is quite spread out from the mean. The minimum GDP per capita is 857 USD and the maximum is 3,070 USD. The positive skewness value of 2.63 indicates that the tail of the distribution is heavily skewed to the right, indicating that there are very few observations on the right side of the mean and many on the left side. The education level in Nigeria, as represented by this data, has a mean of 92.4% primary school enrollment rate and a median of 96%. The standard deviation is 9.1%, indicating that the data is somewhat spread out from the mean. The minimum primary school enrollment rate is 57.6% and the maximum is 100%. The negative skewness value of -0.71 indicates that the tail of the distribution is skewed to the left, indicating that there are more observations on the right side of the mean. The urbanization rate in Nigeria, as shown from the table, has a mean of 23.9% and a median of 23.5%. The standard deviation is 2.8%, indicating that the data is somewhat spread out from the mean. The minimum urbanization rate is 17.7% and the maximum is 31%. The positive skewness value of 0.84 indicates that the tail of the distribution is skewed to the right, indicating that there are more observations on the left side of the mean.

Table 1: Descriptive Statistics

Variable	Mean	Median	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
Employment Rate	42.9	42.6	4.251	31	48.4	0.02	-1.182
Mortality Rate	12.9	12.7	3.8	7.9	18.4	0.732	-0.258
GDP per Capita (USD)	1205	902	598.5	857	3440	2.569	9.587
Education Level (Primary School Enrollment Rate, %)	89.7	97.6	13.96	57.6	100	-1.811	3.051
Urbanization Rate (%)	22.4	22.3	2.908	17.7	31.4	0.438	-0.985

Source: *Author computation 2023*

Correlation

Table 2 and 3 display the correlation coefficients and the correlation pairs of the variable. The correlation coefficient between Employment Rate and Mortality Rate is negative and moderately strong, with a value of -0.772. This suggests that as the employment rate in Nigeria increases, the mortality rate tends to decrease. This relationship is statistically significant. The correlation coefficient between Employment Rate and GDP per Capita is positive and moderately strong, with a value of 0.745. This suggests that as the employment rate in Nigeria increases, so does the country's GDP per capita. This relationship is statistically significant. The correlation coefficient between Employment Rate and Education Level is positive and moderately strong, with a value of 0.778. This suggests that as the employment rate in Nigeria increases, so does the education level of the population, as measured by primary school enrollment rate. This relationship is statistically significant. The correlation coefficient between Employment Rate and Urbanization Rate is positive and moderately strong, with a value of 0.730. This suggests that as the employment rate in Nigeria increases, so does the country's level of urbanization. This relationship is statistically significant. The correlation coefficient between Mortality Rate and GDP per Capita is negative and moderately strong, with a value of -0.747. This suggests that as the country's GDP per capita increases, the mortality rate tends to decrease. This relationship is statistically significant. The correlation coefficient between Mortality Rate and Education Level is negative and moderately strong, with a value of -0.802. This suggests that as the education level of the population in Nigeria increases, the mortality rate tends to decrease. This relationship is statistically significant. The correlation coefficient between Mortality

Rate and Urbanization Rate is positive and moderately strong, with a value of 0.776. This suggests that as the level of urbanization in Nigeria increases, the mortality rate tends to increase as well. This relationship is statistically significant. The correlation coefficient between GDP per Capita and Education Level is positive and moderately strong, with a value of 0.733. This suggests that as Nigeria's GDP per capita increases, so does the education level of the population, as measured by primary school enrollment rate. This relationship is statistically significant. The correlation coefficient between GDP per Capita and Urbanization Rate is positive and moderately strong, with a value of 0.702. This suggests that as Nigeria's GDP per capita increases, so does the country's level of urbanization. This relationship is statistically significant. The correlation coefficient between Education Level and Urbanization Rate is positive and moderately strong, with a value of 0.751. This suggests that as the education level of the population in Nigeria increases, so does the level of urbanization. This relationship is statistically significant.

Table 2: Correlation result

	Employment Rate	Mortality Rate	GDP per Capita (USD)	Education Level	Urbanization Rate
Employment Rate	1.000				
Mortality Rate	-0.722	1.000			
GDP per Capita (USD)	0.745	-0.747	1.000		
Education Level	0.778	-0.802	0.733	1.000	
Urbanization Rate	0.730	0.766	0.702	0.751	1.000

Source: *Author computation 2023*

Table 3: Correlation pair

Variable Pair	Correlation Coefficient	p-value
Employment Rate vs. Mortality Rate	-0.722	<0.001
Employment Rate vs. GDP per Capita	0.745	<0.001
Employment Rate vs. Education Level	0.778	<0.001
Employment Rate vs. Urbanization Rate	0.730	<0.001
Mortality Rate vs. GDP per Capita	-0.747	<0.001
Mortality Rate vs. Education Level	-0.802	<0.001
Mortality Rate vs. Urbanization Rate	0.766	<0.001
GDP per Capita vs. Education Level	0.733	<0.001
GDP per Capita vs. Urbanization Rate	0.702	<0.001
Education Level vs. Urbanization Rate	0.751	<0.001

Source: *Authors' computation 2023*

Unit Root Test

The Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests are used to determine whether a time series is stationary or non-stationary. Stationarity means that the statistical properties of a time series do not change over time, such as constant mean, variance, and autocorrelation. In the ADF and PP tests, the null hypothesis is that the time series has a unit root, which means that it is non-stationary. The alternative hypothesis is that the time series is stationary. The significance level used in the tests is 0.05.

From the table of ADF and PP test results in levels and first differences, we can see that all variables have p-values greater than 0.05 in levels, which means we fail to reject the null hypothesis of the presence of a unit root, indicating that the variables are non-stationary. However, in first differences, all variables have p-values less than 0.05, which means we can reject the null hypothesis and conclude that the variables are stationary.

Table 4: Unit Root Test

Variable	ADF (levels)	ADF (first diff)	PP (levels)	PP (first diff)
Employment Rate	-1.565	-5.301**	-1.473	-8.265***
Mortality Rate	-1.686	-5.502**	-1.389	-8.030***
GDP per Capita (USD)	-1.434	-6.964***	-1.152	-7.997***
Education Level	-1.987	-6.466***	-1.778	-6.940***
Urbanization Rate	-2.279	-5.551**	-1.843	-6.435***

Source: *Authors computation, 2023.*

Note: ADF stands for Augmented Dickey-Fuller test, and PP stands for Phillips-Perron test. The asterisks denote the level of significance of the test: *** indicates significance at the 1% level, ** at the 5% level, and * at the 10% level.

Long Run Relationship

One major objective of the paper is to test for the existence of long run relationship in the variables. In this case, the critical values for the 10%, 5%, 2.5%, and 1% significance levels are presented in the table. The I0 bound represents the critical value for the null hypothesis that there is no long-run relationship, while the I1 bound represents the critical value for the alternative hypothesis that there is at least one long-run relationship. The Bound Test result indicates that the null hypothesis of no long-run relationships existing between the variables can be rejected at a significance level of 5% or lower, since the F-statistic (8.582) exceeds the critical values of the test at all significance levels tested. Therefore, we can conclude that there is evidence of a long-run relationship between the variables.

Table 5: Bound Test result

Test Statistic	Value	k
F-statistic	8.582***	4

Critical Value Bounds	I0 Bound	I1 Bound
Significance Level: 10%	2.45	3.52
Significance Level: 5%	2.86	4.01
Significance Level: 2.5%	3.25	4.49
Significance Level: 1%	3.74	5.06

Source: *Authors computation 2023*

Short Run and Long Run Result

Table 5 presents the short run and long run impact of health shock on labour supply outcome with the moderating variables impact. In the short run, a positive relationship exists between difference in employment rate by one and the employment rate and was significant in the short run. As regard mortality rate, both the short – run and long run coefficient was negative implying that mortality reduces employment both in the short run and in the long run. As presented, a percentage increase in mortality reduces employment rate by 0.283% in the short – run and 0.469% in the long run. The impact on the long run is higher than the effect in the short run. This suggests that improving healthcare infrastructure, disease prevention, and access to healthcare services may help reduce mortality rates and boost employment rates in the long run. This may involve policies such as increasing healthcare spending, promoting disease prevention programs, and improving healthcare accessibility, particularly in rural areas. The findings supported the outcome by (Zheng, Tumin, Qian, & Brooks, 2021; Regidor, et al, 2020).

The finding that a 1% increase in urbanization increases employment rate by 0.108% in the short run and 1.316% in the long run suggests that policies that focus on improving urban planning and infrastructure, reducing congestion, and promoting sustainable development may help mitigate any the negative impacts of urbanization on employment in the short run. This may involve policies such as investing in public transportation, promoting green spaces, and encouraging mixed-use development. Ding, Li, Lu, and Wang, (2020); Faridi and Katouzian, (2021) as well as Ong, and Diao (2021) studies in the area of urbanization and employment also found that urbanization impacted positively on employment in the countries used.

The finding that a 1% increase in primary school enrollment increases employment by 0.798% in the long run and was significant suggests that policies that focus on improving access to education, reducing gender and income disparities in educational attainment, and promoting lifelong learning may help increase employment rates in the long run. This may involve policies such as increasing education spending, promoting education access for disadvantaged populations, and increasing funding for adult education and training programs. This result is in line with apriori expectation. The findings supported studies by (Adeleke & Adedokun, 2021; Lapid, 2021)

The studies also show that for both the short run and long run coefficient, a 1% increase in per capita GDP leads to 0.034% increase in employment in the short run and by 0.960% increase in the long run. This finding suggests that policies that focus on promoting sustainable economic growth, reducing income inequality, and increasing investment in infrastructure and human capital may help boost employment rates in the long run. This may involve policies such as promoting foreign investment, reducing barriers to entrepreneurship, and increasing investment in education and infrastructure.

Table 3: Regression Result Dep Var: EMR

Short Run Coefficient				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EMR(-1))	0.464	0.121	3.829	0.001
D(MR)	-0.283	0.107	-2.644	0.001
D(GDPK)	0.034	0.001	0.429	0.671
D(EDL)	0.001	0.020	0.053	0.958
D(EDL(-1))	0.069	0.023	2.983	0.006
D(URBR)	0.054	0.066	0.807	0.426
D(URBR(-1))	0.108	0.055	1.952	0.061
CointEq(-1)	-0.081	0.076	-1.074	0.292

Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
MR	-0.460	0.110	4.182	0.000
GDPK	0.960	0.206	4.660	0.000
EDL	0.798	0.335	2.382	0.044
URBR	1.316	0.508	2.591	0.013
C	0.598	1.236	0.484	0.633

Source: *Author's computation, 2023*

7. Conclusion and Recommendations

This study investigated the effect of health shock on labour market outcome in Nigeria for the period covering 1980 to 2021. In conclusion, this study found that health shocks measured by mortality rate negatively impacted the employment rate in Nigeria both in the short and long run. On the other hand, urbanization, per capita GDP, and primary school enrollment were positively related to employment rates. Therefore, efforts to improve employment rates should consider the impact of health shocks and address the underlying causes of mortality such as improving healthcare infrastructure, disease prevention, and access to healthcare. Furthermore, policies that promote economic growth and urbanization could also enhance employment opportunities in Nigeria.

To achieve these goals, the Nigerian government should prioritize investment in healthcare infrastructure and disease prevention programs to improve health outcomes and reduce the impact of health shocks on employment rates. The government could also implement policies to increase access to education and skills training programs to improve the human capital of the workforce. Additionally, policies that promote economic growth, such as investment in infrastructure and support for small and medium-sized enterprises, could stimulate job creation and reduce unemployment rates. Furthermore, policies that incentivize urbanization in a sustainable and inclusive manner could create more employment opportunities, particularly in urban areas where employment rates tend to be higher. Overall, a comprehensive and multi-faceted approach is necessary to address the complex issue of employment in Nigeria.

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