Impact of COVID-19 Pandemic Restrictions on Major Crimes and Sexual Offences in Jamaica: A comparative analysis of crimes reported by the Jamaica Constabulary Force (2014-2020)

Dr. Tazhmoye V. Crawford¹, Mr. Kimalie F. Parchment¹, Sgt. Sylven Robinson³

¹National Family Planning Board, Statutory Body under the Ministry of Health, Kingston, Jamaica

³Jamaica Constabulary Force, Kingston, Jamaica

Abstract: To explore the impact of COVID-19 on major crimes, including sexual offences and crimes against minors under 18 years old in Jamaica, by comparing the number of cases reported by the Jamaica Constabulary Force (JCF) in the year 2020, with those reported six years prior to the pandemic (2014-2019).

Methods: Monthly cumulated data on major crimes, sexual offences and crimes against minors for the period January 1, 2014 -December 30, 2020, was obtained from the JCF. The five-year period (2014-2018) was used to calculate a monthly and annual threshold for each crime type using monthly/annual means and 95% confidence intervals. Differences in the number of crimes reported during 2020 were determined by comparison with the historically set monthly and annual thresholds for each crime type as well as with those reported in the previous year, 2019. The offences are represented as the number of cases reported per 100,000 population.

Findings: Compared with the historical threshold, there were significant reductions in homicides, rapes, indecent assaults and sex against minors; however, there was no decline in the reports of grievous sexual assault. Compared with 2019, there were significant declines in rape, indecent assault and crimes against minors but no significant decline in homicides.

Conclusion: This exploratory study provided an initial assessment of the impact of COVID-19 on crime during the first year of the pandemic in Jamaica. These findings, provide the basis for an in-depth analysis into the impact of COVID-19 on crime especially, gender-based violence and crimes against minors. Also, they highlighted many issues such as crime against women and minors under 16 years.

Keywords: COVID-19, Major Crimes, Sexual Offences, and Crimes against minors.

1. INTRODUCTION

On March 11, 2020 the World Health Organisation declared COVID-19 a global pandemic, the virus is highly contagious and has survived in all climatic conditions. At the end of 2020, the WHO reported 83,753,763 confirmed cases and 1,802,760 deaths globally (www.covid19.who.int) [1]. The total confirmed cases in Jamaica for the same period (2020) was 12,793 cases with 302 deaths. (www.jamcoivd19.moh.gov.jm) [1, 2]. COVID-19 coupled with major crimes have spurred serious public health threats throughout the world.

To reduce transmission of COVID-19, most governments issued stay at home orders; in Jamaica, the Disaster Risk Management Act, 2015 was invoked and enforcement measures were enacted to reduce the transmission of the virus. These included border closures, curfews, stay at home orders, restricting the number of persons at public gatherings, mandatory mask wearing in public places and physical distancing [3]. These restrictions resulted in unprecedented

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reductions in economic activity at national and global levels. The World GDP in 2020 reduced by 5.3%, in Jamaica, this reduction was 8.3% [4, 5]. The constriction of the economy has led to increase in unemployment which is associated with an increase in crimes [6, 7].

Early in the pandemic, cities such as San Francisco and Oakland reported an overall drop in crime of 43% and 54% two weeks after the issuance of stay-at home orders [8]. Ashby *et.al.* in his paper considering changes on reported crime in 16 US cities, found no impact on crime [9]. Campedelli and colleagues noted a small reduction in assaults but no change in assault with a deadly weapon, intimate partner violence, burglary and homicides for Los Angeles [10]. Payne and Morgan (2020) in Australia, found similar results to Campedelli where for March 2020 there were no significant differences from the number of serious assaults and sexual violence forecasted [11]. In 2020, Jamaica's homicide rate was 46.5 per 100,000; a reduction over the previous year (47.4 per 100,000) [12].

On average, throughout the World, 1 in 3 women experience physical or sexual violence inflicted by an intimate partner or non-partner at some point in their lifetime [3]. This usually takes the form of physical, emotional, sexual, or psychological abuse [4]. Evidence prior to the pandemic shows that less than 40 per cent of women who experience violence seek help [13], as such, not all cases were reported. One research posited that during violence at home, under the COVID-19 lockdown, approximately 50% reduction in calls received by the police because of weakened telecommunication infrastructure which resulted in a disruption in calls), thus inhibited reporting [14].

Globally 243 million women and girls have been subjected to sexual and/or physical violence by an intimate partner in a 12 months period ended in 2020 [13]. The Latin America and Caribbean region has one of the highest rates of gender-based violence in the world with Brazil, Mexico, Argentina, Peru, El Salvador and Bolivia representing 81% of the global cases documented [[15]. The results of a Women's Health Survey showed that more than one in every four Jamaican women experience intimate partner physical and sexual violence in their lifetime [16].

Pandemics give rise to other threats beyond the risk of infection, in two recently documented epidemics; namely, Zika outbreak (2015-2016) and West African Ebola Outbreak (2014-2016), women faced significant barriers to health care due to lack of autonomy over their own sexual and reproductive health and their predominant roles as caretakers and health workers respectively [13] [14].

Mohler and Colleagues noted an increase in calls for domestic violence in Los Angeles [17]. They reported that these calls did not result in increased level of aggravated assaults. These results were similar to those of Piquero *et. al.* (2020) who reported an initial increase in domestic violence a few weeks after lockdown which returned to normal levels a few weeks later [18]. It should be noted that these studies examined the impact of crime within a month after the stay-at-home orders were issued and do not examine the impact using a longer time horizon, such as a year.

In Nepal, there was a three-month nationwide lockdown in 2020 due to COVID-19, during this time, the available support system to respond to violence against women and girls was disrupted. Nepal reported an increase in violence against women and child sexual activity. It has been reported that 648 women committed suicide during the 83 days of lockdown in the country [19]. There have been 48 complaints from anecdotal records of child sexual assaults in the first six weeks of lockdown, this is considered high, as the total complaints for the fiscal year 2018/2019 was 211 [19].

The Planning Institute of Jamaica reported 643 children were victims of violent crime in 2016, this represents a rate of 68 per 100,000 [20]. In 2016, the Centre for the Investigation of Sexual Offences and Child Abuse reported 97.3 per cent of the 1,094 child abuse incidents were girls; demonstrating the high vulnerability of girls to abuse https://www.ocr.gov.jm/index.php/statistics [21].

A meta-study on violence against children in the context of natural disasters by Cerna-Turoff *et.al.* (2019) found no evidence of a consistent association or directional influence between natural disasters and violence against children; simply put, they did not find evidence of more violence, nor more severe violence against children during crisis [22].

Many countries' efforts to achieve the targets under Sustainable Development Goals, have been constrained by the novel COVID-19, which affects all 17 goals. This study bears significance for the National Family Planning Board of Jamaica, which continues to be a part of the sustainable development process, owing to its legislative mandate regarding sexual and reproductive health/population planning and development, of which gender-based violence is a part.

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This study aimed to explore the impact of COVID-19 on major crimes, including sexual offences and crimes against minors under 18 years old in Jamaica; by comparing the number of cases reported by the Jamaica Constabulary Force (JCF) in the year 2020, with those reported six years prior to the pandemic (2014-2019). The specific objectives were:

- 1. To use the five-year period (2014-2018) to calculate a monthly threshold for each crime type, that is, mean \pm 95% confidence interval
- 2. To compare reports for each month in 2020 against the historically set threshold values as well as with the previous year, 2019.
- To determine whether there are statistically significant differences in crime type reported during the COVID-19
 pandemic in 2020 with the comparison period, by comparing reports for each month in 2020 against the historically
 set threshold values.

It is anticipated that the results of this exploratory research will provide scope for incorporation into policy, hence, the findings will be shared with policymakers. The primary intent is to use the results to generate hypotheses for more indepth investigations which will contribute to the strengthening of the policy-programme-research interface on the impact of COVID-19 on crime.

2. METHODOLOGY

A cross-sectional study design was employed to determine whether there were differences between the occurrence of major crimes and sexual offences during the 2020 COVID-19 pandemic restrictions (Table 1) and six years prior. The restrictions started in March 2020 and continued in varying degrees for the remainder of the year.

TABLE I: COVID-19 PANDEMIC MEASURES USED IN JAMAICA

Some COVID-19 measures utilised by the Government of Jamaica Islandwide Curfews Closure of Public Beaches and Rivers Stay-at-Home Order for Persons over 75 years old Work-From-Home arrangement for Public Sector Workers (not critical service delivery personnel) Travel Bans and Border Closure Gathering Limits to 10 Local/ Community Lockdowns Mandatory quarantine for persons entering the island and persons in contact with a COVID-19 positive personnel Protocols for all business or public service offices

We compared the number of major crimes, sexual offences and crimes against minors reported by the police during the first year of the pandemic (2020), with six years prior to the pandemic. The five-year period (2014-2018) was used to calculate a monthly threshold for each crime, the reports for each month in 2020 was then compared against the historically set threshold values as well as with the previous year, 2019.

Publicly available, aggregated and de-identified data on major crimes posted on the Jamaica Constabulary Force's website was the primary source of the data. Data for the comparison years as well as additional data on sexual offences and crimes against minors not posted on the website were obtained from the Jamaica Constabulary Force (JCF), Crime Statistics Division. These additional data on sexual offences and crimes against minors are routinely shared by the JCF with the National Family Planning Board (NFPB) as part of the NFPB's programme monitoring and evaluation framework for sexual and reproductive health. These data do not line list the individual crimes, however, they present each crime aggregated by police division.

The dataset was a compilation of major crimes, sexual offences and crimes against minors reported by the JCF Statistics Division over the period January 1, 2014- December 30, 2020. The study analyzed data from 19 types of offences per month over 72 months.

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Conceptual Definitions of Category of Crime and Type of Offences

We examined four categories of crime and nineteen types of offences (Table 2). This study does not include all other crimes reported by the Jamaica Constabulary Force. The definitions of these crimes are presented in Table 3 [23-25].

TABLE 2: CATEGORY OF CRIME AND TYPE OF OFFENCES reported by the Jamaica Constabulary Force

Category of Crime	Type of Offence	
Major Crimes	Murder	
	Shootings	
	Rape	
Sexual Offences	Rape	
	Grievous Sexual Assault	
	Incest	
	Indecent Assault	
	Sexual Grooming	
	Sexual Touching/ Interference	
Crimes Against minors (Under age 18)	Sexual Intercourse with persons under age 16 years	
	Child Abuse	
	Cruelty to a Child	
	Sexual Grooming (minors only)	
	Sexual Touching/ Interference (minors only)	

TABLE 3: DEFINITIONS OF CRIMES UNDER JAMAICAN LAW

Crime	Definition/Description
Rape	Rape is defined in Jamaican law as the penetration of the penis in
Grievous Sexual Assault (GSA)	Grievous sexual assault is defined by law in Jamaica as the penetration or causing another to penetrate the vagina or anus of a victim by a body part other than the penis of the offender (or the person forced) or the use of an object manipulated by the offender (or the person forced)
Indecent Assault	Indecent assault is defined as any sexual assault which does not involve rape by definition but against the consent of the victim [20]
Incest	Incest is defined in the Jamaican law as the willing sexual intercourse by the offender with their family member of the opposite sex; the family members may include grandparent, parent, aunt or uncle, niece or nephew and grandchild [19]
Child Abuse	Child abuse is defined by Jamaican law as any act, or failure to act, on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse, or exploitation of a child [21].
Cruelty to Child	Defined by Jamaican law as any act of an adult, which results in death, serious physical or emotional harm, sexual abuse, or exploitation of a child [22].
Sexual Touching or Interference	Defined by Jamaican law as the direct or indirect sexual acts committed by an adult on a child under the age of sixteen years. The sexual act may involves inciting, inviting or counselling a child to touch a part of the adult's body using a part of the victim's body or an object or using a part of the offender's body or an object to touch a part of the child's body.

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Statistical Analysis

The data received from the JCF was exported into SPSS for analysis. Descriptive statistics for each crime under consideration was analysed by month and year. Population rates per 100,000 was calculated for each crime using population estimates for each year provided by the Statistical Institute of Jamaica [26]. Monthly and annual threshold for each crime category was calculated using the means and the 95% confidence intervals of the historical data for 2014-2018. Significance testing (p<0.5) was used to compare the 2020 values with the thresholds calculated for each month.

Ethical Considerations

This study utilised secondary de-identified and aggregated data. Ethical approval was obtained from the Mona Campus Research Ethics Committee of the University of the West Indies, Jamaica.

3. RESULTS

Major Crimes

Homicides

There was an overall decrease in homicides during the period of March 2020 to December 2020 when compared with the same period in 2019 (4%) and the average of the same period for the years 2014 to 2018 (2%) (Figure 1). However, it should be noted that there was a steep decline in the month after the COVID-19 measures, but this is not dissimilar from the previous year. The months of May and December 2020 showed higher reports of homicides in comparison with the previous year and the average for the years 2014 to 2018. The mean number of homicides per 100,000 individuals per month for the period of March to December 2020 (3.98) was within the 95% CI for the same period in 2019 (4.13 \pm 0.31) indicating no significant difference between 2019 and 2020. However, the 2020 homicides reported was below the 95% CI for the period 2014 to 2018 (4.07 \pm 0.06) demonstrating a significant difference when compared to the historical threshold of the 5 years from 2014 to 2018.

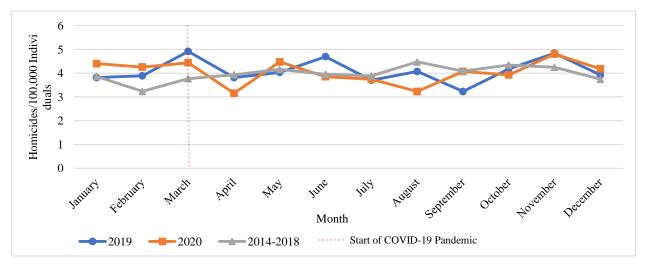


Fig. 1: Trend showing homicide rates per 100,000 individuals for the period 2014 to 2020

Shooting

There was an overall increase in shooting victims per 100,000 individuals during the period of March 2020 to December 2020 when compared with the same period in 2019 (10%) and the average of the same period for the years 2014 to 2018 (8%). However, it should be noted that there was a steep decline the month that follows the COVID-19 measures in 2020. The mean number of shooting victims per 100,000 individuals per month for the period of March to December 2020 (11.71 victims) was within the 95% CI for the same period in 2019 (11.52 \pm 0.95 victims) and 2014 to 2018 (11.72 \pm 0.57 victims) which indicated no significant difference in the number of shooting victims per 100,000 individuals.

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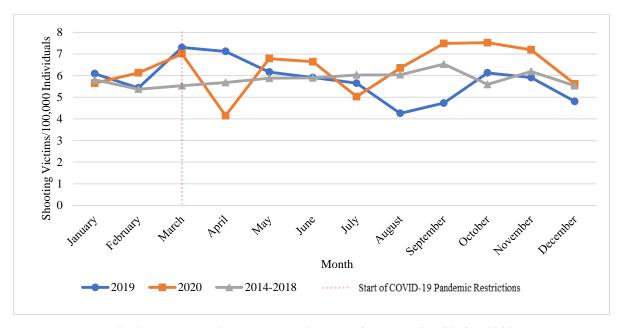


Fig. 2: Trend showing actual shooting rates for the period 2014 to 2020

Rape

There was an overall decrease in the number of female rapes during the period of March 2020 to December 2020 when compared with the same period in 2019 (16%) and the historical threshold 2014 to 2018 (24%) (Figure 2). It should be noted that there were seven (7) male rape victims for the period 2014 to 2020 with one (1) reported in 2020. The mean number of female rapes per month for the period of March to December 2020 (37 females) was below the 95% CI for the same period in 2019 (44 \pm 6) and 2014 to 2018 (48 \pm 3) which indicated a significant reduction in the number of rape cases reported (Table 4).

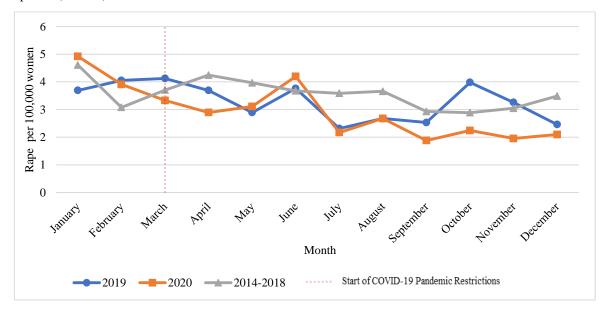


Fig. 3: Trend showing rapes per 100,000 women for the period 2014 to 2020

TABLE 4: DESCRIPTIVE STATISTICS FOR RAPE FOR THE PERIOD MARCH TO DECEMBER (2014 TO 2020)

Year	2014-2018	2019	2020
Significance Level	0.05	0.05	0.05
Mean	48.32	43.8	36.7

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Standard Deviation	10.61	8.91	9.68
Number of Months	50	10	10
Confidence Interval	48.32 ± 2.94	43.8 ± 5.52	36.70 ± 6.00

Sexual Offences

Grievous Sexual Assault (GSA)

There was no change in the rate of GSA during the period of March 2020 to December 2020 when compared with the same period in 2019 and the historical threshold (3) (Figure 3).

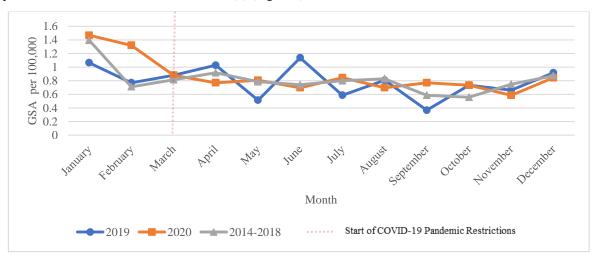


Fig. 4: Trend showing grievous sexual assaults per 100,000 for the period 2014 to 2020

Indecent Assault

There was an overall decrease in the number of indecent assaults during the period of March 2020 to December 2020 when compared with the same period in 2019 (37%) and the historical threshold (5%) (4) (Figure 4). Females represent over 80% of the cases in this category. The mean number of indecent assaults per month for March to December 2020 (8) was below the 95% CI for the same period 2019 (13 \pm 2) and 2014 to 2018 (11 \pm 1) which indicated a significant decline in the number of indecent assaults.

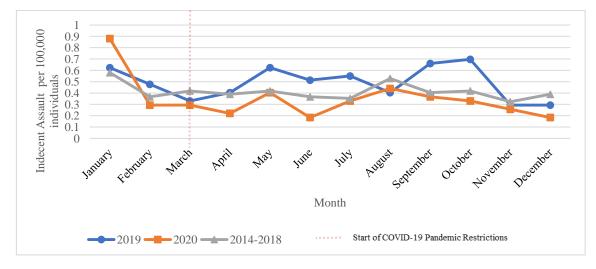


Fig. 5: Trend showing grievous sexual assaults per 100,000 for the period 2014 to 2020

Incest

The mean number of incest cases per month for the period March to December 2020 (2) (Figure 5) was within the 95% CI for the same period in 2019 (2 \pm 1) and 2014 to 2018 (3 \pm 1) which indicated no significant difference in the cases of incest reported.

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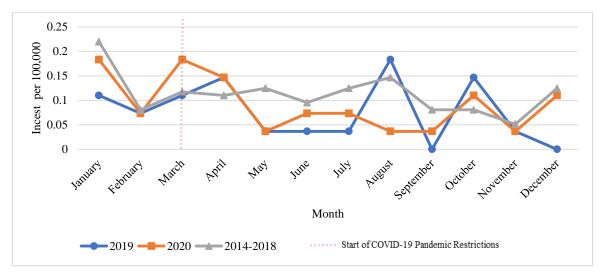


Fig. 6: Trend showing incest per 100,000 for the period 2014 to 2020

Crimes against Minors (Under the age of 18)

There was an overall decrease in the number for some crimes against minors (sexual intercourse with persons under age 16, child abuse, cruelty to child) during the period of March 2020 to December 2020 when compared with the same period in 2019 (40%) and the average of the same period for the years 2014 to 2018 (32%). The number of crimes against children was higher in February 2020 prior to the restrictions when compared with the same period in the previous year and the average of the years 2014-2020 (Figure 6). Annual comparisons revealed a significant decline in 2020 for both time periods (Table 5).

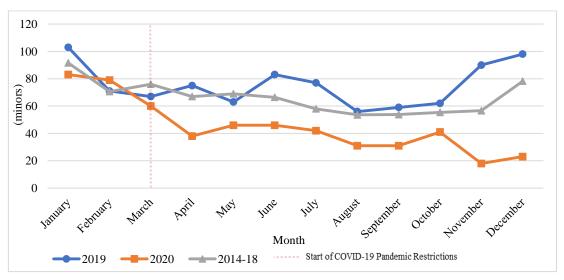


Fig. 7: Trend showing the number of crimes against minors for the period 2014 to 2020

TABLE 5: DESCRIPTIVE STATISTICS FOR CRIMES AGAINST MINORS FOR THE PERIOD MARCH TO DECEMBER (2014 TO 2020)

Year	2014-2018	2019	2020
Significance Level	0.05	0.05	0.05
Mean	63.4	73	37.6
Standard Deviation	8.71	13.32	11.70
Number of Months	50	10	10
Confidence Interval	63.40 ± 2.41	73.00 ± 8.26	37.6 ± 11.81

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Sexual Touching/Interference

There was an overall decrease in sexual touching/interference as reported by the police for March 2020 to December 2020 when compared with the same period in 2019 (9%) and the historical threshold for 2014 to 2018 (3%). The mean number of sexual touching/interference per month for the period of March to December 2020 (11) was within the 95% CI for the same period in 2019 (12 ± 2) and 2014 to 2018 (13 ± 2) which indicated no significant difference in the number of sexual touching/interference.

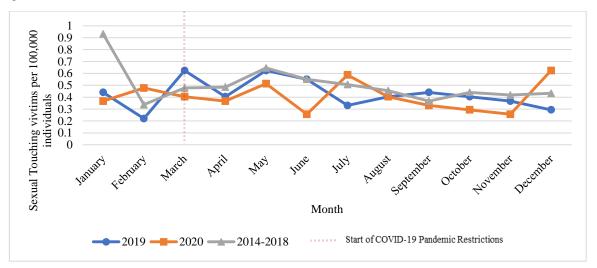


Fig. 8: Trend showing sexual touching rates for the period 2014 to 2020

4. DISCUSSION

This paper presented monthly trends for major crimes, sexual offences, crimes against persons under 18 years to determine the extent to which the COVID-19 pandemic measures impacted crimes. The findings from the results show that most crimes declined in 2020, but it was not statistically significant when compared with the previous years and the average of the 5-year prior to 2019 (2014-2018), except for crimes against minors and rape. The literature highlights possible short-term changes and long-term changes associated with COVID-19 due to the measures associated to help reduce the impact on the population [27]. These short-term measures reduced the opportunities to commit crimes such as homicides and shootings initially but may present more opportunities for sexual offences against women and crime against minors [27].

All three major crimes indicated a decline in number during the first year of the pandemic. This may be associated with reduction of persons in public spaces due to restriction measures. The initial decline in homicide and shooting may be an indication of a short-term impact of COVID-19, as the numbers increased in December 2020 which is above the comparison years [27] [6].

The decrease in rape and other sexual offences, as well as crimes against minors under 18 years old suggest that there may have been an increase in underreporting, as trends prior to the COVID-19 measures indicated that the number of most offences was within the previous year and 95% CI of the five-year historical threshold. In the case of crimes against minors, there was a significant difference in the reported cases after the installation of the measures which offer two possible explanations. Firstly, there was underreporting to the police, as victims were spending longer times at home with their perpetrator [13] [16], [28]. The second explanation is that there was less movement of people, and so exposure to crimes would be reduced.

Although there were decreases in the number of sexual offences against women, it is suggested that this could be due to consistent underreporting of the cases to the authorities and the lack of trust in the security force in dealing with these issues effectively. These issues may possess serious threats to sexual and reproductive health in Jamaica. In the event that there are increases in sexual offences against women and girls such as rape and sexual intercourse with girls under 16, there may be an increase in the number of unplanned pregnancies, sexual transmitted diseases such as human immunodeficiency virus and syphilis. These instances would present serious threats to family planning and sexual and reproductive health in Jamaica [16].

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The results of this study revealed that there were no significant changes in the level of most crimes due to the COVID-19 pandemic restrictions, though there were decreases in most major crimes, sexual offences, or crimes against minors. The measures which included temporary border closure, community lockdowns, curfews and capacity limits were not as extreme as other countries with total lockdowns and extended border closure.

These data show very little association between the measures on crime but highlighted many issues such as crimes against women and minors under 18. There was a significant decline in the JCF reported crimes against minors and some sexual offences targeting female when compared with 2019 and the previous 5 years. The findings, provide the basis for an indepth analysis into the impact of COVID-19 on crime especially, gender-based violence and crimes against minors.

5. CONCLUSION

This exploratory study provided an initial assessment of the impact of COVID-19 on crime during the first year of the pandemic in Jamaica. These findings, provide the basis for an in-depth analysis into the impact of COVID-19 on crime especially, gender-based violence and crimes against minors. Also, they highlighted many issues such as crime against women and minors under 16 years.

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REFERENCES

- [1] World Health Organisation. WHO corona Virus COVID-19 Dashboard. 2020 January 12, 2021]; Available from: who.covid19.int.
- [2] Ministry of Health and Wellness. Jamaica COVID-19 Dashboard. 2021; Available from: www.jamcovid19.moh.gov.jm.
- [3] Government of Jamaica, Disaster Risk Management Act, 2015, G.o. Jamaica, Editor. 2020, Gazette: Jamaica.
- [4] World Bank, The Global Economic Outlook during COVID-19 pandemic: A changed world. 2020, World Bank: Wasington D.C.
- [5] Bank of Jamaica. Economic Indicators. 2021 [cited 2021 March 17, 2021]; Available from: http://www.boj.org.jm/bank/National_Summary_Data_Page.php.
- [6] Renzetti C.M., Economic Stress and Domestic Violence, in CRVAW Faculty Research Reports and Papers. 1. 2009, Coalition against Domestic Violence.
- [7] Gerell, M., J. Kardell, and J. Kindgren, Minor covid-19 association with crime in Sweden. Crime Science, 2020. 9(1): p. 19.
- [8] Shayegh, S. and M. Malpede, Staying home saves lives, really! 2020.
- [9] Ashby, M.P., Initial evidence on the relationship between the coronavirus pandemic and crime in the United States. Crime Science, 2020. 9: p. 1-16.
- [10] Campedelli, G.M., et al., Disentangling community-level changes in crime trends during the COVID-19 pandemic in Chicago. Crime Science, 2020. 9(1): p. 1-18.
- [11] Payne, J.L., A. Morgan, and A.R. Piquero, COVID-19 and social distancing measures in Queensland, Australia, are associated with short-term decreases in recorded violent crime. Journal of experimental criminology, 2020: p. 1-25.
- [12] Parker Asmann and Katie Jones. InSight Crime's 2020 Homicide Roundup. 2020 March 21, 2021]; Available from: https://insightcrime.org/news/analysis/2020-homicide-round-up/.
- [13] Sri, A.S., et al., COVID-19 and the violence against women and girls: 'The shadow pandemic'. International Journal of Social Psychiatry, 2021. 0(0): p. 0020764021995556.

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- [14] Sánchez, O.R., et al., Violence against women during the COVID-19 pandemic: An integrative review. International Journal of Gynecology & Obstetrics, 2020. 151(2): p. 180-187.
- [15] UN Women, COVID-19 Global Gender Response Tracker. Factsheet, Latin America and the Caribbean. 2020, UNDP UN Women.
- [16] Watson Williams, C., Women's Health Survey 2016: Jamaica. 2018, Statistical Institute of Jamaica and Inter-American Development Bank.
- [17] Mohler, G., et al., Impact of social distancing during COVID-19 pandemic on crime in Los Angeles and Indianapolis. Journal of Criminal Justice, 2020. 68: p. 101692.
- [18] Piquero, A.R., et al., Staying home, staying safe? A short-term analysis of COVID-19 on Dallas domestic violence. American Journal of Criminal Justice, 2020. 45(4): p. 601-635.
- [19] Dahal, M., et al., Mitigating violence against women and young girls during COVID-19 induced lockdown in Nepal: a wake-up call. Globalization and health, 2020. 16(1): p. 1-3.
- [20] Planning Institute of Jamaica, Economic and Social Survey of Jamaica, 2017. 2017, PIOJ: Kingston.
- [21] Office of the Children's Registry. Statistics on the number of report received by the national children's registry. 2016 March 21, 2021]; Available from: https://www.ocr.gov.jm/index.php/statistics.
- [22] Cerna-Turoff, I., et al., Violence against children and natural disasters: A systematic review and meta-analysis of quantitative evidence. PloS one, 2019. 14(5): p. e0217719.
- [23] The Child Care and Protection Act. Rev. 2007, G.o.J. Ministry of Justice, Editor. 2007.
- [24] Sexual Offence Act Rev. 2009. 2009: Jamaica.
- [25] Offences against the Peron Act. Rev. 2014. 2014: Jamaica.
- [26] Statistical Institute of Jamaica, Population Statistics. 2014-2020, STATIN: Kingston.
- [27] United Nations Office on Drugs and Crime, Research brief: Effect of the COVID-19 pandemic and related restrictions on homicide and property crime. 2020.
- [28] United Nations Children's Fund, Situation Analysis of Jamaican Children. 2018, UNICEF.