

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

Paul Andrew Bourne¹, Shameal Smith², Chrystal Carty², Nyasha Rattray², Shantelle Codling², Ramon Gordon², Vincent M.S. Peterkin³, Michael Burke⁴ & Clifton Foster⁵

¹Acting Director of Institutional Research, Northern Caribbean University, Mandeville, Manchester, Jamaica, WI

²Nursing Student, Department of Nursing, Northern Caribbean University, Mandeville, Manchester, Jamaica, WI

³Associate Vice President of Academic Administration and Interim Dean of the College of Humanities, Social and Behavioural Sciences, Northern Caribbean University, Mandeville, Manchester, Jamaica, WI

⁴Monitoring and Evaluation officer & Data Analysts, Quality Management & Institutional Research, Northern Caribbean University, Mandeville, Manchester, Jamaica, WI

⁵Department of Biology, Chemistry, and Environmental Sciences, Northern Caribbean University, Mandeville, Manchester, Jamaica, W.I

***Corresponding Author:** Paul Andrew Bourne, Acting Director of Institutional Research, Northern Caribbean University, Mandeville, Manchester, Jamaica, WI

ABSTRACT

Introduction: The COVID-19 pandemic has shifted the focus of health promotion and health education strategies from primary health care to COVID-19 prevention and mitigation.

Objective: This study seeks to (1) identifying the relationship between social isolation and the rate at which Jamaican's are screened for sexually transmitted infections, (2) to determine if Jamaicans are more likely to contract said illnesses during this time of pandemic, and (3) establish healthcare-seeking model based on people's sexual behavior.

Methods: This study employed a correlational cross-sectional research design. Using Jamaica's estimated population for 2019 (2,734,093), a 95% confidence interval, and a margin of error of 4%, the calculated sample size was 601. The entire population was sampled based on each parish's proportion, with a response rate of 76.2%. A standardized survey was developed, and Survey Monkey was used to collect the data, which was later retrieved, stored, and analyzed using the Statistical Packages for the Social Sciences for Windows, Version 27.0. Descriptive and inferential statistics were performed on the data, and a healthcare-seeking behavior model was established. A p-value of 5% was used to determine the level of statistical significance.

Findings: The findings revealed that 26.6% (N=122) of the sampled respondents used a condom, 12.9% (N=59) had multiple sexual partners, 60.0% (N=275) indicated being sexually active, and 24.5% (N=112) have been tested for a sexually transmitted infection. The two factors accounted for 58.7% of the variance observed in the healthcare-seeking behavior (current STI and sexually active), with being infected with a sexually transmitted infection having more influence on healthcare-seeking behavior than sexual behavior.

Conclusion: An explosion of STI is imminent after the dissipation of the COVID-19 pandemic in Jamaica, and intervention measures must be effectively planned for as early as now.

Keywords: Clinical Services, COVID-19, Jamaica, PMT, Sexual Activity, Social Isolation, STIs

INTRODUCTION

The COVID-19 pandemic has shifted the priority of healthcare providers as well as health seekers (Briggs and Kattey, 2020; Chen, Zhou, Dong, et al., 2019; Noble, 2021; The Health

Foundation, 2020; Yang, Gong, Chen, et al. 2020; WHO, 2020). Health promotion and educational strategies have evolved past primary programs to include a key focus on initiatives that aim to prevent and mitigate the fallout from

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

COVID-19 (Chisholm-Ford, 2020; Hwang, Rabheru, Peisah, Reichman, and Ikeda, 2020; World Health Organization, 2019). One such technique requires social isolation or the mandatory practice of social distancing, its implication for psychological well-being (Banerjee and Rai, 2020; Sepúlveda-Loyola, Rodríguez-Sánchez, Pérez-Rodríguez, et al., 2020) and role of health promotion in addressing the pandemic (Barmania and Reiss, 2020; Rains, Crane, Iyengar, Merchant, Oxnam, Sprinkle, & Ernst, 2020; Van den Broucke, 2020).

Although many protocols were established to reduce the spread of COVID-19 and many health promotion campaigns have been carried out on the matter, and the pertinent question is, "Does Social Isolation influence the reporting of sexually transmitted infections?" Crane, Popovic, Stolbach, & Ghanem (2020) opined that "Social distancing guidelines and resource reallocation during the COVID-19 pandemic have led to significant disruption of sexual health clinics within the United States of America (USA). Little is known about how this disruption has impacted sexually transmitted infection (STI) reporting. The number of reported cases of STIs within the USA was analyzed as affected due to the COVID-19 pandemic; Covid-19 had significantly impacted the provision of health services. This indicated

that sexually transmitted infections are likely to rise drastically during 2021 and beyond due to the low testing among peoples and the shortage of testing kits (Dunn, 2020). An apparent public health crisis may occur with the undiagnosed sexually transmitted infections (STIs) in people because of screening challenges (Dunn, 2020). So an important issue that is yet to be explored in Jamaica is social isolation and STI screening, and the sexual health of people.

This objective research aims to determine the influence of social isolation on Jamaicans' STI screening behavior and examine the sexual practices of Jamaicans before and during the COVID-19 pandemic. A cohort of volunteers aged 18 to over 65 was randomly selected to help the researchers achieve this underlined goal. The study is especially significant because its findings will offer information germane to the extent to which the pandemic has affected STI screening rates during the pandemic. It will also determine the likely effect of COVID-19 on Jamaica's primary healthcare system and the public's response to the changes occurring daily. The researchers hope the findings and analysis will elucidate enough information for the policymakers to understand and implement effective social policy in Jamaicans' STI screening behavior through the usage of quantitative research data.

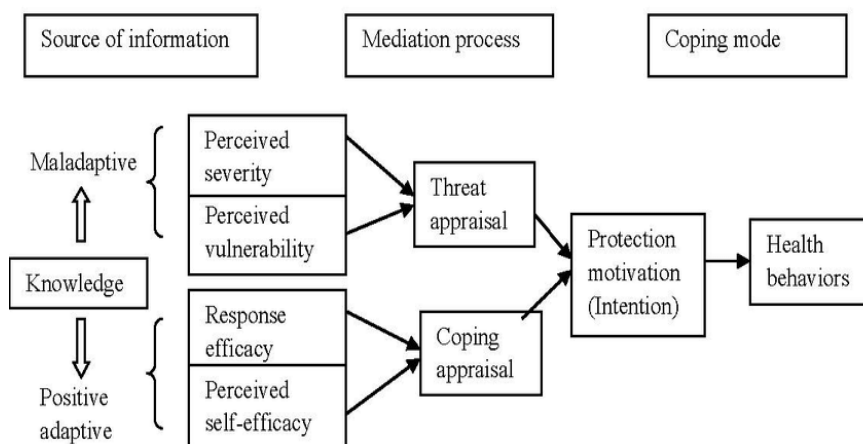


Figure 1. The elements of the Protection Motivation Theory

Source: (Rogers, 1983)

THEORETICAL FRAMEWORK

The Protection Motivation Theory, developed by R.W. Rogers in 1975, is an intrapersonal postulation that explores central human attributes - among them: knowledge, attitudes, beliefs, self-concept, development history, past experiences, motivation, skills, and behaviors. It

is also a continuum theory: identifying variables that influence individual actions and quantifying them to predict a particular response's likelihood. The researchers' hypothesis is this: Social Isolation affects the Sexually Transmitted Infections screening rate of Jamaicans during the COVID-19 pandemic. The Protection

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

Motivation Theory applies to the context of this study because there is an observed decrease in the screening for STIs and the researchers believe that the corona pandemic is the cause.

LITERATURE REVIEW

The current coronavirus pandemic has placed a halt on many aspects of our society. Of note, primary healthcare and the provision of the same have been affected. The health industry has been wrought with sundry economic and psychosocial burdens compounded by the ever-growing desire to beat the coronavirus. Notably, efforts to contain the spread of the virus have inadvertently made the treatment of other illnesses harder. The pandemic has interrupted the dispensation of clinical services for HIV/STIs (Dutta, 2020).

The pandemic has interrupted the provision of clinical services for HIV/STIs. Although social distancing can decrease HIV/STI transmission, service interruption could increase their spread (Jeness, 2020). According to Bethany Ao of the Philadelphia Inquirer, safety measures like adherence to social distancing measures to protect patients and staff “have led to an interruption in walk-in testing for sexually transmitted diseases (STDs) at some centers, many of which serve mainly patients without health insurance because of the risk of COVID-19 exposure to staffers and other patients (Ao, 2020).

A reduction in clinical services for a prolonged period may cause a higher incidence of HIV and STIs. However, long-term sexual distancing has the opposite effect. An interruption in distributing antiretroviral-related therapies to HIV patients also causes cases to rise (Dutta, 2020). In the coming months, the researchers believe there will be a decrease in the number of STI cases reported island-wide. Of note, many countries have seen marked increases in syphilis, chlamydia, and gonorrhea in the last few years. In the United States, between 2014 and 2018, reports of syphilis, chlamydia, and gonorrhea increased by 71%, 19%, and 63%, respectively.

In contrast, HIV incidence has been decreasing worldwide due to the UNAIDS 90–90–90 strategy (Alpalhao 2020). Though instances of STD and STI transmission have reduced, they continue to spread despite COVID-19 fears. Before March 1, 2020, in New York City, 11 clinics reported offering STI testing either for symptomatic or asymptomatic patients; however, as of April 1, 2020, only 18% of those sites were still able to offer STI testing to asymptomatic patients. States have reportedly redeployed disease intervention specialists and STI program staff to assist in the public health response to the COVID-19 (Nagendra, 2020).

The COVID-19 crisis has had notable impacts on the ability of healthcare facilities to treat instances of STIs. Disruptions are likely to continue as the pandemic progresses. The global COVID-19 pandemic has the potential to indirectly impact the transmission dynamics and prevention of HIV and other STIs (Nagendra, 2020).

METHODS AND MATERIALS

This study employed a correlational cross-sectional research design. Using Jamaica’s estimated population for 2019 (2,734,093), a 95% confidence interval, and a margin of error of 4%, the calculated sample size was 601. The entire population was sampled based on each parish's proportion based on the estimated end-of-year population published by the Statistical Institute of Jamaica (Table 1). The response rate for the study was 76.2%. A standardized survey was developed, and Survey Monkey was used to collect the data, which was later retrieved, stored, and analyzed using the Statistical Packages for the Social Sciences for Windows, Version 27.0, between November 10 and December 14, 2020. No personal identifier was on the instrument, and informed consent was implied based on those who completed the questionnaire. Descriptive and inferential statistics were performed on the data, and a healthcare-seeking behavior model was established. A p-value of 5% was used to determine the level of statistical significance.

Table 1. End of Year Population by Parish for 2019 by Population and Sample

| Parish | Population | Sample |
|-----------|------------|--------|
| Kingston | 90,544 | 26 |
| St Andrew | 571,947 | 164 |
| St Thomas | 94,391 | 27 |
| Portland | 80,921 | 23 |
| St Mary | 115,090 | 33 |

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

| | | |
|--------------|-----------|-----|
| St Ann | 177,054 | 51 |
| Trelawny | 78,487 | 23 |
| St James | 191,737 | 55 |
| Hanover | 72,519 | 21 |
| Westmoreland | 149,857 | 43 |
| St Elizabeth | 151,911 | 44 |
| Manchester | 191,720 | 55 |
| Clarendon | 247,112 | 71 |
| St Catherine | 520,804 | 149 |
| Total | 2,734,093 | 784 |

FINDINGS

Table 2 presents the age group and gender of the sampled respondents. There is 155 (33.8%) males and 303 (66.2%) female respondents. The respondents ages are as follows: 18-24 years which accounts for 216 (47.2%) of the

respondents, 140 (30.6%) being 25-34 years, 63 (13.8%) ages 35-44 years, 29 (6.3%) ages 45-54 years, 8 (1.7%) ages 55-64 years and 2 respondents (0.4 %) who are 65+ years. The majority of the respondents were females and within the age group of 18-24 years.

Table 2. Demographic Characteristics of the Sampled Respondents, N=458

| Details | % (N) |
|----------------|------------|
| Gender: | |
| Male | 33.8 (155) |
| Female | 66.2 (303) |
| Age: | |
| 18-24 | 47.2 (216) |
| 25-34 | 30.6 (140) |
| 35-44 | 13.8 (63) |
| 45-54 | 6.3 (29) |
| 55-64 | 1.7 (8) |
| 65+ | 0.4 (2) |

Table 3 presents information on social isolation and selected sexual behavior of respondents disaggregated by gender. The findings revealed that 26.6% (N=122) of the sampled respondents used a condom, 12.9% (N=59) had multiple sexual partners, 60.0% (N=275) indicated being sexually active, and 24.5% (N=112) have been tested for a sexually transmitted infection. Furthermore, more males (36.1%) utilized a condom on their last sexual activity compared to 21.8% of the female sampled respondents ($\chi^2(2)=10.972$, $P = 0.004$). Like gender disparity

in condom usage, 21.9% of the sampled male respondents indicated having multiple sexual partners compared to 8.3% of females.

The findings revealed a significant statistical relationship between condom usage and the number of sexual partners ($\chi^2(2)=89.025$, $P < 0.0001$). Fifty-four and two-tenths percent of those with multiple sexual partners used a condom on their last sexual activity compared to 37.3% of those with a single sexual partner and 1.8% of those who remarked not having a sexual partner.

Table 3. Social Isolation and Selected Sexual Behaviour of Respondents, N=458

| Details | Gender | | Total % (N) |
|--|------------|------------|----------------|
| | Male | Female | |
| Practicing Social Isolation | | | |
| No | 10.3 (16) | 5.3 (16) | 7.0 (32) |
| Yes, Always | 55.5 (86) | 56.1 (170) | 55.9 (256) |
| Yes, Sometimes | 34.2 (53) | 38.6 (117) | 37.1 (170) |
| Sexually Active | | | |
| No | 27.1 (42) | 37.3 (113) | 33.8 (155) |
| Yes | 65.2 (101) | 57.4 (174) | 60.0 (275) |
| Not Applicable | 7.7 (12) | 5.3 (16) | 6.1 (28) |
| Number of Sexual Partner(s)¹ | | | |
| None | 31.0 (48) | 38.9 (118) | 36.2 (166) |

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

| | | | |
|---------------------------------|------------|------------|------------|
| 1 person | 47.1 (73) | 52.8 (160) | 50.9 (233) |
| 2 and beyond | 21.9 (34) | 8.3 (25) | 12.9 (59) |
| STI Status | | | |
| Negative | 81.9 (127) | 83.4 (252) | 82.9 (379) |
| Positive | 1.9 (3) | 3.3 (10) | 2.8 (13) |
| Not aware | 16.2 (25) | 13.3 (40) | 14.2 (65) |
| STI Screening | | | |
| No | 76.8 (119) | 74.9 (227) | 75.5 (346) |
| Yes | 23.2 (36) | 25.1 (76) | 24.5 (112) |
| STI Status of Partner | | | |
| Negative | 59.4 (92) | 49.3 (149) | 52.7 (241) |
| Positive | 1.9 (3) | 1.1 (3) | 1.3 (6) |
| Not aware | 13.5 (21) | 16.2 (49) | 15.3 (70) |
| Not Applicable | 25.2 (39) | 33.4 (101) | 30.6 (140) |
| Condom Usage² | | | |
| No | 32.9 (51) | 38.3 (116) | 36.5 (167) |
| Yes | 36.1 (56) | 21.8 (66) | 26.6 (122) |
| N/A | 31.0 (48) | 39.9 (121) | 36.9 (169) |

¹ $\chi^2(2)=17.364, P < 0.0001$

² $\chi^2(2)=10.972, P = 0.004$

Table 4 presents a cross-tabulation between being sexually active (in the last ten months) and condom usage, with there being a significant statistical association ($\chi^2(1)=66.729, P < 0.0001$). Of those who indicated being sexually active, 40.4% (N=111) used a condom compared to 5.2% (8) who were not sexually active.

Table4. Cross-tabulation between sexually active (in last 10 months) and Condom usage, N=458

| Details | Sexually Active | | | Total % (N) |
|---------------------|-----------------|------------|-----------|----------------|
| | No | Yes | N/A | |
| Condom Usage | | | | |
| No | 94.8 (147) | 59.6 (164) | 89.3 (25) | 73.4 (336) |
| Yes | 5.2 (8) | 40.4 (111) | 10.7 (3) | 26.6 (122) |
| Total | 155 | 275 | 28 | 458 |

The findings showed that STI screening among the respondents was generally low except for HIV testing (Table 5). Furthermore, fewer respondents were engaged in STI screening during COVID-19 compared to before the pandemic.

Table5. Self-reported Testing for Selected STIs, N=458

| Details | Before COVID-19 | During COVID-19 |
|---|-----------------|-----------------|
| | % (N) | % (N) |
| Human immunodeficiency virus (HIV) | | |
| No | 65.1 (298) | 80.3 (368) |
| Yes | 34.9 (160) | 19.7 (90) |
| Chlamydia | | |
| No | 90.0 (412) | 94.1 (431) |
| Yes | 10.0 (90) | 5.9 (27) |
| Gonorrhoea | | |
| No | 84.5 (387) | 91.7 (420) |
| Yes | 15.5 (71) | 8.3 (38) |
| Genital Herpes | | |
| No | 89.4 (410) | 93.4 (428) |
| Yes | 10.5 (48) | 6.6 (30) |
| Hepatitis | | |
| No | 91.5 (419) | 96.1 (440) |
| Yes | 8.5 (85) | 3.9 (18) |

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

| | | |
|--|------------|------------|
| Human papillomavirus (HPV) | | |
| No | 92.8 (425) | 95.6 (438) |
| Yes | 7.2 (33) | 4.4 (20) |
| Syphilis | | |
| No | 82.3 (377) | 89.7 (411) |
| Yes | 17.7 (81) | 10.3 (47) |
| Trichomoniasis | | |
| No | 93.2 (427) | 96.1 (440) |
| Yes | 6.8 (31) | 3.9 (18) |
| Pelvic inflammatory disease (PID) | | |
| No | 94.5 (433) | 97.6 (447) |
| Yes | 5.5 (25) | 2.4 (11) |

Table 6 showed arise in the number of STI infected cases among Jamaicans during the COVID-19 period (pre-COVID-19 18.4%; COVID-19 24.2%). Despite the increase in cases of STIs among the sampled respondents, marginally more sought medical care (pre-COVID-19 14.6%; COVID-19 19.3%).

Table 6. Self-reported Identified Health Issues and Healthcare Seeking Behaviour, N=458

| Details | Before COVID-19 | | | During COVID-19 | | |
|--------------------------------------|-------------------|------------------|------------|-------------------|-------------------|------------|
| | No | Yes | N/A | No | Yes | N/A |
| | % (N) | % (N) | % (N) | % (N) | % (N) | % (N) |
| Sores or bumps on genital | 96.7 (443) | 3.3 (15) | - | 95.6 (438) | 4.4 (20) | - |
| Painful or burning urination | 96.7 (443) | 3.3 (15) | - | 93.2 (427) | 6.8 (31) | - |
| Smelly discharge from the penis | 99.3 (455) | 0.7 (3) | - | 99.1 (454) | 0.9 (4) | - |
| The odd smell from vaginal discharge | 93.4 (428) | 6.6 (30) | - | 93.4 (428) | 6.6 (30) | - |
| Unusual vaginal bleeding | 99.3 (455) | 0.7 (3) | - | 97.8 (448) | 2.2 (10) | - |
| Pain during sexual intercourse | 99.3 (455) | 0.7 (3) | - | 95.2 (436) | 4.8 (22) | - |
| Lower abdominal pain | 91.7 (419) | 8.3 (38) | - | 90.0 (412) | 10.0 (46) | - |
| A rash over the trunk hands/feet | 99.6 (456) | 0.4 (2) | - | 99.8 (457) | 0.2 (1) | - |
| Fever | 95.0 (435) | 5.0 (23) | - | 93.4 (428) | 6.6 (30) | - |
| Total Infection | 81.8 (373) | 18.4 (84) | | 75.8 (347) | 24.2 (111) | |
| Healthcare Seeking Behaviour | 14.2 (64) | 14.6 (66) | 71.2 (322) | 13.3 (60) | 19.7 (89) | 67.0 (303) |

Table 7 presents a cross-tabulation between self-reported HIV/AIDS status and condom usage of sampled respondents. Of the sample respondents, 19.7% indicated they had been tested positive for HIV/AIDS; yet only 32.8% of those who use a condom had a positive status compared to 14.9% of those who had a negative HIV/AIDS status ($\chi^2(1)=18.175$, $P < 0.0001$).

Table 7. Cross-tabulation between Self-reported HIV/AIDS Status and Condom Usage

| Details | Condom Usage | | Total |
|-----------------|--------------|-----------|------------|
| | No | Yes | |
| | % (N) | % (N) | % (N) |
| HIV/AIDS Status | | | |
| Negative | 85.1 (286) | 67.2 (82) | 80.3 (368) |
| Positive | 14.9 (50) | 32.8 (40) | 19.7 (90) |
| Total | 336 | 122 | 458 |

Table 8 presents that of the 26.6% of sampled respondents who use a condom, 44.4% tested positive for HIV/AIDS, and 22.3% tested negative for the virus ($\chi^2(1)=18.175$, $P < 0.0001$). These findings suggest that most of those who were HIV/AIDS positive were engaged in risky sexual behavior.

Table 8. Cross-tabulation between Condom Usage and Self-reported HIV/AIDS Status

| Details | HIV/AIDS Status | | Total |
|--------------|-----------------|-----------|------------|
| | | | |
| | % (N) | % (N) | % (N) |
| Condom Usage | Negative | Positive | |
| No | 77.7 (286) | 55.6 (50) | 73.4 (368) |
| Yes | 22.3 (82) | 44.4 (40) | 26.6 (90) |

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

| | | | |
|-------|-----|----|-----|
| Total | 368 | 90 | 458 |
|-------|-----|----|-----|

The current findings revealed that only 10% of those who indicated having a positive HIV/AIDS status were not sexually active (Table 9— ($\chi^2(1)=41.897$, $P < 0.0001$), which would suggest that one's HIV/AIDS status does not mitigate against sexual behavior.

Table9. Cross-tabulation between Condom Usage and Self-reported HIV/AIDS Status

| Details | HIV/AIDS Status | | Total |
|---------------------------|-----------------|-----------|------------|
| | | | |
| | % (N) | % (N) | % (N) |
| Currently Sexually Active | Negative | Positive | |
| No | 47.3 (174) | 10.0 (50) | 40.0 (183) |
| Yes | 52.7 (194) | 90.0 (40) | 60.0 (275) |
| Total | 368 | 90 | 458 |

Table 10 presents a logistic regression of the estimates for the healthcare-seeking behavior model of Jamaicans. Binary logistic regression can be used to model healthcare-seeking behaviour of Jamaica (-2Log likelihood = 239.418, Omnibus test of model: $\chi^2(8) = 207.716$, $P < 0.0001$; Hosmer and Lemeshow test - $\chi^2(8) = 5.195$, $P = 0.737$). Four hundred and forty-nine observations were used to create this model (correctly classified 89.1%; correctly classified those who sought medical care 77.5%; correctly classified those who did not seek medical care 91.9%). Eight variables were placed in the model at once, and two emerged as

factors of healthcare-seeking behavior (current STI and sexually active). The two factors account for 58.7% of the variance in healthcare-seeking behavior.

Furthermore, being infected with an STI influenced healthcare-seeking behavior (Wald statistic = 82.078) than sexual behavior (Wald statistic = 0.926). An individual who reported having a sexual infection is 40.7 times more like to seek medical care than someone who does not report having an STI. Sexually active respondents were 2.513 times more likely to visit a healthcare practitioner than sexually inactive people.

Table10. Logistic regression –estimates for healthcare-seeking behavior model

| Variables | B | SE. | Wald | df | P-value | Odds ratio | 95% CI. | |
|---------------------------------|--------|-------|--------|----|---------|------------|---------|--------|
| | | | | | | | Lower | Upper |
| STI Infections (currently) | 3.707 | 0.409 | 82.078 | 1 | <0.0001 | 40.739 | 18.268 | 90.848 |
| STI Infection (before COVID-19) | 0.304 | 0.413 | 0.542 | 1 | 0.462 | 1.355 | 0.603 | 3.043 |
| Youngadults (1=yes) | 0.392 | 0.351 | 1.248 | 1 | 0.264 | 1.479 | 0.744 | 2.941 |
| STI testing | 2.025 | 1.100 | 3.392 | 1 | 0.066 | 7.576 | 0.878 | 65.372 |
| STI testing (partner) | -0.782 | 1.360 | 0.331 | 1 | 0.565 | 0.457 | 0.032 | 6.574 |
| Male | -0.220 | 0.394 | 0.311 | 1 | 0.577 | 0.803 | 0.371 | 1.737 |
| SexuallyActive | 0.921 | 0.377 | 5.960 | 1 | 0.015 | 2.513 | 1.199 | 5.265 |
| Social Isolation (1=Yes) | 0.785 | 0.816 | 0.926 | 1 | 0.336 | 2.193 | 0.443 | 10.850 |
| Constant | -4.620 | 0.886 | 27.170 | 1 | <0.0001 | 0.010 | | |

DISCUSSION AND CONCLUSION

Social isolation is among the World Health Organization protocols and the Centers for Disease Control and Prevention, European Observatory on Health Systems and Policies (Marczak, Joanna, Wittenberg, Raphael, Doetter, Lorraine F, Casanova, Georgia. et al., 2019; Institute of Medicine (US) Division of Health Promotion and Disease Prevention; Berg RL, Cassells JS, editors. (1992; National Academic of Science, Engineering, and Medicine, 2020), written on by scholars (Holt-Lunstad, 2020; Novotney, 2019). Although social isolation is widely promulgated by many

agencies as well as governments across the globe, its influence of sexually transmitted infections (STIs) screening habits and status of Jamaicans or peoples in the wider Caribbean was never empirically examined, more so in keeping with the changes made to human relations because of social isolation caused by COVID-19. The current study has provided quantitative research data on social isolation and its effect on sexually transmitted infections (STIs) screening habits.

The Protection Motivation Theory outlines that perceived severity, perceived vulnerability, response efficacy, and perceived self-efficacy

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

are factors that influence health behavior (Rogers, 1983). One of the deductions that can be made from the Protection Motivation Theory is that the threat of disease posed a challenge for humans' healthcare-seeking behavior as well as motivational intention and one's coping mechanism. This should offer some explanation for the role of the COVID-19 pandemic on sexual transmitted infections (STIs) screening habits and Jamaicans' status. The current study found that being infected with a sexually transmitted infection and sexually active account for 58.7% of the variation in Jamaica's healthcare-seeking behavior during the COVID-19 pandemic. The former factor explains more of the variance in healthcare-seeking behavior. An individual who reported having a sexually transmitted infection was 40.7 times more likely to seek medical care compared to those who negative. Also, the present study revealed that 93.0% of the sampled respondents were practicing social distancing, 50.9% had one sexual partner, 12.9% have at least two sexual partners, and 24.5% have tested themselves for sexually transmitted infections during the COVID-19 period. Only 26.0% were using a condom.

The present findings revealed that more than 60% of the sampled respondents identified themselves as sexually active, and most of this group were in the 18-24 age range. Of the respondents, nearly 90% practiced social isolation compared to 10% who did not. This result indicated high cognizance and awareness of those participants concerning the risk factors associated with promiscuity and unsafe sexual behaviors. Less than 7% of the respondents who reported being sexually active identified as having received a positive STI status, while under 15% reported as being unaware of their STI status. The latter exposes a grave threat to the sexual health of those participants and their sexual partners as these persons possess the potential to spread STIs through unsafe sexual practices. Despite the reality that most of the sampled respondents were sexually active, only 40.4% of those who were sexually active used a condom, which indicates a high degree of risky sexual behavior among Jamaicans.

Crane, Popovic, Stolbach, & Ghanem (2020) opined that "Social distancing guidelines and resource reallocation during the COVID-19 pandemic have led to significant disruption of sexual health clinics within the USA, which is equally the same across many other nations

including Jamaica. This disruption in healthcare clinics' services coupled with a high degree of risky sexual behavior among Jamaicans does not explain the seemingly self-reported reduction in selected sexually transmitted infections. At the same time, there is an increase in the number of people seeking medical care owing to sexually transmitted diseases. The paradox identified by this study highlights the challenge in using self-reported sexual behavior to measure actual sexual practices of Jamaicans. Nevertheless, Jamaicans have socially isolated themselves in keeping with the Ministry of Health and Well and the World Health Organization's established protocols, and the Centers for Disease Control and Prevention. Still, their sexual behavior requires urgent public health focus. The current research showed that 60% of Jamaicans indicated being sexually active, 24.5% have screened for a sexually transmitted infection since March 10, 2020, yet only 26.6% used a condom. The value of this study to public health education is profound as there is the future rise in STIs inclusive of HIV/AIDS, pregnancies, and likely strain on the public health facilities after the COVID-19 pandemic has subsided in Jamaica, which was also promulgated by Dunn (2020) as a reality in the USA.

Globally, the COVID-19 pandemic has preoccupied the consciousness and policy focus of numerous governmental departments will minuscule emphasis on sexual behavior, especially risk practices of people during this time. Of the 90 sampled respondents who indicated positive testing for HIV/AIDS, only 44.4% used a condom on their last sexual activities. The reality of a sexually transmitted infection explosion is likely to occupy Jamaica if this issue is not urgently and timely address by health education. The likely STIs explosion in Jamaica explains a rationale for this statement made by the CDC that "All adults and adolescents from ages 13 to 64 should be tested at least once for HIV" (CDC, n.d.), and the justification is embedded in the current findings. In fact, there can be no deduction from this study to support a decrease in HIV transmission in Jamaica; and with the service interruption, this could concur with the perspective of Jenness (2020) on the rise of infections.

Jamaicans are sexually active people, and this does not change because of their sexually transmitted infection statuses. Outside of the sexual expression of people, there is a low degree of condom usage, sexually transmitted

infection screening behavior, and risky sexual habits of Jamaicans. One of the alarming discoveries of this study is high non-condom usage among Jamaicans who have reported being HIV/AIDS patients. This highlights the STIs explosive that is likely to occur after the dissipation of the COVID-19 pandemic.

REFERENCES

- [1] Alpalhão, M., & Filipe, P. (2020). The Impacts of Isolation Measures Against SARS-CoV-2 Infection on Sexual Health. *AIDS and Behavior*, 24(8), 2258–2259. <https://doi.org/10.1007/s10461-020-02853-x>
- [2] Ao, B. (2020, June 18) COVID-19 has interrupted STD screenings. Sexual health centers are concerned. retrieved December 18 2020 from <https://medicalxpress.com/news/2020-06-covid-stds-screenings-sexual-health.html>
- [3] Banerjee, D., & Rai, M. (2020). Social isolation in Covid-19: The impact of loneliness. *International Journal of Social Psychiatry*, 66(6):525-527. <https://doi.org/10.1177/0020764020922269>.
- [4] Barmania, S., & Reiss, M.J. (2020). Health promotion perspectives on the COVID-19 pandemic: The importance of religion. *Global Health Promotion*, 2020. <https://doi.org/10.1177/1757975920972992>.
- [5] Briggs, D., & Kattey, K. (2020). COVID-19: Parents' healthcare-seeking behavior for their sick children in Nigeria- An online survey. *International Journal of Tropical Disease and Health*, 41(13):14-25.
- [6] Chen N.S., Zhou, M., Dong, X., Qu, J.M., Gong, F.Y., Han, Y. et al. (2019). Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *Lancet*, 395(10223): 507-513.
- [7] Chishlom-Ford, S. (2020, August 26). Preventing HPV infections and precancers in HIV-positive women. *The Gleaner*. <http://jamaica-gleaner.com/article/health/20200826/preventing-hpv-infections-and-precancers-hiv-positive-women>
- [8] Crane, M. A., Popovic, A., Stolbach, A. I., & Ghanem, K. G. (2020). Reporting of sexually transmitted infections during the COVID-19 pandemic. *Sexually transmitted infections*, sextrans-2020-054805. Advance online publication. <https://doi.org/10.1136/sextrans-2020-054805>.
- [9] Dunn, L. (2020, December 5). How Covid test supply shortages could cause a 'public health crisis' of undiagnosed STIs. New York: NBC. Retrieved from <https://www.nbcnews.com/health/sexual-health/how-covid-test-supply-shortages-could-cause-public-health-crisis-n1250036>.
- [10] Dutta, S. S. (2020, October 20). *The implications of COVID-related sexual distancing and clinical service interruption*. Retrieved from <https://www.news-medical.net/medical/authors/sanchari-sinha-dutta>
- [11] European Observatory on Health Systems and Policies, Marczak, J., Wittenberg, R., Doetter, L.F., Casanova, G., Golinska, S., Guillen, M., & Rothgang, H. (2019). Preventing social isolation and loneliness among older people. *Eurohealth*, 25 (4), 3 - 5. World Health Organization. Regional Office for Europe. <https://apps.who.int/iris/handle/10665/332493>.
- [12] Holt-Lunstad, J. (2020). Social isolation and health. *Health Affairs*. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hpb20200622.253235>
- [13] Hwang, T. J., Rabheru, K., Peisah, C., Reichman, W., & Ikeda, M. (2020). Loneliness and social isolation during the COVID-19 pandemic. *International psychogeriatrics*, 32(10), 1217–1220. <https://doi.org/10.1017/S1041610220000988>.
- [14] Institute of Medicine (USA) Division of Health Promotion and Disease Prevention; Berg RL, Cassells JS, editors. (1992). *The Second Fifty Years: Promoting Health and Preventing Disability*. Washington (DC): National Academies Press (US); 1992. 14, Social Isolation Among Older Individuals: The Relationship to Mortality and Morbidity. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK235604/>.
- [15] Jenness, S. (2020, September 30). Retrieved December 2, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7536881/>.
- [16] Nagendra, G., Carnevale, C., Neu, N., Cohall, A., & Zucker, J. (2020). The Potential Impact & Availability of Sexual Health Services During the COVID-19 Pandemic. *Sexually Transmitted Diseases, Publish Ahead of Print*, 434–436. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7448722/>
- [17] National Academic of Science, Engineering, and Medicine. (2020). Social isolation and loneliness in older adults: opportunities for the health care system. Washington, DC: The National Academic Press. Retrieved from http://doi.org/10.17226/25663external_icon.
- [18] Noble, J. (2021). Healthcare-seeking behaviors during the local COVID-19 epidemic and their socioeconomic determinants, in the Old School Hip Hop Parent & ADRC participant/informant cohorts. New York: Columbia University. Available at:

Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans

- <https://research.columbia.edu/covid/community/healthcareseeking>.
- [19] Novotney, A. (2019). The risks of social isolation: Psychologists are studying how to combat loneliness in those most at risk, such as older adults. *The American Psychological Association*, 50(5), 1-32.
- [20] Rains, S.A., Crane, T.E., Iyengar, S., Merchant, N., Oxnam, M., Sprinkle, M.M., & Ernst, K.C. (2020). Community-Level Health Promotion during a Pandemic: Key Considerations for Health Communication, *Health Communication*, 35:14, 1747-1749, DOI: 10.1080/10410236.2020.1837443.
- [21] Rogers, R.W. *Cognitive and Physiological Processes in Fear Appeal and Attitude Change: A Revised Theory of Protection Motivation*; Guilford Press: New York, NY, USA, 1983.
- [22] Sepúlveda-Loyola, W., Rodríguez-Sánchez, I., Pérez-Rodríguez, P., Ganz, F., Torralba, R., Oliveira, D. V., & Rodríguez-Mañas, L. (2020). Impact of Social Isolation Due to COVID-19 on Health in Older People: Mental and Physical Effects and Recommendations. *The Journal of Nutrition, Health & Aging*, 1–10. Advance online publication. <https://doi.org/10.1007/s12603-020-1469-2>.
- [23] The Health Foundation. (2020). Health care usage during COVID-19. Available at: <https://www.health.org.uk/health-care-usage-during-covid-19>.
- [24] Van den Broucke, S. (2020). Why health promotion matters to the COVID-19 pandemic, and vice versa, *Health Promotion International*, 35(2):181–186, <https://doi.org/10.1093/heapro/daaa042>.
- [25] World Health Organization. (2019). Corona virus disease (COVID-19) pandemic. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.
- [26] World Health Organization. (2020). Maintain essential health services during COVID-19 response: WHO. Washington DC: WHO. Available at: <https://www.who.int/southeastasia/news/detail/06-08-2020-maintain-essential-health-services-during-covid-19-response-who>.
- [27] Yang, J., Gong, H., Chen, X., Chen, Z., Deng, X., Qian, M., Hou, Z., Ajelli, M., Viboud, C., & Yu, H. (2020). Health seeking behaviors of patients with acute respiratory infections during the outbreak of novel coronavirus disease 2019 in Wuhan, China. *medRxiv : the preprint server for health sciences*, 2020.05.05.20091553. <https://doi.org/10.1101/2020.05.05.20091553>.
- [28] Center for Disease Control and Prevention. (2020). Which STD Tests Should I Get? US Department of Health & Human Services. Retrieved from <https://www.cdc.gov/std/prevention/screeningrecs.htm>.

Citation: Paul Andrew Bourne, Shameal Smith, Chrystal Carty, Nyasha Rattray, Shantelle Codling, Ramon Gordon, Vincent M.S. Peterkin, Michael Burke & Clifton Foster, "Social Isolation during the COVID19 Pandemic and its influence on the Sexual Transmitted Infections (STIs) Screening Habits and Status of Jamaicans", *International Journal of Research in Humanities and Social Studies*, 8(4), 2021, pp. 49-58.

Copyright: © 2021 Paul Andrew Bourne. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.