



# Perceived Impact of COVID-19 Pandemic on Social Health of Single Mothers in Rivers State, Nigeria

Nwankwo, G.A. <sup>a\*</sup>, Agu, B.N. <sup>a</sup>, Gbaduo, C.C. <sup>a</sup>, Igwe, D.U. <sup>b</sup>, Ojide, R.N. <sup>a</sup>, Oketah, E.N. <sup>c</sup>, Kalio, A. J. <sup>c</sup>, Asuzu, N.C. <sup>a</sup>, Onu, E.N. <sup>d</sup>, Eritela, E.O. <sup>a</sup>, Igwe, M.U. <sup>c</sup>, Okafor, F.O. <sup>a</sup>, Ugochukwu, F.B. <sup>a</sup>, Aluwuo, N.J. <sup>a</sup> and Okonko, I. O. <sup>c</sup>

<sup>a</sup> Department of Public Health, Madonna University Nigeria, Elele Rivers State, Nigeria.

<sup>b</sup> Department of Community Medicine, Faculty of Clinical Medicine, Enugu State University of Science and Technology, Enugu, Nigeria.

<sup>c</sup> Virus & Genomics Research Unit, Department of Microbiology, University of Port Harcourt, Port Harcourt, Nigeria.

<sup>d</sup> Department of Medical Microbiology, Faculty of Basic Clinical Medicine, Alex-Ekueme Federal University, Ndufu-Alike, Ikwo, Ebonyi State, Nigeria.

## Authors' contributions

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

## Article Information

### Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/113759>

**Original Research Article**

**Received: 28/12/2023**

**Accepted: 03/03/2024**

**Published: 22/03/2024**

## ABSTRACT

Globally, COVID-19 had serious social, economic and health impacts on the lives of individuals, especially single mothers; the situation was worse in developing countries like Nigeria. The study aimed to ascertain the perceived impact of COVID-19 on the social health of single mothers in River State Nigeria. A cross-sectional research design was employed in the study. Taro Yamane's technique was used to determine a sample size of 285 out of the 1000 single mothers that made up the study's population. A multi-stage sampling strategy was employed. A questionnaire was the instrument for data collection and was self-developed, validated, and pretested. Descriptive

\*Corresponding author: Email: [nwankwoGracey@gmail.com](mailto:nwankwoGracey@gmail.com);

statistics of frequency and percentage were employed, and the hypotheses were tested using the Chi-square test statistic. It was found that Covid -19 pandemic had a high perceived impact on the social health of single mothers in Rivers State, Nigeria (63.7%). Single mothers less than 25 years had average perceived impact (47.4%); 25 to 44 years had an average perceived impact (50.7%); those above 44 years had a high perceived impact (64.6%). Based on the level of education, the perceived impacts are as follows: no formal education (33.3%), primary education (38.7%), secondary education (38.2%) and tertiary education (43.5%). Furthermore, occupation as a variable showed the perceived impacts as found below: unemployed (44.3%), self-employed (40.6%) and employed (42.5%). More so, the perceived impacts across the demographic variables were significant ( $p < 0.05$ ). In conclusion, therefore, there was a high perceived impact of covid-19 pandemic on the social health of single mothers in Rivers State; the impact was more on single mothers who were beyond 44 years old. Based on the level of education and occupation, the impact was more on those with tertiary education and employed respectively. It was recommended that social health support services should be considered globally by policymakers when making certain legislation and policies. Mental health services and financial aid necessary to address the effects of COVID-19 on the social health of single mothers should be provided.

*Keywords: Perceived impacts; social health; covid-19 pandemic; single mothers; rivers state Nigeria.*

## 1. INTRODUCTION

Globally, millions of people suffered grave repercussions as a result of the COVID-19 epidemic [1]; but some people have been impacted more than others. Those who live in single-parent households are a vulnerable group that is particularly and much more likely to experience financial difficulties, emotional discomfort, and social isolation due to their lack of social network. These were evident in the United Kingdom, Germany and other European countries [2,3;4;5;6;7,8]. Single mothers experienced a rise in social isolation as a result of social distancing policies and gathering prohibitions [9,10,11,12,13,14,15,16]. Their lack of access to friends, family [17], and support systems meant they had fewer opportunities for emotional support and connection - two things that are essential to preserving social health. Stress from unstable finances, more caregiving duties, and social isolation hurt single mothers' mental health all around the world. During the pandemic, many people had elevated levels of anxiety, despair, and loneliness [18,19].

In Nigeria, Covid -19 pandemic exposed everyone especially single mothers to a gamut of issues, which include social isolation, greater caregiving responsibilities, and the stress of uncertain finances impact on the social health of single mothers [20]. As single mothers deal with the difficulties caused by the epidemic, they may develop anxiety, sadness, and other mental health conditions [21]. Restrictions on movement and social distancing measures made it harder for single mothers in Nigeria to connect with social support systems [22]. Without the

emotional support and social connections, they were accustomed to before the pandemic, they might have felt alone and isolated.

Generally, the pandemic resulting from Coronavirus 19 had lots of impacts on various aspects of life. In this study, the interest is not on studying coronavirus as a disease but on the impact the pandemic had on the social health of single mothers. How some activities of the pandemic like quarantine, lockdown and social distancing impacted the social health of this group of women. Wang et al. [23] opined that crisis periods are usually periods of impacts on all aspects of health and well-being with the attendant social, emotional, and psychological distress and the associated symptoms, including stress, worry, and panic among the general public. Understanding the extent to which such pandemics affect social and mental health as well as other facets of life is therefore vital [24,25,26]. Hertz et al [27] posited that the most challenging aspect of the shutdown was the lack of personal time or space that both jobs and social networks supplied, which negatively impacted women's wellbeing overwhelmingly.

Restrictions on movement, being apart from friends and family, having little independence, and being afraid of the future are all things that could make the negative psychological and social effects worse [28,29,30]. Serafini et al. [31] emphasised that several stresses, such as extended quarantine periods, anxiety about contracting an infection, discomfort, loneliness, boredom, confinement, insufficient knowledge, and financial loss, might exacerbate poor mental and social health. Several studies have

examined the gender dimension of the impacts of the Covid-19 pandemic [32,33,34].

The phrase "social health" describes how individuals build wholesome and constructive interpersonal connections with one another. People who are in good social health are better able to manage their emotions and feel supported in day-to-day activities. Getting out and socializing, participating in community events, and avoiding isolation are just a few strategies to attain this kind of health. Good social health is demonstrated by a robust support network, strong social networks, and strong interpersonal interactions. Better mental and physical health are supported by good social health. We run the risk of experiencing social isolation, physical health issues, low self-esteem, anxiety, depression, and other mental health illnesses, as well as a lower quality of life, when we have poor social health [35]. Therefore, there is a need to investigate the perceived impacts of COVID-19 on the social health of single mothers in Rivers State, Nigeria.

This paper examined the perceived impact of COVID-19 on the social health of single mothers in Rivers State, Nigeria. The study would achieve the objective of determining the perceived impacts of the COVID-19 pandemic on the social health of single mothers in Rivers State based on the socio-demographics of age, level of education, and occupation.

## 2. MATERIALS AND METHODS

The study was carried out in Obio/Akpor L.G.A of Rivers State Nigeria (study area) using a cross-sectional research design. The population size of the study was 1000 single mothers and a sample size of 285 was calculated using Taro Yamane's formula. A multi-stage sampling technique was used to recruit the respondents. The LGA was clustered into communities, wards, village and family heads. The different family heads listed the number of single mothers in their families that the self-developed, validated and pretested questionnaire was administered to. To address research issues, descriptive statistics of percentage and frequency were employed, and the Chi-square test statistic was employed to evaluate the hypotheses at a 0.05 level of significance.

## 3. RESULTS AND DISCUSSION

Results in Table 1 show that the COVID-19 pandemic had a high perceived impact (63.7%) on the social health of single mothers in the studied population.

### The key for interpretations of Tables 1 and 2:

Less than 39% implies low perceived impact; 40 – 59% implies average perceived impact; 60 -79% implies high perceived impact; 80% and above for very high perceived impact. 'Yes' is the indication of perceived impact.

Table 2 shows that single mothers aged below 25 years (50.7%) and those aged 25 -44 years (47.4 %) both had an average perceived impact while those above 44 years had a high perceived impact (64.6%) on their social health ( $P < 0.05$ ). Table 2 further showed that single mothers with no formal education (33.3%), primary education (38.7 %) and secondary education (38.2%) all had low perceived impact while those with tertiary education (43.5%) had an average perceived impact of the pandemic on their social health ( $P < 0.05$ ). It was also revealed in Table 2 that single mothers across occupations had average perceived impacts of the pandemic on their social health; those with no jobs (44.3%), those who were self-employed (40.6%) and those employed (42.5%).

Table 1 revealed that the single mothers in Rivers State, Nigeria had a high perceived impact of covid-19 pandemic on their social health (63.7%). This agrees with the findings of Paris [30] and Alon et al. [32]. This is not surprising because the Obia/Akpor Area is the epicentre of social activities in Rivers State.

The results in Table 2 indicate that single mothers significantly have different perceived impacts of the pandemic on their social health based on their ages which agrees with Melo and Soares [36] who found significant differences in the effect of the pandemic on health based on age. The results could stem from the fact that single mothers beyond 44 years would have more responsibilities attributable to age and with less assistance. The table further showed that participants with tertiary education had a higher impact than their counterparts. This is expected with the social networking and relationships of women with tertiary education; social distancing, and staying at home will impact their social health significantly. This is consistent with the study of Bassuk et al. [37] and Paris [30] who found that educational level was significant in perceived stress by individuals during the pandemic. Table 2 also showed that single mothers had the average perceived impact of the pandemic on their social health across all occupations [38]. This could be as a result of the

**Table 1. The frequency of perceived impact of the covid-19 pandemic on the social health of single mothers in rivers state Nigeria**

S/N	Items	Perceived impacts of Covid-19 (n=285)			
		Yes		No	
		F	%	F	%
1	Did you experience loneliness during the lockdown as a single mother?	251	88.1	34	11.9
2	Did you experience anxiety during the pandemic?	223	78.2	62	21.8
3	Did your mental stress level increase during the pandemic?	247	86.7	38	13.3
4	Were you afraid of the pandemic as a single mother?	262	91.9	23	8.1
5	Did you receive good social support during the pandemic?	261	91.6	24	8.4
6	Did you feel connected with the television religious worship?	161	56.5	124	43.5
7	Did you gain excessive weight during the lockdown due to lack of exercise as a single parent?	136	47.7	149	52.3
8	Did you engage in heavy alcohol intake to reduce stress during the pandemic?	52	18.2	233	81.8
9	Did you use smoking to make yourself happy during the lockdown?	28	9.8	257	90.2
10	Did the social distancing hinder the care you get from others?	231	81.1	54	19.9
11	Did the pandemic make you feel pained being a single mother?	146	51.2	139	48.8
<b>Average</b>		<b>182</b>	<b>63.7</b>	<b>103</b>	<b>36.3</b>

**Table 2. The frequency of perceived impacts of the covid-19 pandemic on the social health of single mothers in, rivers state Nigeria based on age, level of education and occupation**

Yes F/%	No F/%	Yes F/%	No F/%	Yes F/%	No F/%	Yes F/%	No F/%	P-value
<b>Based on age</b>								
<b>&lt; 25 years (n=79)</b>		<b>25-44years (n=145)</b>		<b>&gt;44 years (n=61)</b>				
37(47.4)	2(52.6)	74(50.7)	71(49.3)	41(64.6)	20(35.4)	0.00001		
<b>Based on the level of education</b>								
<b>No formal education (n=8)</b>		<b>Primary(n=46)</b>		<b>Secondary (n=123)</b>		<b>Tertiary (n=108)</b>		
3(33.3)	5(66.7)	18(38.7)	28(61.3)	47(38.2)	76(61.8)	47(43.5)	61(56.5)	0.00001
<b>Based on occupation</b>								
<b>No job (n=32)</b>		<b>Self-employed years (n=133)</b>		<b>Employed (n=120)</b>		0.00001		
14(44.3)	18(55.7)	54(40.6)	79(59.4)	51(42.5)	69(57.5)			

lockdown which forced everyone to stay at home and be exposed to the same concerns. This agrees with Wang et al. [23].

#### 4. CONCLUSION

There was a high perceived impact of covid-19 pandemic on the social health of single mothers

in Rivers State, Nigeria. The demographics showed that older women, those with tertiary education and employed were mostly affected. Based on the findings of the study it was recommended that social health support should be considered by policymakers when making certain policies. Comprehensive global and national strategies including social and mental

health supports, targeted support programs, healthcare service access, financial aid, and efforts to end gender-based violence are needed to address these issues. Community organizations, governmental organisations, and non-governmental organisations can be extremely important providers of support and resources for the social health of Nigerian single mothers.

## CONSENT AND ETHICAL APPROVAL

Ethical committees of Madonna University Nigeria Elele and Rivers State University Teaching Hospital (RUSTH/REC/2022190) approved this study. Consents were also obtained from participants before questionnaire administration.

## ACKNOWLEDGEMENTS

The authors would like to thank all who contributed to the success of this research.

## COMPETING INTERESTS

The authors have declared that no competing interests exist.

## REFERENCES

1. Kontoangelos K, Economou M, Papageorgiou C. Mental health effects of Covid-19 pandemic: A review of clinical and psychological traits. *Psychiatry Investig.* 2020;17:491–505. DOI: 10.30773/pi.2020.0161
2. Liedl B, Fritsch N, Mejia CS, Verwiebe R. Risk perceptions of individuals living in single-parent households during the Covid-19 crisis: Examining the mediating and moderating role of income. *Frontiers in Sociology.* 2023;8. Available: <https://doi.org/10.3389/fsoc.2023.1265302>
3. Blundell R, Costa Dias M, Cribb J, Joyce R, Waters T, Wernham T. Inequality and the Covid-19 crisis in the United Kingdom. *Ann. Rev. Econ.* 2022;14:607–636. DOI: 10.1146/annual-economics-051520-030252
4. Dromey J, Dewar L, Finnegan J. *Tackling single parents poverty after coronavirus.* Leicester: Learning and Work Institute; 2020.
5. Branowska-Rataj A, Matysiak A, Mynarska M. Does lone motherhood decrease women's happiness? Evidence from qualitative and quantitative research. *J. Happiness Stud.* 2014;15:1457–1477. DOI: 10.1007/s10902-013-9486-z
6. Calvano C, Engelke L, Di Bella J, Kindermann J, Renneberg B, Winter MS. Families in the Covid-19 pandemic: Parental stress, parental mental health and the occurrence of adverse childhood experiences - results of a representative survey in Germany. *Eur. Child Adolesc. Psychiatry.* 2022;31:1–13. DOI: 10.1007/s00787-021-01739-0
7. Carotta C, Lavender-Stott E, Garcia A, Liu HL. Relationship status and well-being in the context of the COVID-19 pandemic. *J. Fam. Issues.* 2022;44:2527–2546. DOI: 10.1177/0192513X221105242
8. Cook R, Grimshaw D. A gendered lens on COVID-19 employment and social policies in Europe. *Eur. Soc.* 2021;23:S215–S227. DOI: 10.1080/14616696.2020.1822538
9. Hiekel N, Kühn M. Mental health before and during the Covid-19 pandemic: The role of partnership and parenthood status in growing; 2022.
10. Kuhn U, Klaas H, Antal E, Dasoki N, Lebert F, Lipps O. Who is most affected by the Corona crisis? An analysis of changes in stress and well-being in Switzerland. *Eur. Soc.* 2021;23:S942–S956. DOI: 10.1080/14616696.2020.1839671
11. Huebener M, Waights S, Spiess K, Siegel N, Wagner G. Parental well-being in times of covid-19 in Germany. *Rev. Econ. Househ.* 2021;19:91–122. DOI: 10.1007/s11150-020-09529-4
12. Li J, Bünning M, Kaier T, Hipp L. Who suffered most? Parental stress and mental health during the COVID-19 pandemic in Germany. *J. Fam. Res.* 2022;34:281–309. DOI: 10.20377/jfr-704
13. O'Reilly A. Trying to function in the unfunctionable: Mothers and Covid-19. *J. Motherh. Initiat.* 2020;11:7–24.
14. Nieuwenhuis R, Maldonado L. Single-parent families and in-work poverty in Handbook on in-work poverty. eds. H. Lohmann and I. Marx (Cheltenham: Edward Elgar Publishing Limited). 2018;171–192.
15. Nieuwenhuis R, Maldonado L. (Eds.) *The triple bind of single-parent families.* Bristol Policy Press; 2019.
16. Tisdell C. Economic, social and political issues raised by the COVID-19 pandemic. *Econ. Anal. Pol.* 2020;68:17–28. DOI: 10.1016/j.eap.2020.08.002

17. Racine N, Hetherington E, McArthur BA, McDonald S, Edwards S, Tough S. Maternal depressive and anxiety symptoms before and during the COVID-19 pandemic in Canada: A longitudinal analysis. *Lancet Psychiatry* 2021; 8:405–415. DOI: 10.1016/S2215-0366(21)00074-2
18. Romero-Gonzalez B, Lozano-Ruiz A, Puertas-Gonzalez J, Marino-Narvaez C, Peralta-Ramirez MI. Symptoms of anxiety in mothers during the COVID-19 lockdown: A structural equation model approach. *J. Fam. Issues*. 2022; 44:1756–1772. DOI: 10.1177/0192513X211064861
19. Wanberg C, Csillag B, Douglass R, Zhou L, Pollard M. Socioeconomic status and well-being during COVID-19: A resource-based examination. *J. Appl. Psychol.* 2020;105:1382–1396. DOI: 10.1037/apl0000831
20. Boye AEE. Impact of COVID-19 on micro, small and medium self-financed businesses among single mothers in Sapele metropolis. *International Journal of Economics Development Research (IJEDR)*. 2023;4(1):10–26. Available: <https://doi.org/10.37385/ijedr.v4i1.831>
21. Attah AP, Alfa PI, Mamman MS. Demographic and social impact of Covid-19 pandemic in Nigeria. *Journal of International Relations Security and Economic Studies (JIRSES)*, 2021;1(1): 41-49. Available: <http://journals.rcmss.com/index.php/jirses>. ISSN: 2756-522X
22. Iheanacho-Shahid J. The Impact of the Covid-19 Pandemic on Women in Nigeria. *African Journal of Politics and Administrative Studies (AJPAS)*. 2021;14(11):125-140. e-ISSN: 2787-0359, p-ISSN: 2787-0367 Available: [www.ajpasebsu.org.ng](http://www.ajpasebsu.org.ng) 127
23. Wang C, Pan R, Wan X, Tan Y, Xu L, McIntyre RS, N Choo FN, Tran B, Ho R, Sharma VK, Cyrus Ho C. A longitudinal study on the mental health of the general population during the covid-19 epidemic in China. *Brain, Behavior, and Immunity*. 2020;87:40-48, ISSN 0889-1591, Available: <https://doi.org/10.1016/j.bbi.2020.04.028>
24. Al-Rabiah A, Tamsah MH, Al-Eyadhy AA, Hasan GM, Al-Zamil F, Al-Subaie S, Alshime F, Jamal A, Alhaboob A, Al-Saadi B, Somily AM. Middle East respiratory syndrome-corona virus (MERS-CoV) associated stress among medical students at a university teaching hospital in Saudi Arabia. *Journal of Infection and Public Health*. 2020;13(5):687-691, DOI: 10.1016/j.jiph.2020.01.005
25. Davico C, Ghiggia A, Marcotulli D, Ricci F, Amianto F, Vitiello B. Psychological impact of the COVID-19 pandemic on adults and their children in Italy. *Front Psychiatry*. 2021;12:572997. DOI: 10.3389/fpsy.2021.572997. PMID: 33776812. PMCID: PMC7994767
26. Torales H, Rios-Gonzalez C, Barrios I, O'Higgins M, Gonzalez I, Garcia O, Castaldelli-Maia J. M. Ventriglio A. Self-perceived stress during the quarantine of the covid-19 pandemic in Paraguay: An exploratory Survey. *Frontiers Psychiatry Public Mental Health*. 2020; 26:1. Available:<https://doi.org/10.3389/fpsy.2020.558691>
27. Hertz R, Mattes J, Alexandra S. When paid work invades the family: Single mothers in the COVID-19 pandemic. *Journal of Family Issues*. 2021;42(9):2019–2045.
28. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N. The psychological impact of quarantine and how to reduce it: A rapid review of the evidence. *Lancet*. 2020;395: 912–920. DOI: 10.1016/S0140-6736(20)30460-8
29. Lee AM, Wong JG, McAlonan GM, Cheung V, Cheung C, Sham PC, Chu CM, Wong PC, Tsang KW, Chua SE. Stress and psychological distress among SARS survivors 1 year after the outbreak. *Can J Psychiatry*. 2007;52(4):233-40. DOI: 10.1177/070674370705200405. PMID: 17500304
30. Paris M. What's a 'shelter in place' order, and who's affected? *Wired*, accessed March 2020;23. Available: <https://www.wired.com/story/whats-shelter-placeorder-whos-affected/>
31. Serafini G, Bondi E, Locatelli C, Amore M. Aged patients with mental disorders in the COVID-19 era: The experience of Northern Italy. *Am. J. Geriatr. Psychiatr.* 2020;28:794–795. DOI: 10.1016/j.jagp.2020.04.015
32. Alon T, Doepke M, Olmstead-Rumsey J, Tertilt M. The impact of COVID-19 on gender equality (No. w26947). *National Bureau of Economic Research*; 2020a. DOI:10.3386/w26947

33. Wenham C, Smith J, Davies SE, Feng H, Grepin KA, Harman S, Herten-Crabb, Morgan R. The social and economic impacts of COVID-19 fall harder on women than on men. Governments need to gather data and target policy to keep all citizens equally safe, sheltered and secure. *Nature*. 2020;583:194-198. Available: <https://www.nature.com/articles/d41586-020-02006-z>
34. Georgetown Institute for Women, Peace and Security; 2019. Available: <https://giwps.georgetown.edu/wp-content/uploads/2019/12/WPS-Index-2019-20-Report.pdf>
35. East Tennessee State University. What is social health?; 2022. Accessed on 10/10/2022. Available: <https://study.com/academy/lesson/what-is-social-health-definition-examples.html>
36. Melo MCA Soares DDS. Impact of social distancing on mental health during the COVID-19 pandemic: An urgent discussion. *International Journal of Social Psychiatry*. 2020;66(6): 625–626. DOI: 10.1177/0020764020927047
37. Bassuk SS, Glass TA, Berkman LF. Social disengagement and incident cognitive decline in community-dwelling elderly persons. *Ann. Intern. Med.*, 1999;131: 165–173. DOI:10.7326/0003-4819-131-3-199908030-00002
38. World Health Organization (WHO). COVID-19 Weekly Epidemiological Update- 15 June 2021, World Health Organization, Geneva, Switzerland; 2021. Available: <https://covid19.who.int/>Google Scholar

---

© Copyright (2024): Author(s). The licensee is the journal publisher. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*  
*The peer review history for this paper can be accessed here:*  
<https://www.sdiarticle5.com/review-history/113759>