

The COVID-19 Pandemic Lockdown and Its Future Economic and Demographic Implications on Nigeria

Babatunde Afolabi (✉ babatunde.afolabi@fuoye.edu.ng)

Federal University Oye,

Sunday Matthew Abatan

Federal University Oye,

Ruth Ngukimbin Atsuwa

Benue State University

Research Article

Keywords: covoid-19, pandemic, fertility, economic, intimate partner violence

Posted Date: April 23rd, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-385893/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Background:

The coronavirus pandemic (COVID-19) associated with acute respiratory syndrome believed to have emanated from Wuhan, China in 2019 has led to serious implications on fertility, economic challenges and intimate partner violence (IPV) in Nigeria. The impact of the covid-19 pandemic led to various responses by many governments around the world, aimed at reducing the spread of the disease and the unprecedented deaths that have followed. This paper examined the implications of the COVID-19 lockdown on fertility, economic and intimate partner violence in Nigeria using situation analysis study (SAS) as its design. Qualitative and quantitative data obtained through administered questionnaires using online survey monkey and focused group method was analyzed.

Result:

Results indicated that, although lockdown as a method adopted by governments to curtail the spread of the deadly virus has to an extent reduced the spread of Covid-19, however, it has negative implications especially on fertility and the economy. It was also found to induce a spike in intimate partner violence (IPV) in Nigeria.

Conclusion:

The study recommends that government agencies aside introducing lockdown as a measure for reducing the spread of the virus should sensitize on its benefits as a good instrument for tackling future occurrences of the virus. Also, other safety nets like flexible loans to low income individuals for immediate and basic needs among other factors should be adopted.

1.0 Introduction

The sporadic increase and huge number of confirmed cases of Covid-19 put the whole world into a near total lockdown recently. This did not spare any sector; it had serious impact on the economy of nations, industries and schools as well as transport companies (HFG, 2020). Since the outbreak of COVID-19 late 2019, otherwise known as corona virus there are diverse opinions through the social media, print, electronic media, and other available means of communication as to what will the implications of COVID-19 lockdown strategy be on everyone in the world (Badu et.al, 2020).

Although, the near-total lockdown seemed to be an effective means to win the battle against corona virus, yet as a social scientist, there is need to understand the socio-demographic and economic implications of the lockdown for a more people-centered policy and programme response to avert the immediate and future consequences. There are many, but the most relevant mechanisms result from the emergency measures taken to combat the pandemic by interrupting the transmission pathways of the virus. They include health-promotion recommendations, especially social distancing; enforced constraints on daily

life, such as the closure of bars, restaurants, schools, businesses, and factories; prohibition of public gatherings; constriction of international and national travels (HFG, 2020). COVID-19 pandemic is perhaps the worst global crisis yet in the 21st century, its effects radiate into every aspect of life, social/family bonding, economic/financial burden. It is currently estimated that schools were closed in over 185 countries and that 89 percent of globally enrolled students were out of school from 2020 to 2021 (Albrechtsen and Giannini, 2020).

In Nigeria, most schools did not resume until late January while some resumed partially late in 2020 with strict rules and restrictions. This reality poses a great risk to adolescent girls and married women as evidence from similar crises indicate that they are amongst the most at-risk populations in times of disease outbreaks and emergencies (Plan International, 2019). More so, there are several implications of these on family increase due to coital frequency, use of contraceptives, unintended pregnancy, and intimate partners' violence. It is on basis of the above that this study seeks to examine the following objectives: determine the impact of COVID-19 lockdown on social bonding among family members, examine the demographic implications of the lockdown on individuals (coital frequency, use of contraceptives, unintended pregnancy, and abortion) and assess the influence of COVID 19 lockdown on household's economic activities (household income, expenses, loss of job)

Significance of the study

The study attempted a 3 new dimensional view of COVID-19 lockdown in the aspect of intimate partner violence, fertility and economic fallouts. Policymakers and government functionaries should not view total lockdown as a means to relax the family but a way of putting the family into 3-dimensional risks-high fertility, violence and economic traps. This study would serve as a baseline for further research aiming at understanding the socio-demographic and economic impact of Covid-19 lockdown on individuals and households. The data would also provide baseline information for interventional research aiming at meeting people's reproductive health and other needs in emergency situations such as the COVID-19 lockdown.

2.0 Covid-19 Pandemic And Fertility Rates In Nigeria

Ullah, et al (2020) assessed the impact of the pandemic induced lockdown. They posited that the impact will most probably further increase inequalities and poverty rates worldwide. This position was informed by the fact of inability of hundreds of millions of people to be able to go to work for a long time due to the restriction of movement and others due to unemployment rate which followed geometrically.

Several studies like Banik et al (2020) Anser et al (2020) and Wietzke (2020) have variously suggested that economic recession and poverty though with country-specific poverty rates across both developing and developed nations leads to further variations in fertility rates. Wietzke, (2020) in his study reported United States of America in 2008 suffered a decline in birth rates because of the economic down turn of the period and this continued until the following year, 2009. So, it can be safely said that the covid-19

induced economic recession may likely cause some long-term negative impact on fertility rate even long after the pandemic has gone.

The existence of covid-19 pandemic and its spread to various regions of the world has resulted in financial market shutdown, closure of corporate offices and businesses of different kinds. This activity has given rise to reduction in incomes accruing to households which in turn has affected the consumption level and investments (Ozili and Arun 2020). Also, the existence of Covid-19 gave rise to the recent prediction of global recession by economist such as Gita Gopinath and Kristalina Georgieva of the International Monetary Fund.

Mandates placed by government in various economies to ensure social distancing is observed has indeed resulted in uncertainties such as loss of jobs and post crisis consumption and recovery even though this exercise was to curtail the rapid spread of the said deadly virus. No doubt, this pandemic has led to dramatic rise in unemployment which will further reduce the standard of living (World Bank 2020). Analyzing the effect of the pandemic on poor communities across four continents, Buhej *et al* (2020) estimates that 49 million individuals will be driven into extreme poverty in 2020. This will mean that individuals will be living on less than \$1.90 per day which is considered far below average and negative to any economy.

The covid-19 pandemic has had serious consequences on human population globally, it is expected to further impact mortality levels. Aasswe, et al (2020). Also, Ghislandi *et al* (2020) reported in their studies a reduction in life expectancy from 2 to 3.5 years for men and 1.1 to 2.5 years for women in the northern Italian provinces hit by the covid-19. The report highlighted the crisis in fertility as been the worse seen since the influenza pandemic of 1918–1919 and the World war 11. Further studies like that of Goldstein and Lee (2020) showed like patterns happened in other countries of the world. Aasswe et al (2020) asserted that when focus is firmly on deaths, then scientific debate risks overlooking that population dynamics are also affected or determined by fertility trajectories. This is because history has shown that increase in mortality rates have happened after famines and pandemics which are then followed by changes in fertility rates. The impact of covid-19 pandemic on fertility will surely have implications on the rate of population that is aging, cause future health challenges as well as economic growth potential all over the world.

2.1 COVID – 19 PANDEMIC AND ECONOMIC IMPLICATIONS ON NIGERIANS

The ravaging effects of covid-19 pandemic on the economies of nations have being devastating and catastrophic. Reports from John Hopkins University showed that fatality from the pandemic has surpassed 2.7 million worldwide. While economically, the impact has been felt across all sectors of economies of countries of the world, starting from movement restrictions and travels leading to partial or total closures of plants and factories and serious disruptions in supply chains all culminating in great loss of revenues, massive job losses and negative impact of world economies. Despite the discovery and

quick roll out plan in vaccination of vaccines in many countries to curtail the spread of the pandemic worldwide, the impact on world economy has remained grim and the outlook at best is very fragile. The economic impact on the Nigerian economy is even more worrisome and disturbing. While the forecast for the world Gross Domestic Product (GDP) is 2.5 percent in the out gone year, 2020, Nigeria currently has a 2.3 GDP growth rate before the advent of the covid-19. The Nigerian case was actually made worse because of the challenge of decline in oil prices early in the 2021 leading to an acute loss of revenue, mounting debts and deteriorating debt service-to-revenue ration of more than 60 percent.

Moreover, The World Bank projects that the COVID-19 pandemic will cause a contraction of 7% in GDP across the globe in 2020 and, while severely affecting all countries, the impact on unemployment will vary. According to estimates by the International Labor Organization (ILO), the lower-middle income countries (LMICs) (16.1%) experienced greater levels of working hour losses than those sustained by higher income countries (HICs) (13.9%) in the second quarter of 2020.

2.2 Theoretical Framework

This study explained the effect of COVID-19 lockdown and its effect on family members (Domestic violence, fertility and economic fallout) using ecological theory to explain family response to environment in which they found themselves. The ecological theory is embedded in a set of nested structures with natural-biological environments that make it very difficult to analyze the broadness of interactions going on in the family setting.

Life Course Theory

To situate understanding of the effects of COVID-19 as a pandemic that has negatively affected the activities of individuals, we draw on life course theory as a guide. Life course theory is a useful lens that assists in understanding the multiple factors responsible in shaping individuals' lives negatively or positively from birth to death. Originally conceived of and applied to the impact of the Great Depression, the life course theory perspective posits that "historical forces shape the social trajectories of family, education, and work, and they in turn influence behavior and particular lines of development" (Elder, 1998).

This research adopts the life course theory to give an understanding to the demographic implications of potential adverse effects of the COVID-19 pandemic on individuals of various age groups ranging from children to adults. One could view developmental perspectives such as bio ecological and life-span theories as being relevant and useful in understanding the current pandemic. However, life course theory gives a clearer perspective on how one is affected by sudden mishaps within a system hence, providing an optimal lens through which to view COVID-19 and its influences (Baltes, Lindenberger, & Staudinger, 1998).

3.0 Methodology

Methods: This study adopted online survey monkey to gather information from 245 respondents during the lockdown, it was the period when movement was restricted. That informed the reason for the online method of data collection. The most recent Nigeria Demographic and Health Survey reports that 81% of men age 15-59 years old and 55% of women age 15-49 years in Nigeria have a mobile phone (National Population Commission & ICF International, 2019).

Quantitative and qualitative data were collected over a period of two and half months using an online questionnaire and Focus grouped Discussion (FGDs) vis Zoom App administered online among adults age 18 and above in Nigeria. The questionnaire has four sections: Socio-demographic characteristics of the respondents, general knowledge of COVID-19, family relationship before and during lockdown, sexual and reproductive health activities and household income and expenses. The collected text file was downloaded from Google Form and was converted to SPSS data file for analysis.

3.1 Data Analysis: The cross-section data was used; the Poisson Chi-square and regression was used in the analysis. It showed a positive mean. Generalized linear models (GLMs) were used to assess the relationship between the main independent variables. The mean can use the identity link, but it is more common to model the log of the mean. Like the linear predictor $\alpha + \beta x$, the log of the mean can take any real-number value. A Poisson log-linear model is a GLM that assumes a Poisson distribution for Y and uses the log link function.

For a single explanatory variable x, the Poisson log-linear model has form

$$\log \mu = \alpha + \beta x$$

The mean satisfies the exponential relationship

$$\mu = \exp(\alpha + \beta x) = e^{\alpha} (e^{\beta})^x$$

A one-unit increase in x has a multiplicative impact of e^{β} on μ : The mean of Y at $x + 1$ equals the mean of Y at x multiplied by e^{β} . If $\beta = 0$, then $e^{\beta} = e^0 = 1$ and the multiplicative factor is 1. Then, the mean of Y does not change as x changes. If $\beta > 0$, then $e^{\beta} > 1$, and the mean of Y increases as x increases. If $\beta < 0$, the mean decreases as x increases. The Y is the outcome variable (Demographic effect, Economic effect and Social Effect).

Ethical issues and Consent

Ethical approval for the study was obtained from the University Research Ethics Committee, at Federal University Oye, Nigeria. We confirm **informed consent** was obtained from all subjects in the ethical approval and consent to participate in the research. We do not envisage any other ethical issues since the data collection was done online and personal identifiers were not needed in the questionnaire.

We confirm that all methods were carried out in accordance with relevant guidelines and regulations.

Results

Table 1. Provides the background information of the respondents indicating that a total number of 155 (63.3%) are males and 90 (36.7%) are females. Urban residents are 202 (82.4%) and 43 (17.6%) people resided in the rural areas. The dominant ethnic group in the study area are the Yorubas having 219 respondents (89.4%), while the Igbos had 12 respondents (4.9%), 6 people (2.4%) are Hausa and 3.3% are other ethnic groups.

The employment status simply signified that (61.6%) 151 people are employed while 48 (19.6%) are self-employed and students are 17 (11.8%). The unemployed are the fewest having 17 (6.9%). The result shows that the 4, (1.6%) have no formal education. Just 2 people of (0.8%) had primary education, 9 People (3.7%) had secondary education. The highest is 230 people having (93.9%). A total of 225 (91.8%) are Christians and 18 people (7.3%) are of Islam religion. The lowest is traditional religion worshippers are just 2 having (0.8%)

Table 1: Background information of Respondents

Background Information	Frequency	%
Sex		
Male	155	63.3
Female	90	36.7
Place of Residence		
Urban	202	82.4
Rural	43	17.6
Ethnic Group		
Yoruba	219	89.4
Igbo	12	4.9
Hausa	6	2.4
Others	8	3.3
Employment Status		
Employed	151	61.6
Self-Employed	48	19.6
Students	29	11.8
Unemployed	17	6.9
Educational Status		
No Formal Education	4	1.6
Primary	2	.8
Secondary	9	3.7
Post-Secondary	230	93.9
Religion Affiliation		
Christianity	225	91.8
Islam	18	7.3
Traditional	2	.8
Total	245	100

Source: Computation by Authors 2021

In table 2, the study shows that 238 (97.1%) believes COVID-19 is real, 5 (2.0%) feels it's not true. While 2 (0.8%) were undecided. A total of 233 (95.1%) believed that direct respiratory droplets from an infected person through coughing, sneezing and contaminated surfaces can transmit corona virus, while 3 (1.2%) said it's false and just 9 (3.7%) are neutral. In analyzing the knowledge, attitude and perception of participants towards Covid-19, 31 (12.7%) believes Covid-19 is punishment from God because of our sins while 126 (51.4%) said its false and 88 (35.9%). A total of 89 (36.3) believes that Covid-19 is man made by the Chinese government, while 43 (17.6%) said false and 113 (46.1%) don't know.

Table 2: Knowledge and Perceptions of participants toward Covid-19 Reality

Knowledge of Covid-19 Reality	True	False	Don't Know
Corona virus also known as COVID 19 is real?	238(97.1)	5(2.0)	2(0.8)
Corona Virus can be contracted when in direct contact with respiratory droplets from an infected person through coughing, sneezing and contaminated surfaces?	233(95.1)	3(1.2)	9(3.7)
Corona Virus is punishment from God because of our sins	31(12.7)	126(51.4)	88(35.9)
Corona Virus is man-made by the Chinese Government	89(36.3)	43(17.6)	113(46.1)

Source: Computation by Authors 2021

Furthermore, Table 3 showed the perceptions toward Covid-19 preventive strategy, the reasons for the usage of face marks was highlighted and a total of 49 people (20.0%) comply because the government enforces it. 193 people (78.8%) believes it prevents the Covid-19 infection and 3 people (12%) use facemasks simply because others uses it.

The total of 50 people (20.4%) strongly disagree that the lockdown has put the family apart because they could not visit them as they could, 108 respondents (44.1 disagrees, 47 (19.2%) undecided, while 28 respondents a total of 11.4 agreed and 12 respondents (4.9 %).

Table 3: Perceptions of participants toward Covid-19 Prevention Protocol

Attitude to COVID Protocols	Frequency	Percentages
I use face mask because	49	20.0
Government enforced it	193	78.8
To prevent covid-19 infection	3	1.2
I see others using it		
The lockdown has put my family apart because I could not visit them as I could	50	20.4
Strongly Disagree	108	44.1
Disagree	47	19.2
Undecided	28	11.4
Agree	12	4.9
Strongly Agree		
Total	245	100

Source: Computation by Authors 2021

Table 4 and figure 1 displayed the effect of Covid-19 Lockdown on Social Bonding findings shows that participants agreed that the lockdown has put their family apart because they could not visit them as they could; Mean =3.84 and SD= 1.09 from 5 Likert-scale. It was also agreed by the respondents that the lock-down has increased social bonding among immediate family members with more time to take care of myself and family; Mean =3.79 and SD= 1.08 from 5 Likert-scale. Similarly, more than have agreed that lockdown helped to increase their closeness to children/family members; Mean =3.63 and SD= 1.05 from 5 Likert-scale. Conclusively, majority agreed that lockdown has contributed to level of tolerance for family members/ spouse; Mean =3.57 and SD= 1.01 from 5 Likert-scale

Table 4: Effect of Covid-19 Lockdown on Social Bonding among Participants

Questions	N	Mean	SD	Decision
The lockdown has put my family apart because I could not visit them as I could	245	3.84	1.09	Agree
This lock-down has increased social bonding among my family members with more time to take care of myself and family	245	3.79	1.08	Agree
The lockdown help increase my closeness to my children/family members	245	3.63	1.05	Agree
The lockdown has contributed to my level of tolerance for my family members/ spouse	245	3.57	1.01	Agree

Source: Computation by Authors 2021

Furthermore, the demographic indicators show that from the total 245 respondents 103 (42%) they do not want another child, while 78 (31%) said they wanted and 57(23%) said they may consider that later. But 24(21.2%) said sincerely, the lockdown has contributed to their spouse pregnancy while 78% said No. As revealed in table 5a, more than 48% said they are using contraceptive to prevent pregnancy while 40% said they were not using and 4.5% said they will use later.

Table 5a: Effect of Covid-19 Lockdown and Some Demographic index

Other Demographic Indicators	Frequency	Percentages
Do you want another child?	78	31.8
Yes		
No	103	42.0
Maybe Later	57	23.3
Not ready to disclose	7	2.8
Sincerely, do you think the lockdown contributed to your (spouse's) pregnancy?		
Yes	24	21.2
No	193	78.8
Do you normally use any methods to prevent pregnancy?		
Yes	119	48.6
No	98	40.0
Maybe Later	11	4.5
Not ready to disclose	17	6.9

Source: Computation by Authors 2021

Table 5b: Effect of Covid-19 Lockdown and Some Demographic index

SN	Opinion on Demographic Effect	N	Mean	SD	Decision
1	My sexual bond with my spouse has increased during this lockdown than before?	236	2.99	1.13	Undecided
2	Lockdown can lead to increase of unintended pregnancy?	236	3.90	0.93	Agree
3	Too much of staying at home can lead to frequent sexual activities among couples	242	3.76	0.99	Agree
4	Staying at home without any economic activities can lead to unwanted sexual behavior	241	3.68	0.97	Agree
5	My use of contraceptive in this lockdown is higher than before	242	2.48	1.12	Disagree

Source: Computation by Authors 2021

Similarly, in table 5b, majority of the respondents were undecided on the effect of to have increased their sexual bond with their spouse; Mean =2.99 and SD= 1.13 from 5 Likert-scale. Lockdown was agreed to have led to increase of unintended pregnancy: Mean =3.90 and SD= 0.93 from 5 Likert-scales. Conclusively, majority agreed that staying at home without any economic activities can lead to unwanted sexual behaviour among unmarried sexual partner; Mean =3.68 and SD= 0.97 from 5 Likert-scale. Further details are reported in the figure 2 and figure 3 charts.

3.3 Hypothesis Testing: Hypothesis One

Ho: Female in Nigeria will report different social effect, demographic effect and economic effect toward Covid-19 lockdown in Nigeria than male participants.

The hypothesis was tested using the t-test for independent samples. The result is presented in table 4.2:

Table 4.2: t-test Summary Table showing Organization commitment by Gender

Gender	N	Mean	SD	Df	T	P
Social Bonding	151	20.7	4.81	238	-0.47	>.05
Male						
Female	89	21.0	3.90			
Demographic Effect	151	14.4	2.89	238	0.66	>.05
Male						
Female	83	14.1	3.51			
Economic Effect	154	14.0	0.22	238	-0.74	>.05
Male						
Female	86	14.3	0.26			

Source: Computation by Authors 2021

Interpretation

Since the p-value in the 3- selected indicators is greater than 0.05, we have no statistical justification to reject Ho. We therefore conclude that, there is no gender difference in the social, economic and demographic effect of Covid-19 lockdown. This implies the effect is the same in both males and females.

Hypothesis Two

Ho: Educational attainment, employment status, religion affiliation and age will independently or jointly predict Covid-19 lockdown effect on participants. A Poisson regression analysis were used. The results are presented below:

The incidence rate of social effect, demographic effect and economic effect were displayed in model 1, model 2 and model 3 respectively. Model 1, show the factor that is associated with social bounding effect of lockdown among participants. It was found that rural dwellers have lower social bounding compared with urban residence (IRR=0.78, $p<0.05$), also, the students were reported to have higher social bounding compared with those employed ((IRR=1.10, $p<0.05$). But there is lower social bounding effect of lockdown among unemployed compared with the employed (IRR=0.55, $p<0.05$). It was observed that religion & level of educational attainment do not show significance relationship.

In model 2, the demographic effect of lockdown was found to be higher among the students (IRR=1.13, $p<0.05$) and traditional religion (IRR=1.13, $p<0.05$) while other factors which show lower incidence rate were not statistically significance.

Table 6: Poisson Regression Analysis of Effect of Covid-19 Lockdown on Participants

Factors	Model 1	Model 2	Model 3
Social Bonding (IRR)	Demographic Effect (IRR)	Economic Effect (IRR)	
Age	0.99(0.93-1.01)	0.99(0.96-1.08)	.99(0.99- 1.00)
Place of Residence	1.00	1.00	1.00
Urban			
Rural	0.78*(0.71-0.94)	0.93(0.85-1.02)	.92(.84- 1.09)
Occupations	1.00	1.00	1.00
Employed			
Self-Employed	0.55*(0.44-0.88)	1.08(1.01-1.10)	1.07(0.99- 1.17)
Students	1.10*(1.09-1.12)	1.13*(1.02-1.17)	1.11*(1.01-1.14)
Unemployed	0.94(0.83-1.05)	0.89(0.77-1.04)	1.35*(1.14 -1.39)
Education Attainment	1.00	1.00	1.00
None			
Primary	1.08(0.75-1.53)	0.93(0.51-1.35)	1.35(1.18 -2.05)
Secondary	0.82(0.62-1.06)	0.91(0.64-1.250)	.98(0.71 - 1.34)
Post-Secondary	0.95(0.76-1.17)	0.95(0.68-1.20)	1.01(0.77 - 1.33)
Religion	1.00	1.00	1.00
Christian			
Islam	0.93(0.83-1.04)	1.06*(0.91-1.21)	1.16*(1.03 -1.20)
Traditional	0.93(0.67-1.29)	1.13*(1.09-1.60)	1.03(0.72 - 1.49)

Source: Computation by Authors 2021

* $p < 0.05$.

IRR = Incidence rate ratio; CI = confidence interval.

–Cells are empty where models were not applicable.

Source: Computation by Authors 2021

The economic effect of Covid-19 lockdown as shown in table 6, was found to be higher among the unemployed (IRR=1.35, $p < 0.05$), students (IRR=1.11, $p < 0.05$), primary education (IRR=1.35, $p < 0.05$), Islam (IRR=1.16, $p < 0.05$) but the effect is lower among the age, rural dwellers, secondary holder but were not significantly associated.

Discussion Of Findings

The implications of global pandemic, and its spread to various regions resulted in financial market shutdown, closure of corporate offices and many businesses. This lockdown has given rise to reduction in incomes accruing to households which in turn has affected the consumption level and investments (Ozili and Arun 2020). The results of this paper showed a serious social, demographic and economic implication on respondents in the sampled area.

The sampled respondents had a high knowledge, attitude and good perception towards Covid-19. Majority of the respondents believed the pandemic was a man-made infection and punishment from God, it was reported that the lockdown has put the family apart because they could not visit them as they could. During the lockdown, the findings disclosed social bonding increase among immediate family members as majority reported to have more time to take care family, it also helped to increase their level of closeness to children/family members agreed that lockdown has contributed to level of tolerance for family members/ spouse.

But the implication of the demographic indicators of low desire for another child and high rate of unintended pregnancies increased the negative impact of lockdown on the families. This was further confirmed as more than half of male respondents reported that the lockdown has contributed to their spouse pregnancy because their use of contraception was poor.

The ban on sale of alcohol in South Africa, Latin America and other developed country posed increase in domestic violence and serious assault, in comparison to the same week a year earlier (Marupeng, 2020). This is said to explain the increase in unwanted pregnancies and the potency to skyrocket the fertility rate of the populace.

Furthermore, the socio-economic determinants of the effect of lockdown disclosed amazing results, ordinarily, the people in rural areas seem to have higher social bonding than those in the urban areas but the reverse was the case during lockdown as rural dwellers have lower social bounding compared with urban dwellers likewise the economic and demographic effects was lower in rural areas compared to the urban areas. This is so because the lockdown does not necessarily affect the rural dweller who are predominantly farmers compared to urban dwellers who engage in professional and white-collar jobs.

This study agrees with the findings of Akpan, (2020) which found that there is increased risk of unplanned pregnancies due to Covid-19 lockdown as the cases of abortion and unwanted pregnancies significantly increased in the period.

Inferably many female students were forced to bear the burden of child bearing and nurturing alone while some may not return to school because of fear of being stigmatized by their peers due to the occurrences of unplanned pregnancy (Akpan, 2020). The psychological effect and risk of exposure to

birth and health related complications increased, such as premature births, maternal or mortality, vesicovaginal fistulas (VVF), etc.

Conclusion And Recommendations

The study applied the situation analysis study (SAS) as its design. Using qualitative and quantitative data obtained through administered questionnaires, the results indicated that, the lockdown responses to the pandemic though is one of the major panaceas to minimize the spread of the deadly virus, it has however also numerous negative impacts on not only on fertility and economy at large but has also induced a spike on women leading to unwanted pregnancy and intimate partner violence (IPV) in Nigeria. Thus, the government agencies are advised to look into the key findings as a way of providing informed knowledge to tackle future occurrences.

Declarations

Ethics Approval and Consent to participate

Ethical approval for the study was obtained from the University Research Ethics Committee, at Federal University Oye, Nigeria.

-We confirm informed consent was obtained from all subjects in the ethical approval and consent to participate in the research. We do not envisage any other ethical issues since the data collection was done online and personal identifiers were not needed in the questionnaire.

-We confirm that all methods were carried out in accordance with relevant guidelines and regulations.

Consent for Publication

We confirm that the content of the manuscript has not been published, or submitted for publication elsewhere.

Availability of data and Materials

The datasets generated and/or analyzed during the current study are available in the **Google Form** Repository Drive, <https://forms.gle/UMA1kTVJY9CzNNpk6>. Permission to access it is available from the corresponding author on reasonable request.

Competing Interests

The authors declare they have no competing interest

Funding

No funding received for this project. All the authors bore all the financial cost of the study

Authors' contributions

The study was conceived by Abatan and Afolabi. The literature was done by the Afolabi and Atsuwa while methodology, analysis and discussion of findings were designed by Abatan with contributions from Afolabi. All the three authors contributed to reviewing and approved the final manuscript.

Acknowledgements

We acknowledge God, the Almighty, the author of all wisdom and the giver of life.

Authors Information

Babatunde Afolabi; Associate Professor and Head of Department of Finance, Federal University Oye, Nigeria. Email: babatunde.afolabi@fuoye.edu.ng

Sunday Matthew Abatan; Graduate Student and Research Assistant, Department of Demography and Social Statistics, Federal University Oye, Nigeria.

Email: Sunday.abatan@fuoye.edu.ng

Atsuwa Ruth Ngukimbin; Graduate Student, Department of Business Management, Benue State University, Makurdi; Nigeria. Email: ruth.atsuwa@gmail.com

References

Aasswe. A, Caralli. N, Mencarini. L, Pleahs and Bacci., M. L (2020) The COVID-19 pandemic and human fertility. Tsinghua-Science 2020-2921 Workshop.

Akpan U (2020): Covid-19 in Nigeria: A gendered perspective *Development Economics at SOAS University of London*

Albrechtsen. A and [Giannini S](#)(2020), Coronavirus School Closings Around the World Will Hit

Girls the Hardest. *The United Nations' educational, scientific and cultural agency.*

Anser MK, Yousaf Z, Khan MA, Voo XH, Nassani AA and Alotaibi SM (2020) The impacts of COVID-19 measures on global environment and fertility rate: double coincidence. *Air Qual Atmos Health.* (2020) 13:1083–92. doi: 10.1007/s11869-020-00865-z [PubMed Abstract](#) | [CrossRef Full Text](#) | [Google Scholar](#)

Badu K, Jessica P.R, Thorn,N. G, Natisha D, Adeniyi F. F,, Benard W. K, (2020),Africa's response to the COVID-19 pandemic: A review of the nature of the virus, impacts and implications for preparedness. *AAS Open Research* 2020, 3:19 Last updated: 18 MAY 2020

Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (1998). Life-span theory in developmental psychology. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Theoretical models of human*

development (p. 1029–1143). John Wiley & Sons Inc.

Banik R, Rahman M, Sidker MT and Gozal D (2020). SARS-CoV-2 pandemic: an emerging public health concern for the poorest in Bangladesh. *Public Health in Practice*. (2020). doi: 10.1016/j.puhip.2020.100024 [CrossRef Full Text](#) | [Google Scholar](#)

Buheji M., da Costa Cunha K., Beka G., Mavrić B., Leandro do Carmo de Souza Y., Souza da Costa Silva S., Hanafi M., Chetia Yein T. (2020) The extent of COVID-19 pandemic socio-economic impact on global poverty. a global integrative multidisciplinary review. *American Journal of Economics* 2020(4):213–224. <http://journal.sapub.org/economics>

Elder, G. H., Jr. (1998). The life course as developmental theory. *Child Development*, 69(1), 1–12. <https://doi.org/10.2307/1132065>

Ghislandi, S, Muttarak, R, Sauerberg, M and Scotti B, (2020) *medRxiv 10.1101/2020.04.29.20084335* (2020). [Google Scholar](#)

Goldstein, J and Lee R (2020) *Demographic Perspectives on Mortality of Covid-19 and Other Epidemics. Working Paper 27043; www.nber.org/papers/w27043.pdf* (2020). [Google Scholar](#)

HFG (2020), Violence and the Pandemic, Questions for Research. HFG Research & Policy in Brief. www.hfg.org

Marupeng, P. (2020). Bheki Cele Says Serious Violent Crimes Dropped since Nationwide Lockdown. *Sowetan Live*. <https://www.sowetanlive.co.za/news/southafrica/2020-04-05-bheki-cele-says-serious-violent-crimes-dropped-since-nationwide-lockdown>.

National Population Commission (NPC) and ICF. (2019). Nigeria Demographic and Health Survey 2018 Key Indicators Report. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF Plan International (2019), Novel Coronavirus (2019-nCoV): Strategic Preparedness and Responses. WHO in Emergencies: www.who.int/emergencies/en

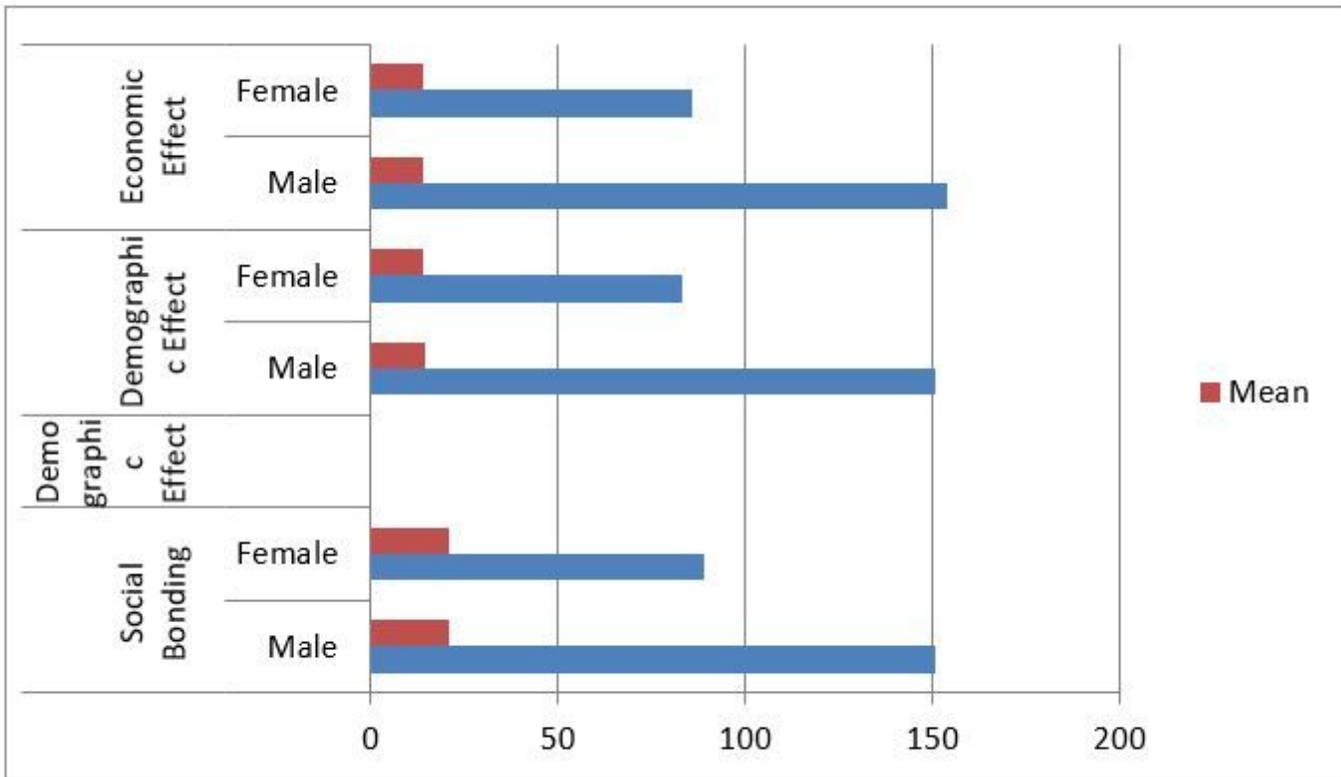
Ozili, P and Arun, T (2020), Spillover of COVID-19: Impact on the Global Economy. *Econ Papers*. [MPRA Paper 99317](#), University Library of Munich, Germany

Ullah, A, Moan, A. T, Arafa. Y, Bhuiyan, A, R, Griffiths, M.D and Goal, D (2020) Potential Effects of the COVID-19 Pandemic on Future Birth Rate Perspective Article *Front Public Health* | <https://doi.org/10.3389/fpubh.2020.578438>

Wietzke FB. (2020) Poverty, inequality, and fertility: the contribution of demographic change to global poverty reduction. *Popul Dev Rev.* (2020) 46:65–99. doi: 10.1111/padr.12317 [CrossRef](#) [Full Text](#) [Google Scholar](#)

World Bank (2020), *The Global Economic Outlook During the COVID-19 Pandemic: A Changed World*. World Bank Group Annual Reports.

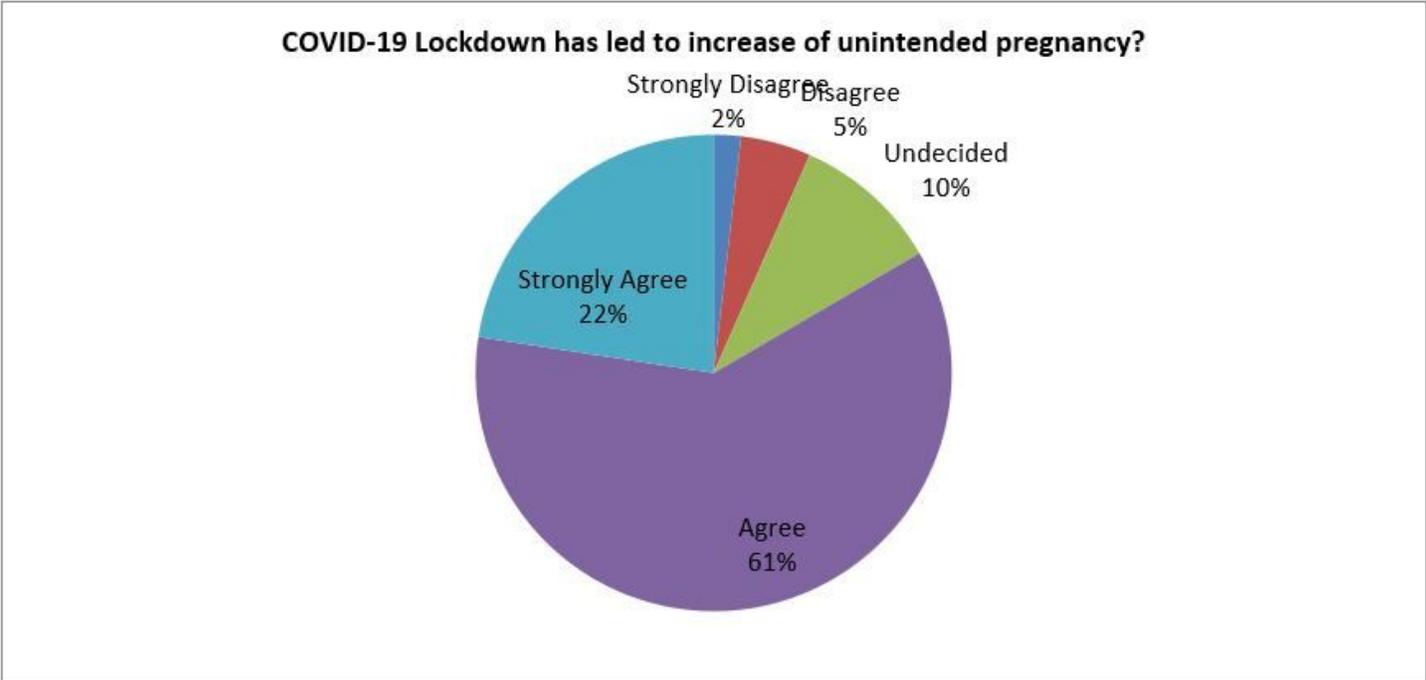
Figures



Source: Authors Computation, 2021.

Figure 1

Effect of Covid-19 Lockdown on participants

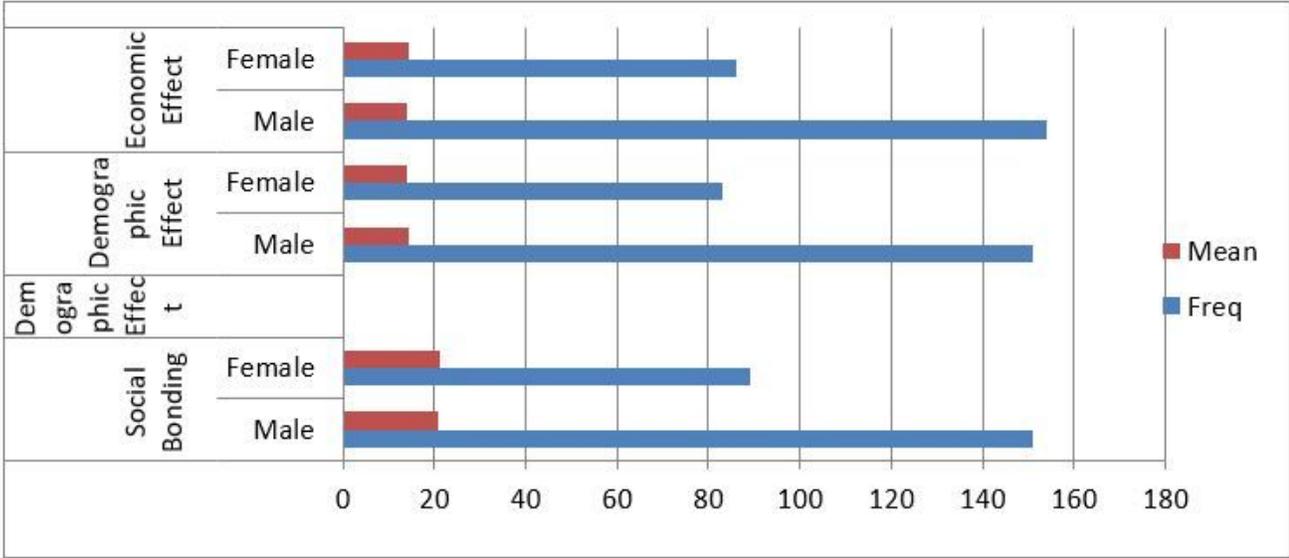


Source: Computation by Authors 2021

Figure 2

My sexual bond with my spouse has increased during this lockdown than before?

Figure 3: Effect of Covid-19 Lockdown on Social, Demographic and Economic Well-Being



Source: Computation by Authors 2021

Figure 3

