Contraceptive use during the COVID-19 pandemic in South Africa

By
Juliana C. Onuh
Department of Geography, University of Nigeria Nsukka, Nigeria
E-mail: juliana.onuh@unn.edu.ng

Ugochukwu S. Asogwa
Department of Sociology and Anthropology, University of Nigeria Nsukka, Nigeria
E-mail: ugochukwu.asogwa @*unn.edu.ng*

Eberechukwu J. Eze
Department of Geography, University of Nigeria Nsukka, Nigeria
E-mail: eberechukwu.eze@*unn.edu.ng*

Chukwuedozie K. Ajaero
Department of Geography, University of Nigeria Nsukka Nigeria
E-mail: chukwuedozie.ajaero@unn.edu.ng

Abstract

The outbreak of corona virus disease (Covid-19) has spearheaded strategies such as: social distancing measures; closure of schools, workplaces, and community facilities and travel restrictions, to curb the transmission process. These measures have varying implications of different socioeconomic activities, including contraceptive use. However, there is dearth of studies on the prevalence and factors of contraceptive use in South Africa during the pandemic. This study therefore, examined the use of contraceptives amidst covid-19 pandemic in South Africa and factors affecting its use. Data from the National Income Dynamics Study-Coronavirus Rapid Mobile Survey (NIDS-CRAM) wave 1 survey was used with a total of 5,762 respondents. Analyses were done using frequencies, percentages, Chi-Square, and binary logistic regression models. The result showed 26.35% of respondents used contraceptive in the country during the pandemic. The unadjusted regression results showed that urban residents (OR=1.24, P=0.001), Non-Blacks (OR=2.05, P=0.000) and those with tertiary education (OR=1.15, P=0.01) had significantly higher odds of contraceptive usage. On the other hand, the adjusted regression model showed that, non-Blacks (OR=2.05, P=0.000) and residents of Limpopo (OR=1.56, P=0.01) had significantly higher odds of using contraceptive compared to other population groups. This study therefore advocates for race and region specific policy/strategy in advancing contraceptive usage in South Africa during pandemics.

Keywords: Contraceptive use, COVID-19, South Africa

Background

Since late 2019, the outbreak of corona virus disease (Covid-19) has spearheaded strategies such as social distancing measures; closure of schools, workplaces, and community facilities and travel restrictions, to curb the transmission process. These Covid-19 containment measures may also have implications for access and usage of contraceptive among populations, especially in African countries. Thus, a longitudinal study carried out in some African countries during the pandemic showed that 25.4% and 13.1% of women in Burkina Faso and Kenya discontinued

using contraceptive during the pandemic (Anglewicz, 2021). However, there remains dearth of study on the prevalence and factors of contraceptive use in South Africa during the pandemic

Studies have noted that contraceptive use remains one of the most effective ways of promoting reproductive health and engendering socioeconomic development globally (Adedini et al, 2015). The need to improve uptake of modern contraceptive methods has also been advocated for in the last few decades as a way of promoting sexual reproductive health, reproductive rights and gender equality (Fagbamigbe, & Ojebuyi, 2017). Contraceptive use therefore has important policy implications for poverty reduction and socio-economic development in developing countries as users of contraceptives take charge of their reproductive choices.

Researches have shown disparities among contraceptive users across various socio economic groups. Men are observed to have more access and use of contraceptive than women. The need for contraception decreased with increasing age as Hossain et al. (2018) report that in Bangladesh, the prevalence of contraception use and access was highest for those aged 30–34 years (73.7%), followed by those aged 35–39 (72.9%). In the same vein, employed women used more contraceptive (68.1%) compare to their unemployed counterparts (59.8%). Significant regional and racial variations have also been observed with higher odds of non-users residing in rural areas than in urban areas (Grady et al., 2015). Black women unlike white women were more likely not to use contraceptive, experience contraceptive failures, use contraceptive inconsistently, and they use less frequently some prescription methods such as contraceptive pill, intrauterine devices (IUDs) (Grady et al., 2015; Roy et al., 2021; Leigh et al., 2021).

Evidence shows that South Africa remains the country that is most-affected by the COVID-19 pandemic in Africa with 1,548, 157 confirmed cases and 52, 846 deaths as at 31st March, 2021 (WHO, 2021). This shows that half (50.6%) of the confirmed cases in all of Africa is in South Africa while more than half (67.9%) of deaths from COVID-19 in Africa occurred in South Africa as well. According to South Africa Demographic and Health Survey (SADHS), (2016) sixty percent of sexually active women age 15-49 in South Africa were contraception users before the pandemic, ranging from 51% in Free State to 65% in KwaZuluNatal. Among women in union, the prevalence is slightly lower (55%). However, little is known about the use and determinants of contraceptives in South Africa within the COVID-19 period. Therefore, the aim of this study is to ascertain the use of contraceptives during covid-19 pandemic in South Africa and to examine the factors affecting its use.

Methods

The data used for the study was National Income Dynamics Study-Coronavirus Rapid Mobile Survey (NIDS-CRAM) wave 1 survey. The NIDS-CRAM is a nationally representative survey of the National Income Dynamics Survey (NIDS), which involves a sample of South Africans from 2017 NIDS wave 5. It is the first secondary dataset on coronavirus from NIDS during the coronavirus pandemic. The total number of the population used for the study is 5,762 with 2,281 of females and 3,481 of males. The study made use of one dependent variable: (i) use or non-use of contraceptives. While the individual level factors were age (15-24, 25-44, 45+years), Gender (male and female), employment status (not employed, employed), race (Blacks, non-Blacks), Level of education (non-tertiary, tertiary), residential area (rural, urban), Province (Western Cape, eastern Cape, Northern Cape, Free State, Kwa-Zulu-Natal, North West, Gauteng, Mpumalanga, Limpopo).

Analysis

Descriptive statistics was used to describe the study populations. Chi-Square was carried out between contraceptive use and each of the individual level factors. Finally, binary logistic regression models were used to determine the influence of individual-level variables on contraceptive use in the study area. There were two models. Model 1 was the unadjusted regression results and model 2 the adjusted regression result. The results were expressed as odds ratio (OR) at 95% confidence intervals (95% CI). The data was weighted for under sampling and oversampling errors before data analyses, and all the analyses were performed using STATA version 14.0

Results

Descriptive statistics of study population

According to table 1 below, 51.87% of the study population were aged 25 to 44 years while, 60.41% of the entire population were females. Greater percentage of the study population have non-tertiary education (66.33%), reside in urban areas (77.44), are Blacks (84.99), not employed (60.48) and reside in Kwanzulu-Natal (27.98).
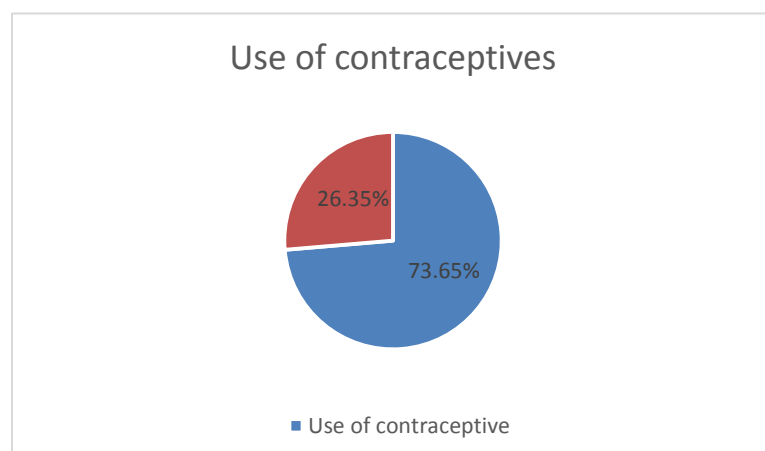
Table 1. Descriptive statistics of study population

Variables	Freq(%)	Chi-Square
Age		6.02[0.04]
15-24	974 (16.90)	
25-44	2,989 (51.87)	
45+	1,799 (31.22)	
Gender		22.13[0.00]
Male	2,281 (39.59)	
Female	3,481 (60.41)	
Employment status		0.44[0.51]

Not employed	3,485 (60.48)	
Employed	2,277 (39.52)	
Level of education		
Non-tertiary	3,030 (66.33)	
Tertiary	1,538 (33.67)	
Medical aid		
Yes	918 (15.95)	
None	4,837 (84.05)	
Residential area		
Rural	1,300 (22.56)	
Urban	4,462 (77.44)	
Race		55.38[0.00]
Blacks	4,897 (84.99)	
Non-Blacks	865 (15.01)	
Province		296.3.98[0.00]
Western Cape	435 (7.55)	
Eastern Cape	544 (9.44)	
Northern Cape	371 (6.44)	
Free State	388 (6.73)	
Kwanzulu-Natal	1,612 (27.98)	
North West	385 (6.68)	
Gauteng	892 (15.48)	
Mpumalanga	522 (9.06)	
Limpopo	613 (10.64)	

Chi-Square Result

Among the entire study population in figure 1 below, only 26.35% of the population used contraceptive during the pandemic. Significant variation was recorded across various age groups, gender, race, residence, and across provinces. For instance, 51.34% of those aged 25-44 years, 58.60% of females, 78.46% of urban residence, 82.89% of blacks and 42.89% of residence in Kwa-Zulu-Natal had the highest contractive usage.

Use of contraceptives

26.35%

73.65%

■ Use of contraceptive

Binary Logistic Regression Result

In the unadjusted regression model (table 2 below), the Non-Blacks (OR=2.05, P=0.000), residents of urban areas (OR=1.24, P=0.001) and those with tertiary education (OR=1.15, P=0.01) were more likely to use contraceptive. Conversely, those aged 45 and above (OR=0.85, P=0.01), and females (OR 0.75, P 0.000) were less likely to use contraceptive. Furthermore, residents of Kwa-Zulu-Natal (OR=0.31, P=0.000), Gauteng (OR=0.72, P=0.01), Free State (OR=0.51, P=0.000), and Mpumalanga (OR=0.47, P=0.000) had significantly decreased odds of contraceptive use than other provinces.

Table 2. Binary logistic regression result

Variables	Model 1:Unadjusted	Model2:Adjusted
Age group		
15-24	**1.00**	**1.00**
25-44	**0.81***	
45+	0.83[0.69-0.99]*	0.80[0.64-1.00]*
Employment status		
Not employed	**1.000**	**1.000**
Employed	1.04[0.92-1.17]	0.90[0.77-1.05]
Medical aid		
Yes	**1.000**	**1.000**
No	0.74[0.62-0.88]***	1.01[0.82-1.25]
Gender		
Male	**1.00**	**1.00**
Female	0.75[0.66-0.84]***	0.74[0.64-0.86]***
Residential area		
Rural	**1.00**	**1.00**
Urban	1.24[1.08-1.42]**	1.12[0.94-1.34]
Race		
Blacks	**1.00**	**1.00**
Non-Blacks	2.05[1.69-2.48] ***	1.75[1.29-2.22]***
Level of education		
Non-tertiary	**1.00**	**1.00**
Tertiary	1.15[0.99-1.32]*	1.13[0.97-1.25]
Province		
Eastern Cape	**1.000**	**1.000**
Northern Cape	1.06[0.73-1.52]	0.99[0.64-1.53]
Free State	0.51[0.37-0.71]***	0.69[0.45-1.05]*
Kwanzulu-Natal	0.31[0.24-0.41]***	0.39[0.28-0.56]***
North West	0.90[0.63-1.29]	1.17[0.75-1.84]
Gauteng	0.72[0.54-0.96]*	0.83[0.57-1.20]

| Mpumalanga | 0.47[0.35-0.64]*** | 0.65[0.43-0.97]* |
| Limpopo | 1.17[0.84-1.63] | 1.56[1.02-2.39]* |

For the adjusted regression model, Non-Blacks (OR=2.05, P=0.000) and residents of Limpopo (OR=1.56, P=0.01), had increased odds of contraceptive use. On the other hand, Females (OR=0.74, P=0.000) and those aged 45 and above (OR=0.80, P=0.01) were less likely to use contraceptives.

Conclusions

This study examined factors, examined the use of contraceptives amidst covid-19 pandemic in South Africa and factors affecting its use using the NIDS-CRAM wave 1 dataset conducted during the COVID-19 pandemic. This study acquired and contributed to the existing literature on how limited use of contraception was during the pandemic, which could lead to adverse sexual and reproductive health outcomes. The policy implication of the study is to help the government plan better to avoid reduction in contraceptive use during pandemics. The study advocates for race and region specific policy/strategy in advancing contraceptive use in South Africa during pandemics. For example, Blacks and those residing in Limpopo should be the focus. Emphasis should also be on females and those aged 45 years and above.

References

Adedini, S. A., Odimegwu, C., Imasiku, E. N., & Ononokpono, D. N. (2015). Unmet Need for Family Planning: Implication for Under-five Mortality in Nigeria. Journal of Health Population and Nutrition, 33 (1), 187–206.

Anglewicz, P. (2021). The Impact of COVID-19 on Fertility Intentions and Contraceptive Use: Results from Longitudinal Studies in Four African Contexts. Performance Monitoring for Action. Johns Hopkins Program for International Education in Gynecology and Obstetrics

Fagbamigbe, A.F., & Ojebuyi, B.R. (2017). Infuence of spousal communication about family planning and HIV/AIDS-related issues on modern contraceptive use in Nigeria, Journal of Health Management, 19(2), 320–333.

Family Planning 2020 http://track20.org/South_Africa

Grady, C. D., Dehlendorf, C., Cohen, E. D., Schwarz, E. B., & Borrero, S. (2015). Racial and ethnic differences in contraceptive use among women who desire no future children, 2006–2010 National Survey of Family Growth. Contraception, 92(1), 62–70. https://doi.org/10.1016/j.contraception.2015.03.017

Hossain, M., Khan, M., Ababneh, F., & Shaw, J. (2018). Identifying factors influencing contraceptive use in Bangladesh: evidence from BDHS 2014 data. BMC Public Health, 18(1), 1-14. https://doi.org/10.1186/s12889-018-5098-1.

Leight J, Hensly C, Chissano M, Ali L. (2021) Short-term effects of the COVID-19 state of emergency on contraceptive access and utilization in Mozambique. PLoS ONE https://doi.org/10.1371/journal.pone.0249195

Roy N, Amin M.B, Maliha MJ, Sarker B, Aktarujjaman M, Hossain E, et al. (2021) Prevalence and factors associated with family planning during COVID-19 pandemic in Bangladesh: A cross-sectional study. PLoS ONE https://doi.org/10.1371/journal.pone.0257634

SADHS, (2016). South Africa Demographic and Health Survey report.

WHO (2021). Media briefing on C0vid-19. (2021). https://www.afro.who.int/health-topics/coronavirus-covid-19