# INFLUENCE OF COVID-19 PANDEMIC ON SEXUAL AND MENTAL HEALTH AMONG COUPLES DURING LOCKDOWN IN KOGI STATE, NIGERIA

## <sup>1</sup>Moses Folusayo ADEOLA, <sup>2</sup>Alice Oladehinde Abu, Mohammed Adamu

<sup>1</sup>Department of Human Kinetics and Health Education

<sup>2</sup>Department of Science Education, Faculty of Education, Prince Abubakar Audu University,

Anyigba, Kogi State.

<sup>3</sup>Federal College of Education, Yola, School of Science.

### **Corresponding Author**

Moses Folusayo Adeola

Department of Human Kinetics and Health Education, Prince Abubakar Audu University,

Anyigba, Kogi State.

#### Abstract

Corona virus disease 2019 (COVID-19) pandemic has affected the lives of people globally. This was due to changes in lifestyles caused by the pandemic. The aim of the study was to determine the influence of COVID-19 pandemic lockdown on sexual and mental health of couples in Kogi State, Nigeria. Descriptive cross-sectional research design was used. A sample size of six hundred (600) respondents were selected using multistage sampling techniques. Data were collected with self-structured questionnaires and analyzed using inferential statistics of chi-square. The finding of the study revealed that COVID -19 pandemic lockdown increased the rate of sexual intimacy, excitement, sexual intercourse, arousal, orgasm, and satisfaction among couples. Also, the study found that couples experienced mental health problems such as depression, anxiety and fear amongst other during COVID-19 pandemic lockdown. The study concluded that COVID-19 pandemic lockdown influences sexual and mental health behaviour's among couples in Kogi State. During the COVID-19 pandemic lockdown, there was also a significant increase in depression, anxiety, stress, phobia, anger, and obsessive-compulsive disorders among couples in Kogi State, Nigeria. It was recommended that couples should be referred to professional health counselor for proper and adequate counseling.

Keywords: COVID-19, sexual, mental, health, couples

### **INTRODUCTION**

The first Novel Coronavirus (SARS-COV-2) was reported in Wuhan, Hubel Province, China in December 2019. It has since spread rapidly throughout the world, causing unpredictable changesin our lives (Ilesanmi et al., 2012; Keragoz et al., 2020). The World Health Organization (WHO) declared this novel coronavirus disease (COVID-19), which is transmitted through the respiratory tract or through direct contact with infected surfaces or people, a pandemic in March 2020, prompting all countries to take extraordinary measures to combat its spread (WHO,2020). There is currently no definitive treatment for COVID-19. Non-pharmacological measures, such as covering one's mouth and nose when coughing or sneezing, frequent hand washing, and maintaining social distance between people, can only slow the spread of the virus and reduce the disease's burden (Kaya, 2021).

The COVID-19 outbreak-induced behaviours have resulted in life constraints that we did not anticipate before the pandemic. People are not allowed to see their friends and are unable to perform daily activities that they used to do, leaving them feeling even more isolated than before (Sheridan, 2020; Torais et al., 2020). Quarantines and lockdowns have become daily routines, and the concepts of social or physical distancing, even within families, have become our new normal, causing significant disruptions in many social relationships (Keragoz et al., 2020).

Fear of infection with COVID-19 has increased time spent at home, and restrictions on socializing and economic losses have caused anxiety and depression in many people who have been forced to stay at home during this period (Torais et al., 2020). As is well known, quality and satisfying sexual lives have a positive influence on many people's social and daily relationship, as well as their intimate lives. (Van et al., 2018; Flynn et al., 2016). The WHO defines sexual health as an individual's physical, emotional, mental, and social well-being. Because sexual health is a fundamental determinant of people's well-being, it is expected that this condition will have a negative impact on sexual contact, though it will not be completely eliminated during the COVID-19 pandemic. As a result, social measures implemented in response to COVID-19 will alter behaviour (Keragoz et al., 2020). Furthermore, the recent rapid increase in the number of cases in many countries, combined with the uncertainty caused by not knowing when the epidemic will end, has resulted in sexual and mental health issues (Kaya, 2021).

Previous research has shown that societal events that cause trauma or distress have an impact on the sexual health and mental well-being of many couples. A significant decrease in sexual satisfaction was reported in a study looking into the impact of the Wenchuan earthquake on female sexual behaviour (AR, 2019). Similarly, differences were reported in sexual behaviour in the aftermath of Hurricane Katrina in the United States (Keragoz et al., 2020). In this context, recent studies on couple sexuality and relationship quality during the COVID-19 pandemic have also been conducted (AR, 2019). According to a study conducted in the United Kingdom, the majority of the participants believe that they did not engage in sexual activity during the COVID-19 pandemic,

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and thus experienced no change in their sexual arousal, orgasm, or sexual satisfaction (Pannzer et al., 2020).

Similarly, a significant decrease in physical contact or intimacy, as well as a decrease in vaginal sex, among couples in the United States of America was discovered during the COVID-1pandemic (Jacob et al., 2020). In another study, Lehinmiller et al. (2012) found that the majority of respondents from various countries reported a decrease in sexual intimacy or relationships, as well as a significant decrease in the frequency of intercourse during the pandemic. In addition, in a cross-national study it was discovered that the rate of individuals with a sexual intercourse frequency of one to five per week prior to the pandemic decreased from 76.7 to 72.5 percent during the pandemic, whereas the rate of those with an intercourse frequency of more than five per week increased by 3.3 percent (Arafat et al., 2020). Furthermore, the social distance measures taken during the COVID-19 pandemic reduced the frequency of sexual interest, sexual excitement, and sexual intercourse (Ibarra et al, 2020). (Yuksei & Ozor, 2020) A significant increase was discovered in the frequency of sexual intercourse during the pandemic period when compared to the pre-pandemic period, which the general sexual function score (sexual arousal, orgasm, and satisfaction) decreased significantly during the COVID-19 pandemic. Both the sexual function score and the frequency of sexual intercourse decreased during the pandemic, according to an Italian study of reproductive-age women (Schiavi et al., 2020). Another Turkish study (Keragoz et al., 2020), discovered an increase in sexual avoidance among couples, which resulted in a significant decrease in the frequency of sexual intercourse and overall sexual function during the COVID-19 pandemic. An online survey study involving 3500 people discovered that the frequency sexual intercourse increased among participants (Li, et al., 2020). Furthermore, they reported that the majority of their study's participants reported less satisfaction in sexual relations but an increase in sexual desire and arousal. This, however, did not result in an increase in the frequency of sexual intercourse. According to a recent Chinese study, sexual satisfaction and sexual frequency ratio decreased among couples during the COVID-19 pandemic (Li, et al., 2020).

Recent research has found a link between the COVID-19 pandemic and mental health (Pich et al., 2020). Stress during the pandemic increases fear of COVID-19 pandemic, and this rising fear increases individuals' depression, anxiety, and stress symptoms (Kocak et al., 2021), COVID-19 fear exacerbated psychiatric symptoms such as depression and anxiety in Ahorsu's Iranians study

(Ahorsu et al., 2022). According to the DASS scale (Jiang et al, 2020), individual depression, anxiety, and stress levels were higher in Philippinnos during the early stages of the pandemic (Tee et al., 2020). Negative emotional responses have also been observed in the general adult population, as well as in children and adolescents, particularly following the announcement of the COVID-19 pandemic (Biddle et al., 2020). This is consistent with previous research indicating that such public health emergencies typically trigger a series of stressful emotional responses characterized by high levels of anxiety and depression at the same time (Brooks et al., 2020).

Similar studies conducted in China (Almerids et al., 2020) revealed significantly higher self-reported levels of stress symptoms, anxiety, depression, and post-traumatic stress disorders, as well as more post-traumatic symptoms and more severe overall psychological problems.

Finally, it was reported in separate studies that uncertainty about health and work combined with social distancing caused by the COVID-19 pandemic, had an impact on psychological adjustment, influencing anxiety, depression, stress, and sleep pattern among individuals (Tiam et al., 2020; Ferrucci et al., 2012; Huang & Zhan, 2020). While many studies have been conducted to investigate the knowledge, attitude, practice, and violence against women in Nigeria during the COVID-19 pandemic and lockdown are influencing sexuality in Nigeria. From various perspectives, sexual health is an aspect of general well-being with significant implications in the daily lives of the population (Ford et al., 2019). It is unclear whether sexual behaviours among married couples changed during the COVID-19 pandemic in Nigeria and Kogi State in particular as well as the role of the pandemic in mental health challenges among married couples during the COVID-19 pandemic. Therefore, this study was to determine the influence of COVID-19 pandemic on the sexual and mental health of married couples in Kogi State, Nigeria.

### **METHODS**

#### **Research Design**

The study employed a descriptive cross-sectional study design. The study was conducted between April to August, 2020.

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#### **Population and Sample**

The study population comprised of all married couples in Kogi State, Nigeria. A total of six hundred (600) respondents were used for the study. The sample size was statistically determined using G-power software (version 3.1). Respondents were met at home. Criteria for inclusion in the study were defined as age 18-65 years and married or co-habiting heterosexual couples who were living together before the pandemic and continue who so during the period of pandemic.

### **Sampling Technique**

A multistage sampling procedure was used for the study, and the stages are described as follows: The state were stratified into three existing senatorial zones (East, West and Central). A simple random sampling method (balloting) was used to select one Local Government Area from each of the senatorial zones. From each of the LGA selected, a ward was also randomly selected. While purposive random sampling technique was used to select two hundred respondents from each ward selected based on accessibility and willingness to participate in the study.

### **Data Collection**

A structure questionnaire was used for data collection. The questionnaire was in two section: Section A was used to gather information on demographic data, while section B sought information on the variables selected for the study. The technique of summated rating and responses was a fourpoint modified Likert scale rating of strongly agreed (SA), agreed ( A), disagreed (D), and strongly disagreed (SD). The questionnaire was pretest at a different L.G.A with similar characteristics as the study location in each of the Senatorial zone to ensure surface and content validity. The researchers administered the instrument/questionnaire to the respondents and retrieval was made on the spot after completed.

#### **Data Analysis**

Data collected was initially entered into a pre-coded excel spreadsheets and analyzed using the statistical package for the social sciences (SPSS) version 200). Frequency and percentage distribution was used for demographic data while inferential statistics of chi-square was used to analyzed the association between selected variables with the level of significance (p) set at <0.05. (p<0.05).

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# RESULTS

Item	Variable	Frequency	Percentage
Age	21-30	115	19.2
	31-40	202	33.7
	41-50	146	24.3
	51-60	105	17.5
	61- above	32	5.3
Tribe	Yoruba	180	30
	Ibo	52	8.7
	Hausa	35	5.8
	Igala	218	36.3
	Ebira	115	19.2
Religion	Christianity	285	47.5
	Islam	315	52.5
Level of Education	Illiterate	77	12.8
	Primary School	94	15.7
	Secondary School	194	32.3
	Tertiary	235	39.2

**Table 1:** Demographic Data of Respondents

Table 1 shows the age of the respondents, 115 (19.2%) are between 21-30 years old, 202 (33.7%) of the respondents are between age 31-40 years, 146 (24.3%) are between age 41-50 years, and 105 (17.5%) are between 51-60 years and the remaining 32 (5.3%) are above 61 years old. Regarding tribe, 180 (30%) were Yoruba 52 (8.7%) were Ibo; 35 (5.8%) were Hausa, and 218 (36.2%) were Igala while 115 (19.2%) were Ebira. Also, as regarding the religion of the respondents, 285 (47.5%) are Christian and 315 (52.5%) are Muslim. For level of education, 77 (12.8%) had not been to school before, 94 (15.7%) had primary school education, 194 (32.3%) had secondary school education while 235 (39.2%) had tertiary education.

S/No	Items	А	D	DF	Cal. $X^2$ value	P-
						value
1	During COVID-19 pandemic lockdown	490	110			
	couples experienced an increase in sexual	81.7	18.3			
	intercourse					
2	During COVID-19 pandemic lockdown	429	171			
	couples experienced an increase in sexual	71.5	28.5			
	excitement					
3	During COVID-19 pandemic lockdown	381	219			
	couples experienced an increase in sexual	63.5	36.5			
	intimacy					
4	During COVID-19 pandemic lockdown	446	154			
	couples experienced an increase in sexual	74.3	25.7			
	desire					
5	During COVID-19 pandemic lockdown	400	200	8	16.05	0.002
	couples experienced an increase in sexual	66.7	33.3			
	arousal					
6	During COVID-19 pandemic lockdown	396	204			
	couples experienced an increase in sexual	66	34			
	lubrication/erection.					
7	During COVID-19 pandemic lockdown	342	258			
	couples experienced an increase in the level	57	43			
	of orgasm.					
8	During COVID-19 pandemic lockdown	391	209			
	couples experienced an increase in sexual	65.2	34.8			
	satisfaction					
9	During COVID-19 pandemic lockdown	375	225			
	couples experienced an increase in sexual	62.5	37.5			
	avoidance					

**Table 2:** Chi-square analysis investigating the influence of COVID-19 pandemic lockdown on sexual function of couples in Kogi State, Nigeria

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Table 2 shows the result of the influence of COVID-19 pandemic lockdown on sexual function among couples. The result showed that the probability value of 0.002 with a degree of freedom of 8 at 0.05 alpha level. Since the p-value is less than 0.05 level of significance, this implies that COVID-19 pandemic lockdown significantly influence sexual function or health of married couples in Kogi State.

**Table 3:** Chi-square analysis showing the influence of COVD-19 pandemic lockdown on mental health of couples in Kogi State, Nigeria

S/No	Items	A	D	DF	Cal. $X^2$ value	P_value
1	Couples experienced an increase in	352	248	DI,	Cal. A value	I -value
I						
	anxiety during COVID-19 pandemic	58.7	41.3			
-	lockdown	<b>. .</b> .				
2	Couples experienced an increased in	376	224			
	depression during COVID-19 pandemic	62.7	37.3			
	lockdown					
3	Couples experienced an increased in anger	349	251			
	during COVID-19 pandemic lockdown	58.2	41.8			
4	Couples experienced an increased in stress	353	247			
	during COVID-19 pandemic lockdown	58.8	41.2			
5	Couples experienced an increased in sleep	427	173	8	12.7	0.003
	disorder during COVID-19 pandemic	71.2	28.8			
	lockdown					
6	Couples experienced an increased in	403	197			
	phobia during COVID-19 pandemic	67.2	32.8			
	lockdown					
7	Couples experienced an increased in	328	272			
	loneliness during COVID-19 pandemic	54.7	45.3			
	lockdown					
8	Couples experienced an increased in	303	297			
U	obsessive compulsive disorder during	50.5	49.5			
	COVID-19 pandemic lockdown	50.5	17.5			
9	Couples experienced an increased in	332	268			
7			208 44.7			
	schizoprenia during COVID-19 pandemic	50.5	44./			
	lockdown				· · · · · · ·	1 · 1

The analysis in table 3 affirmed that COVID-19 pandemic lockdown significantly increased the level of mental health problems of married couples in Kogi State, Nigeria during the pandemic, as the P-value of 0.003 is less than 0.05 level of significance. This implies that couples in Kogi State experienced significant increase in mental health during COIVID-19 pandemic lockdown.

#### DISCUSSION

The present study aimed to examine the influence of COVID-19 pandemic on the sexual and mental health lives of married couples in Kogi State, Nigeria during the lockdown. According to the data obtained from this study, participants reported a significant increase in sexual function or activity as a result of the state's lockdown during the pandemic, a severity of anxiety, depression, anger, stress and other mental health problems was also observed among couples. These findings were found to be consistent with those of Yan et al and Karagoz et al (Yang, et al., 2019; Keragoz et al., 2020).

In previous studies, it has been demonstrated that events that cause trauma at a societal level have an impact or influence on the sexual health as well as on the mental health of many individuals. In a study investigating the effects of earthquake that occurred in Wenchuan, on female sexual behaviours, a significant decrease in sexual satisfaction was reported (Liu et al., 2020 & Keragoz et al., 2020). Similarly, differences in sexual behaviours following hurricane Katrina was reported in the USA (Keragoz et al., 2020). In this context, studies have also been conducted about the COVID-19 pandemic. A survey of individuals in three Southeast Asian countries reveled a significant increase in the frequency of sexual intercourse or activity during the COVID-19 pandemic lockdown compared to before pandemic or pre-pandemic period (Arafat et al., 2020; Yuksei & Ozor, 2020; Keragoz et al., 2020).

However, research on changes in sexual activity among couples as a result of COVID-19 pandemic lockdown reported in different countries has found evidence that contradicts the findings of this study. The overall sexual activity and sexual intercourse frequency have decreased significantly among couples in China (Li et al., 2020). In addition, there was a decrease in sexual interest, excitement, and sexual intercourse during COVID-19 pandemic lockdown (Arafat et al., 2020; Ibarra et al., 2020; Schiavi et al., 2020). Similarly, Yuksel, Ozor (2020) and Li et al. (2020) found that during pandemic, the majority of respondents reported a decrease in sexual arousal, lubrication, satisfaction, and difficulty in reaching organisms. Furthermore, during COVID-19 lockdown. Keragoz et al. (2020) and Jacob et al. (2020) reported an increase in sexual avoidance, a drastic reduction in physical contact, and a decrease in vaginal sex among couples in the United Kingdom and Turkey respectively. This could be attributed to social distance measures implemented during the COVID-19 pandemic.

Lastly, in a study by Panzer et al. (2020) the majority of participants reported no changes in terms of sexual activity in pre-pandemic and pandemic periods. Also, our findings indicated negative significant of COVID-19 pandemic lockdown on the mental health of couples in Kogi State, Nigeria. These findings are in line with Kocak et al. (2021) who reported an increase in depression. Anxiety and stress among couples during COVID-19 pandemic lockdown. Many studies have found that distress during lockdown increases fear of COVID-19 and that this rising fear increases individuals' depression, anxiety, and stress symptoms. Similarly, uncertainty about health and work, combined with social distancing and home schooling related to forced lockdown, had an effect on mental adjustment, influencing anxiety depression, and stress levels among couples (Tian, et al., 2020; Huang & Zhan, 2020; Zhang et al., 2020).

Furthermore, research have shown that COVID-19 pandemic lockdown has been linked to a variety of mental health problems such as anxiety depression, insomma, somatization, social phobia, post-traumatic stress disorders and obsessive compulsive disorders (Shrivastaya et al., 2021). Venkatesh and Edirappuli (2019) reported that depression and anxiety were found as a result of isolation and quarantine programme during the pandemic lockdown. Similar effects were observed due to confinement or activity during the COVID-19 pandemic lockdown compared to before pandemic or pre-pandemic periods. From their loved ones, being devoid of their liberties, and feeling of lack of purpose due to differentiated routine and livelihood.

This leads to low mood, boredom, frustration and potential depressive disorders. Anxiety arises due to fear of containment and improper clarity regarding guidelines of physical distancing. Akorede et al. (2021) discovered that COVID-19 pandemic lockdown typically causes a series of high levels of anxiety and depression, which are characterized by sadness, loss of interest hopelessness, disturbed sleep, poor concentration, thoughts of attempting or committing suicide, and significant impairment in the ability to cope with daily life. Lastly, the findings of systematic review by Xiong et al. (2021) reported higher rates of anxiety, depression and psychological distress among the general population affected by COVID-19 pandemic in different nations.

#### CONCLUSION

The findings of this study revealed a significant increase in sexual behaviours such as sexual intimacy, excitement, desire, arousal, and sexual intercourse among married couples in Kogi State, Nigeria, during the COVID-19 pandemic lockdown. During the COVID-19 pandemic lockdown,

there was also a significant increase in depression, anxiety, stress, phobia, anger, and obsessivecompulsive disorders among couples in Kogi State, Nigeria. Couples experiencing sexual and mental health issues should be referred to a professional health counselor for proper and adequate counseling.

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