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## The sexual behavior of Jamaicans before and during the COVID-19 pandemic

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### Abstract

**Introduction:** Many studies existed on the role of social isolation on sexual behaviour; but there is an inadequacy of such researches during Covid-19, particularly in Jamaica. Sexual behaviour is a critical aspect of health as it has implications for public health matters.

**Objectives:** To determine the sexual behaviour of Jamaicans during Covid-19 as this will provide a platform for future public health programmes.

**Methods and materials:** An associational research design was used to collect data from Jamaicans on their sexual behavior through a standardized survey. The survey instrument was designed in Google Forms and later stored and retrieved in the Statistical Packages for the Social Sciences for Widowed, Version 27.0. The instrument was placed on different social media platforms, and convenience

sampling provided the respondents for data analysis.

**Findings:** 76.8% (380) of the respondents indicated being sexually active, 72.4% (355) have one partner, 68.6% (334) does not reside with their sexual partners, 59.9% (296) participate in sexual activity such as masturbation, and 61.8% (304) view pornographic materials. To the question, "Do you believe that the isolation due to the pandemic affects your sexual behaviour?" 51.9% (257) of the respondents indicated yes. The number of respondents with multiple sexual partners has increased by 7.3% since the Covid-19 pandemic. More respondents are having sex weekly during the Covid-19 pandemic than before it.

**Conclusion:** Based on the responses, there is an exponential rise in Jamaicans' weekly coitus and other sexual behaviours due to the COVID-19 pandemic.

**Keywords:** Coitus, COVID-19, Masturbation, Pornography, Sexual Behavior, Sexual expression, Social isolation, Jamaica

### Introduction

Human sexual behavior is the modus operandi in which humans experience and express their sexuality <sup>[1]</sup>. People engage in various sexual acts, ranging from activities done alone to acts with another person in varying patterns of frequency, for a wide variety of reasons <sup>[2-5]</sup>. Human sexual behavior is how humans experience and express their sexuality <sup>[6]</sup>. People engage in a variety of sexual acts, ranging from activities done alone (e.g., masturbation) to acts with another person (e.g., sexual intercourse, non-penetrative sex, oral sex, etc.) in varying patterns of frequency, for a wide variety of reasons <sup>[7]</sup>. Sexual activity usually results in sexual arousal and physiological changes in the aroused person, some of which are pronounced while others are more subtle.

The COVID 19 is a pandemic that started in December 2019; however, this virus first affected Jamaica on March 10, 2020 <sup>[8,9]</sup>. Since then, Jamaicans are being compelled to spend more time at home to prevent this virus's spreading. There are emerging behaviors that people are becoming more aware of and knowledgeable about during the covid-19. Most of these behaviors are readily available for each adult to venture. Human sexual behaviors may be experienced and expressed in various ways, including thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles, and relationships <sup>[10]</sup>. This manifests itself in biological, physical, and emotional ways and socio-cultural ways. In 2006, a group of scholars conducted research that validated an increase in the sexual practices of people <sup>[7]</sup>, and this was outside of the Covid-19 pandemic.

In 2007, a team of researchers from the University of the West Indies conducted a national probability study of Jamaica, and they found that 48.4% (male 56.2%; females 40.9%) of respondents aged 15-74 years indicated having sex at once per week, and 24.4% had multiple sexual partners <sup>[11]</sup>.

The sexual practices of Jamaicans were once again provided by Wilks *et al.*,<sup>[12]</sup> who found that only 33% used a condom on their last sexual activity at the time of the study in 2018. Quoting from the 2017 Knowledge, Attitude, Behaviour and Practice Survey, the Jamaican Minister of Health and Wellness postulated that there is an increase in the number of people having multiple sexual partners<sup>[13]</sup>, which begs the question ‘What is the state of sexual practices of Jamaicans during Covid-19?’

A medical doctor wrote that:

Home quarantining results in many idle hours that that passes by very slowly with your partner; As the coronavirus that causes COVID-19 continues to spread widely in the continent of North America and beyond, restrictions that promote social distancing do, too. The eventuality of quarantining at home is the development of closer bonding with your partner. While it can be an excellent time to connect, you may have questions about how much intimacy is safe<sup>[14]</sup>

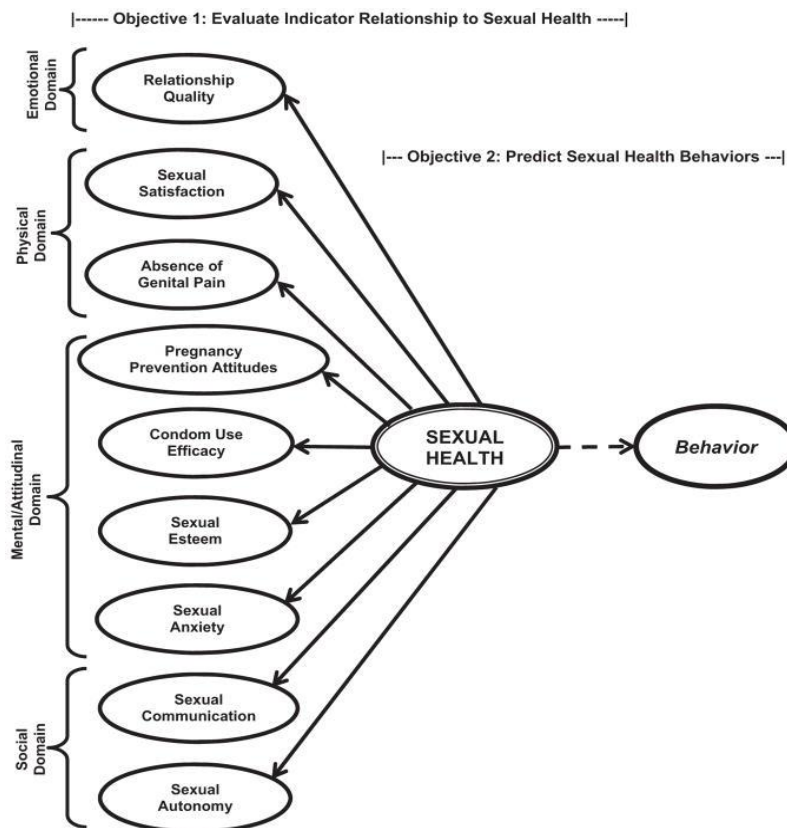
Covid-19 has brought with it more time for home-social interactions, but little emphasis has been placed on the sexual practices of people. This pandemic has subtly brought with it a future public health challenge that of human intimacy and the sexual behaviour of people. A study in 2012 revealed that some tertiary level students in Jamaica have multiple sexual partners<sup>[15]</sup> and that there was a 2% increase in the number of young Jamaicans aged 15-25 years who had multiple sexual partners over 2008 from 2012 suggesting sexual practices of Jamaicans is showing signs of sexually promiscuity and that may be worse in a period of social isolation. The issue is, has Covid-19 change the sexual health of Jamaicans, and has people’s sexual practices changes with social isolation?

The ideal matter is to empirically examine the sexual

practices of people to understand their behaviour and forge a path to address challenges that may emerge from unsafe intimacy. This quantitative research seeks to determine how much our sexual behaviors have been affected since March 10, 2020, in Jamaica. The paper’s researchers are dedicated to being definitive statistically whether this pandemic has resulted in an increased or decreased sexual behaviors of the citizens of Jamaica. The researchers hope to determine how health aspects are affected as a result of sexual behaviors. Human sexual behaviors, including sex toys, pornographic sites, masturbation, sexuality, types of sexual acts, etc., will be thoroughly discussed throughout this research. Researchers will also probe to verify if an increase or decrease in the behaviours mentioned above occurs. The researchers will be using a questionnaire consisting of 25 closed-ended questions to assess whether or not the citizens of Jamaica’s sexual behaviors have been influenced and how much.

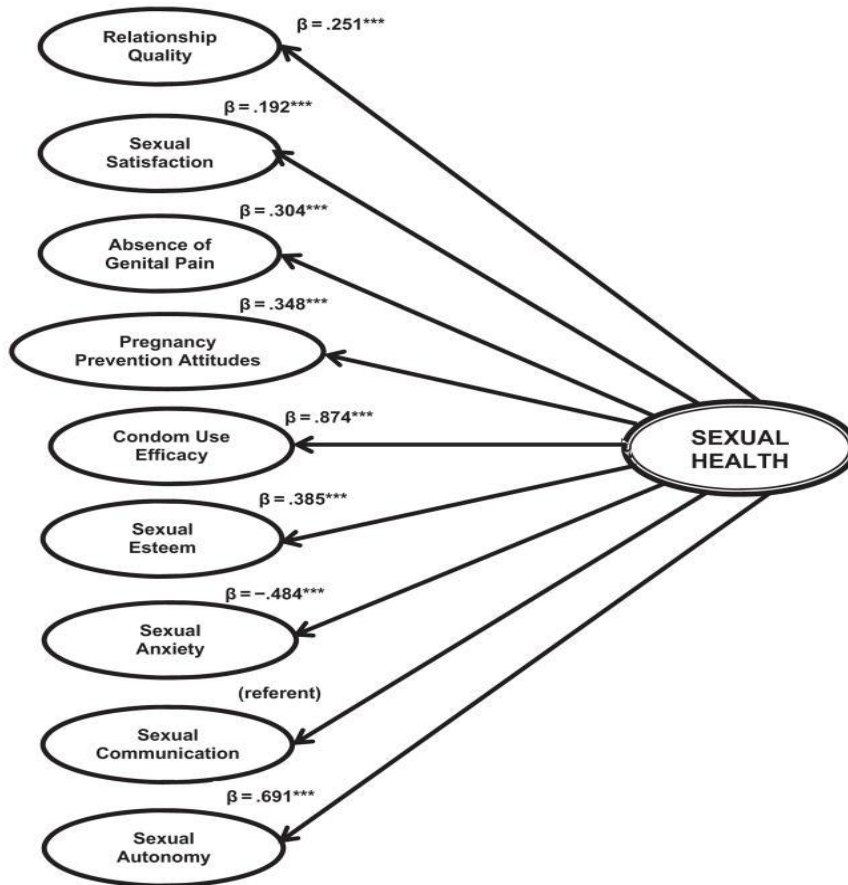
**Theoretical Framework**

Sexual health influences sexual behaviour, and both concepts have been widely studied in health literature<sup>[16-24]</sup>. Using a definition for sexual health, "Sexual health refers a state of lifespan well-being related to sexuality," Hensel and Fortenberry<sup>[15]</sup> developed a quantitative model that evaluates factors that determine sexual health (a multidimensional model of sexual health and sexual and prevention behaviour). They found that four significant domains influence peoples’ sexual health and that sexual health determines sexual behaviour (Fig 1). In the study, the strengths of factors were also established, and this is graphically presented in Fig 2.



Source: Hensel and Fortenberry<sup>[15]</sup>

Fig 1: A Multidimensional Model of Sexual Health and Sexual and Prevention Behavior Among Adolescent Women

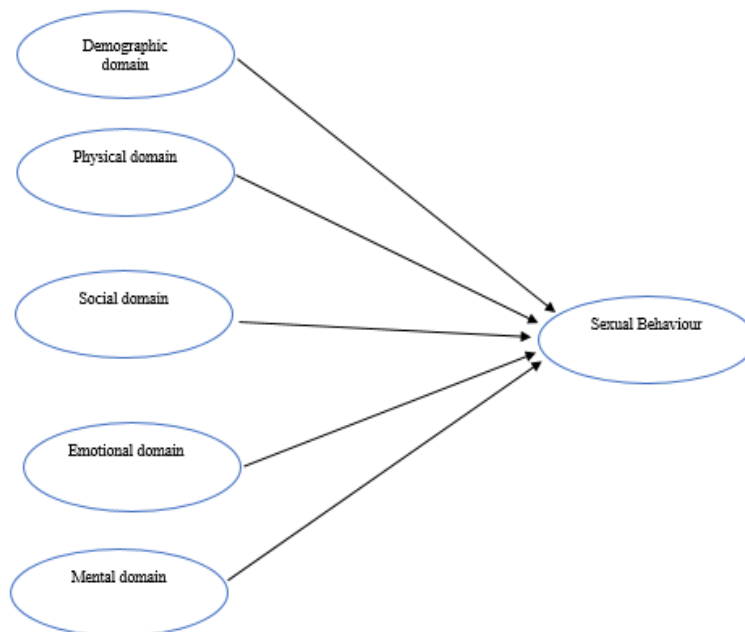


Source: Hensel and Fortenberry [15]

Fig 2: A Multidimensional Model of Sexual Health and Sexual and Prevention Behavior Among Adolescent Women

The multidimensional model of sexual health and sexual and prevention behaviour among adolescent women was modified for the current study. For this study, a notable addition was the inclusion of a demographic domain and the sexual practices of people (sexual behaviour). Within the

various domains employed by Hensel and Fortenberry [15], this research modified some of the items with each domain, and these are presented in Fig 3. Fig 3 is a conceptual framework that will be evaluated, and the final factors will be established by way of multivariate statistical analyses.



Source: Current Researchers

Fig 3: Conceptual Sexual Behaviour of Jamaicans

Characteristics of the five domains of sexual behaviour using a sample of Jamaica.

1. Demographic domain: Age, Gender.
2. Physical domain: engagement in sexual practices/acts (toys, masturbation), viewing sexual acts, sexual satisfaction.
3. Social domain: number of sexual partners, sexual expression, sexual communication, resident with a sexual partner.
4. Emotional domain: effect of social isolation on sexual behavior.
5. Mental/attitudinal domain: sexual anxiety, description of sexual behavior.
6. Sexual behaviour: currently sexually active.

**Methods and Materials**

This study employed an association research design [25-27]. A cross-sectional survey was used to collect the data for analysis. The survey was a standardized one with 25 items, and Rea and Parker’s work provided some guidelines for the item questionnaire design [28]. The questionnaire items include 1) demographic question (age and gender), 2) mental/attitudinal domain, 3) physical domain, 3) emotional domain, and 4) social domain. The sampled size was collected using Jamaica's population for December 2018 (2, 726, 667) via a 95% confidence interval and a 3.5% margin of error [29]. Based on the conditions mentioned above, the computed sample was 784, and the response rate was 63.6% (499 respondents). The research team conveniently collected data from respondents across Jamaica. The survey instrument was designed using Survey Monkey, and this was sent to people's email and WhatsApp, so consent meant that people completed the instrument. The survey did not use any personal identifier, and so confidentiality and anonymity were upheld.

The collected data were converted into the Statistical Packages for Social Sciences for Windows, Version 27.0. The statistical tools were 1) percent, 2) descriptive statistics, 3) bivariate analyses (chi-square), and 4) multivariate analysis (binary logistic regression) [30, 31]. The binary logistic regression was used to determine the sexual behaviour model for Jamaica. A p-value of 5% was used to determine statistical significance.

**Conceptualizations**

**Sexual behaviour (practice):** Human sexual behaviour, which is referred to as sexual behaviour (practice) in this study, denotes sexual activity or engagement of humans to include the use of toys, masturbation, anal, vaginal, and oral sex [1].

**Sexual health:** Human sexual health, which is referred to as sexual health in this study according to Mercer, is "...increasingly recognized as not merely the absence of disease, but the ability to have pleasurable and safe sexual experiences, free from coercion" [1], which is in keeping with the definition of World Health Organization [18]. This research employs the exact meaning of sexual health as forwarded by Mercer [1].

**Masturbation:** Dr. Jennifer Landam, a specialist in hormone therapy from the University Clinic of Essen in Germany, suggested that indulgence in some self-love will strengthen your body's natural defense forces, boost white blood cell count, relax the body and allow for better sleep [32]. She opined that sexual arousal and orgasm increased the number of white blood cells and boosted the immune system, and as

such, self-love may be encouraged for people to become engaged.

**Pornography:** This is the portrayal of sexual acts for sexual arousal [33-35].

**Findings**

Table 1 presents the demographic characteristics of the sampled respondents. Most of the sampled respondents were females (68.1%, n=333), with the average age being 23 years (range of 32 years; minimum age 18 years and maximum age 50 years).

**Table 1:** Demographic Characteristics of Sampled Respondents, n=499

Details	% (N)
<b>Gender</b>	
Male	31.9 (156)
Female	68.1 (333)
<b>Age</b>	23 years, range = 32

Table 2: shows the sexual behavior of 499 Jamaicans during Covid-19 who participated in the survey, of the results; 76.8% (380) of the respondents are currently sexually active, 72.4% (355) have one partner, 68.6% (334) does not reside with their sexual partners, 59.9% (296) participate in sexual activity such as masturbation, and 61.8% (304) view pornographic materials. In addition, 1 in every 5 respondents had multiple sexual partners, with 5 in every 100 having at least 5 sexual partners. Furthermore, the number of respondents with numerous sexual partners has increased by 7.3% since the Covid-19 pandemic.

**Table 2:** Sexual Behaviour of Jamaicans during Covid-19, n=499

Details	% (N)
<b>Currently Sexually Active</b>	
Yes	76.8 (380)
No	23.2 (115)
<b>One Sexual Partner (currently)</b>	
Yes	72.4 (355)
No	27.6 (135)
<b>Resident with Sexual Partner</b>	
Yes	31.4 (153)
No	68.6 (334)
<b>Sexual activity (masturbation)</b>	
Yes	59.9 (296)
No	40.1 (198)
<b>Sexual activity (viewing pornographic materials)</b>	
Yes	61.8 (304)
No	38.2 (188)
<b>Sexual activity (engaged in over the phone)</b>	
Yes	44.9 (222)
No	55.1 (272)
<b>Number of the sexual partner (before Covid-19)</b>	
0 - < 2 persons	79.7 (372)
2 – 4 persons	15.4 (72)
5 – 6 persons	1.9 (9)
7+ persons	3.0 (14)

Table 3 shows the selected issues on the sexual behavior of the sampled respondents n= 499. Of the n=499, 495 responses to the question "Do you believe that the isolation due to the pandemic has an effect on your sexual behavior?" 51.9% (257) said no. Only 494 responded to the question, "Do you engage in any type of over-the-phone sexual activity?" 55.1% (272) said no. 490 responded to the question, "Have you decided to decrease or stop all sexual activity during the pandemic?" 76.5% (375) selected no. 492



responded to the question, "Have you engage in the used of sex toys before isolation due to the pandemic?" 75.6% (372) selected no. 491 responded to the question, "Have sex become a recreational activity for you?"... 60.3% (296) said no. Only 478 responded to the question, "Has sex become more or less pleasurable for you during isolation due to the pandemic?" 57.7% (276) said no. Of the n=499 respondent, only 489 responded to the question "Have you started to use sex toys during isolation due to the pandemic?" majority said

no, accounting for 81.4% (398). 490 responded to the question, "Have you engaged in any form of sexual experimentation during isolation due to the pandemic?" 69.6% (341) said no.

Of the sampled respondents (n=499), 97.8% responded to the question 'Have you experienced an increase in libido during isolation/covid-19?'. Of those who responded to the question (n=488), marginally more indicated no (50.4%).

**Table 3:** Selected Issues on Sexual Behavior of the Sampled Respondents, n=499

Details	% (N)
Covid-19 having an effect on your sexual behavior	
Yes	51.9 (257)
No	48.1 (238)
Decide to stop all sexual activity during COVID-19	
Yes	23.5 (115)
No	76.5 (375)
Engaged in the use of sex toys before COVID-19	
Yes	24.4 (120)
No	75.6 (372)
Sex becoming a recreational activity	
Yes	39.7 (195)
No	60.3 (296)
Sex becoming more or less pleasurable due to COVID-19	
Yes	42.3 (202)
No	57.7 (276)
Used of sex toys during Covid-19	
Yes	18.6 (91)
No	81.4 (398)
Engaged in sexual experimentation	
Yes	30.4 (149)
No	69.6 (341)
Increase in libido during social isolation	
Yes	49.6 (242)
No	50.4 (246)
Decrease in libido during social isolation	
Yes	20.6 (100)
No	79.4 (385)

Table 4: showing the description of sexual behavior before and during Covid-19 of the n=499 respondent 479 person responded to the question "How would you describe your sexual behavior before the pandemic?" The majority indicated an average of 45.5% (218), with boring having the least responses 13.2% (63). 430 responded to the question,

"How would you describe your sexual behavior during the pandemic?" 33.1% (159) indicated average and 20.8 (100) indicating exciting accounting for the lowest. Empirical evidence revealed by this study is that 5.4 times more respondents indicated having sex on a basis during Covid-19 compared to before this time.

**Table 4:** Sexual Practices before and during COVID-19

Details	Before Covid-19	During Covid-19
	% (n)	% (n)
Description of sexual activity		
Boring	13.2 (63)	22.5 (108)
Average	45.5 (218)	33.1 (159)
Adventurous	20.3 (97)	23.5 (113)
Exciting	21.1 (101)	20.8 (100)
Frequency of sexual Activity		
Daily	12.3 (57)	9.3 (42)
2 – 5 days	22.2 (103)	25.2 (113)
Weekly	6.0 (28)	32.3 (145)
Monthly	38.6 (179)	33.2 (149)
Tri-monthly	20.9 (97)	-

Table 5 presents selected sexual matters by gender of the sampled respondents. The findings revealed that more females indicated having a single sexual partner (78.5%) compared to males (60.0%)— $\chi^2(1)=18.106$ ,  $P < 0.0001$ , which is the reverse for those having recreational sex

(females 35.8%; males 47.1%—  $\chi^2(1)=5.680$ ,  $P = 0.017$ ). Furthermore, substantially more males were engaged in phone sex (56.1%) compared to females (36.0%)— $\chi^2(1)=12.510$ ,  $P < 0.0001$ .

**Table 5:** Cross-tabulation of selected sexual matters by gender

Detail	Gender		Total
	Male	Female	% (n)
Currently Sexually Active	% (n)	% (n)	
Yes	76.9 (120)	77.7 (258)	77.5 (378)
No	23.1 (36)	22.3 (74)	22.5 (110)
One Sexual Partner***			
Yes	60.0 (93)	78.5 (259)	72.6 (352)
No	40.0 (62)	21.5 (71)	27.6 (133)
Resident with Sexual Partner			
Yes	34.0 (52)	30.8 (101)	31.8 (153)
No	66.0 (101)	69.2 (227)	68.2 (328)
Sexual activity (masturbation)			
Yes	64.1 (156)	58.1 (194)	60.0 (293)
No	35.9 (50)	41.9 (136)	40.0 (195)
Sexual Activity (Viewing Pornographic materials)			
Yes	67.9 (106)	58.8 (194)	61.7 (300)
No	32.1 (50)	41.2 (136)	38.3 (186)
Covid-19 having an effect on your sexual behavior			
Yes	55.8 (87)	50.2 (167)	51.9 (254)
No	44.2 (68)	49.8 (166)	48.1 (235)
Engaged in over the phone sexual activity***			
Yes	56.1 (87)	30.9 (130)	44.5 (217)
No	43.9 (68)	61.0 (203)	55.5 (271)
Frequency of Current Sexual Behaviour*			
Daily	12.4 (18)	8.0 (24)	9.5 (42)
2 – 5 days	24.1 (35)	26.1 (78)	25.5 (113)
Weekly	37.9 (55)	29.4 (88)	32.2 (143)
Monthly	25.5 (37)	36.5 (109)	32.9 (146)
Sex being a recreational activity**			
Yes	47.1 (73)	35.8 (118)	39.4 (191)
No	52.9 (82)	64.2 (212)	60.6 (294)
Last time had sexual relations.			
Less than 1 day ago	20.1 (30)	25.3 (7)	23.6 (107)
2 – 5 days ago	17.4 (26)	20.4 (62)	19.4 (88)
Last week	22.8 (34)	15.1 (46)	17.7 (80)
Last two weeks	10.1 (15)	12.2 (37)	11.5 (52)
Last month	29.5 (44)	27.0 (82)	27.8 (126)

\*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.0001

Table 6 presents a multivariate analysis of the sexual behaviour of Jamaicans. Of the five domains, three emerged as predictors (factors) of the sexual behaviour of Jamaicans. The three domains are 1) social (multiple sexual partners, resident with sexual partner), 2) emotional (decision to decrease sexual Activity during Covid-19, sex is more pleasurable during Covid-19), and 3) physical domains (engagement in sexual practices/acts (toys, masturbation), sexual experimentation), and these constitute the multidimensional sexual behaviour model. Furthermore, four hundred and forty-three respondents were used to establish the multidimensional sexual behaviour model of Jamaicans. Eighty-seven percent of the data were correctly classified, of which 95% of those who indicated yes were correctly classified and 56% of those who stated no. The predictors (social, emotional, and physical domain) account for 49% of the variance in sexual behaviour of Jamaica (-2Log likelihood = 283.919; Omnibus test of model,  $\chi^2(16) = 166.011$ ,  $P < 0.0001$ ; Hosmer and Lemeshow test,

$\chi^2(8)=12.394$ ,  $P = 0.134$ ).

Of the seven factors identified for Jamaica's current sexual behaviour model during Covid-19, only one (decision to decrease sexual activity) emerged as an inverse predictor of sexual behaviour. Respondents who indicated having taken the decision to decrease their sexual activity during this Covid-19 pandemic were 0.843 times less likely to engage in sexual behaviour than those who have not made this decision. Furthermore, those who indicate finding sex more pleasurable since Covid-19 were 3.678 times more likely to engage in sexual activity than those who are dissatisfied with their sexual expression. Respondents who have multiple sexual partners were 11 times more likely to engage in sexual behaviour than those with a single sexual partner. The findings also showed that those who masturbated were 2.67 times more likely to engage in sexual practices than non-masturbators. Also, the factor multiple sexual behaviour is the most influential predictor of sexual behaviour followed by the decision to decrease sexual activity.

**Table 6:** Binary Logistic Regression of Sexual Behaviour of Jamaicans on selected domains

	B	S.E.	Wald	df	P-value	Odds ratio	95% C.I.	
							Lower	Upper
Age	.005	.029	.026	1	.872	1.005	.949	1.064
Gender	-.559	.373	2.241	1	.134	.572	.275	1.189
Multiple Sexual partners	2.397	.376	40.593	1	.000	10.985	5.256	22.961
Resident with Sexual Partner (1=no)	1.305	.441	8.754	1	.003	3.687	1.553	8.750
Engaged in masturbation (1=Yes)	0.983	.416	5.583	1	.018	2.672	1.182	6.038
5. Do you view any form of por2graphic material during isolation due to the pandemic?	-.519	.412	1.593	1	.207	.595	.266	1.333

6. Have you experienced an increased in libido during isolation due to the pandemic?	-.046	.374	.015	1	.901	.955	.459	1.988
7. Have you experienced a decrease in libido during isolation due to the pandemic?	-.777	.432	3.234	1	.072	.460	.197	1.072
8. Do you believe that the pandemic's isolation has had any effect on your sexual behavior?	.307	.362	.719	1	.397	1.360	.668	2.766
9. Do you engage in any type of over-the-phone sexual activity?	.351	.347	1.022	1	.312	1.420	.720	2.801
Desire to decrease activity	-1.849	.388	22.715	1	.000	.157	.074	.337
11. Have you engaged in the use of sex toys before isolation due to the pandemic?	-.256	.481	.282	1	.595	.774	.302	1.988
12. Has sex become a recreational activity for you?	.196	.389	.253	1	.615	1.216	.567	2.609
Sex becomes more pleasurable since social isolation	1.301	.417	9.757	1	.002	3.675	1.624	8.316
Using sex toys	1.487	.646	5.299	1	.021	4.424	1.247	15.688
Sexual experimentation	1.059	.504	4.423	1	.035	2.884	1.075	7.739
Constant	-.285	1.121	.065	1	.799	.752		

**Discussion and Conclusion**

Sexual behaviour is a critical concept in the public health discourse because it influences sexual health, which changes due to sexually transmitted infections such as AIDS [19]. This risk within the spectrum of the sexual activity band has proliferated the intimate and sensual space in a less than mundane but exhaustively exciting manner. This characterization and profound indulgence in sexual activities mean that cohabitation practices within society hold the key to understanding human existence that impinges on the fertility, mortality, congenial, and gratification continuum. This means that sexual practices hold the key to understanding human existence, including fertility and mortality. So when Wellings *et al.* [7] indicated that the sexual practices of people have increased and the fact that they were articulated in 2009, this raised questions on current sexual health and practices of people within the context Covid-19 that has resulted in social isolation and more homestay. In 2016-2017, Wilks *et al.* [12] conducted a national probability cross-sectional survey that revealed 33% of Jamaicans aged 15-74 years utilize a condom on their engagement in sexual activities, and this may be public health challenge after the Covid-19 pandemic.

The current study revealed that there had been a 49.6% increase in the sexual drive of Jamaicans, 77.5% were sexually active (male 76.9%; female 77.7%), 27.6% had multiple sexual partners, and that there has been a 438.3% rise in the weekly sexual practices of the respondents. The sexual practices of Jamaicans appear to be very high compared to the British. The British National Survey of Sexual Attitudes and Lifestyles of 3343 aged 55-74 years found that 54.3% of men were more sexually active compared to 62.0% of females [36]. The British sexual behaviour study was conducted in 2019; this is within the Covid-19 pandemic and what accounts for high libido among Jamaicans than the British. Like the sexual practices of the British, among a group of 832 Slovak university students, the research revealed 62% of respondents were sexually active and that this research was conducted in 2009 [37].

Another study conducted during the covid-19 home quarantine found that 53.5% of Australians were less engaged in sexual activity than before the pandemic [38], contrary to what was obtained in Jamaica. However, a similarity exists between Jamaicans and south-east Asians (Bangladesh, India & Nepal) as 49.6% of Jamaicans indicated an increase in libido compared to 45% of south-east Asians [39].

The sexual practices of Jamaicans are somewhat different than for what obtained in other societies. Still, there appear to be some similarities and differences related to those with multiple sexual partners. Among Slovak university students, 26.5% of the males indicated having numerous sexual partners compared to 21.4% of female Slovak undergraduate students. In Jamaican, 21.5% of females have multiple sexual partners, comparable to what was obtained in Slovak. The

difference is among the males having multiple sexual partners (Jamaica 40.0%; Slovak undergraduate male 26.5%). The sexual behaviour of people extends to the usage of toys and masturbation, which revealed some differences and similarities between Jamaicans and other nationalities. Sixty percent of Jamaicans indicated being engaged in masturbation compared to 26.0% of Australians, and that 18.6 of Jamaicans used sex toys compared to 14.6% of Australians.

Unlike other studies on sexual behaviour, this research twinned factors influence sexual behavior through the multidimensional sexual model and a detailed description of sexual practices. Although this work employed the multidimensional sexual model developed by Hensel and Fortenberry [15], the items were dissimilar, so there can be no comparison between the two researches. However, the disparity in sexual practices of Jamaicans may be explained by those with multiple sexual partners. This work found that those with multiple sexual partners were 11 times more likely to engaged in sexual activities than those who have a single sexual partner, indicating that sexual promiscuity is accounting for most of the changes in sexual behaviour of Jamaicans.

An important addition critical to the critical assessment agenda is the sexual behaviour discourse of men who have sex with men (MSM) and women who have sex with women. The literature showed a greater probability of the MSM class, not only during the Covid-19 pandemic but overall being infected with an STI than persons from the MSW class [40, 41]. This was indeed a startling statistic and belied that both groups were equally and uniformly susceptible to being infected with an STI. The fact that a member of the MSM group was recorded with a rate of 1,000 per 100,000 population versus 10 per 100,000 population for MSW was nothing but mind-blowing and brings into focus the need to adhere to true scriptures despite calls from some sectors of the society concerning embracing diversity and non-discrimination against homosexuality [42]. The current study found that 32% of Jamaicans are non-resident with their sexual partners and 28% have multiple sexual partners. This can offer some explanation for higher STI among homosexual groups who abstain from using a condom during sexual activity, and the same is true among heterosexuals.

Murphy [43] quoted a Pew Research study that espoused the fact that acknowledgment, recognition, and approval of same-sex unions was increasing across the general band of "American Christianity" [44]. The author opined that this was inclusive of members of religious organizations that once aggressively had serious conflicts and opposed relationships between members of the same sex, as this was deemed aberrant and immoral – a great sin against God and procreation itself. In a surprising and absurd move, recently, the Pope endorsed civil unions for same-sex relationships, which is considered an abomination according to scriptures

[43, 45].

Since Jamaica is considered a country for high temperance for an open homophobic society<sup>[46]</sup>, proper research on MSM is challenging to collect data and have honest engagement by respondents for effective analysis. With the philosophy of the church within Jamaica supported by the majority of citizens still fully immersed in suppressing same-sex behaviors, it would be very problematic and challenging to undertake meaningful research on homosexual practices without some respondents attempting to subvert and suppress the reliability and validity of information through incorrect and inaccurate answers.

IAMAT alluded to the demonstrated sexual risks through 1) individuals engaging in unsafe intercourse external of their mating union; 2) participation in spontaneous and casual copulation; 3) involvement with the services of "sex workers"; 4) engagement in social and immoral conduct that provide immediate and exploratory prospects encompassing sex to seek thrills or through the instances of being lonesome and isolated; 5) participation in exploitive human trafficking and sexual tourism for profit; 6) persons being a victim of sexual violence like rape<sup>[47]</sup>.

In concluding, social isolation has increased the sexual behaviours of Jamaicans, and this may be a public health challenge that must be planned for. At the same time, we highlight and address the various protocols for the COVID-19 pandemic.

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