

A STUDY OF THE IMPACT OF THE DEATHS OF FAMILY MEMBERS DUE TO THE CORONA VIRUS ON ANXIETY AND DEPRESSION AMONG RELATIVES AND CLOSE FRIENDS IN KINGSTON, JAMAICA



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ABSTRACT

Introduction: The COVID-19 pandemic has led to an increase in the number of deaths within families, resulting in significant stress and potential impacts on mental health. Specifically, in Jamaica, individuals residing in Kingston may experience particular effects on their mental well-being due to the Corona Virus (Abel et al., 2021). **Objective:** The objective of this study was to examine the impact of deaths of family members due to the Corona Virus on anxiety and depression levels among relatives and close friends in Kingston, Jamaica. **Methods:** A mixed methods approach was employed in this study, utilizing a survey to collect data from 45 respondents who had experienced the death of a family member due to the Corona Virus. The survey assessed anxiety and depression symptoms. **Results:** The findings revealed that the respondents who experienced a death in the family due to the Corona Virus reported moderate to high levels of anxiety and depression symptoms. **Conclusion:** Based on the observed findings, it is evident that further actions need to be taken by governmental, non-governmental, and non-profit organizations collectively. The aim is to promote a society where individuals are not only aware of the causes and effects of poor mental health, grief, and stress but also knowledgeable about how and where to seek professional assistance.

Keywords: COVID-19 pandemic, death in the family, mental health, anxiety, depression.

1. INTRODUCTION

The novel coronavirus (COVID-19) is an infectious disease caused by SARS-CoV-2. This was identified after a cluster of cases was recorded in Wuhan, China on December 31, 2019 (WHO, 2021). This is a communicable disease and is spread by breathing in air droplets and particles, which contains the virus, coughing and sneezing as well as touching eyes, nose or mouth with hands that have the virus, which was probably transmitted by touching an infected surface (CDC, 2022). The first confirmed case in Jamaica was recorded on March 10, 2020, from a female patient who travelled from the United Kingdom and steps were immediately taken by the government to reduce/control the impact on the country. This involved dispatching health workers to the home of the patient to initiate public health measures and conduct contact tracing for persons who were exposed to the patient (Ministry of Health and Wellness, Jamaica., 2020). Overtime, with the continued widespread of the virus, the government imposed stronger restrictions and, in some cases, wearing of masks and lockdowns, which coupled with the health implications of the virus, had a great negative impact on the mental health of several Jamaicans.

Residents of Kingston, Jamaica have particularly been faced with the dilemma of their mental health being affected as a result of the effects of the novel Corona Virus; commonly known as COVID-19 in the island. (Walters, 2021) stated that "...with a global crisis such as the COVID-19 pandemic, individuals are more likely to experience and undergo some level of stress, anxiety, grief and worry...". With the vast spread of the virus in the island several life altering preventative and responsive measures have been established such as social distancing, isolation, perennial mask wearing, online schooling, working from home, curfews, etcetera. These changes in various aspects of the lives of Jamaicans has affected their mental health resulting in anxiety, depression and withdrawal for example, which is also highlighted in a myriad of researches conducted.

The Corona Virus directly affects the physical body however there are implications on the mental health of individuals also which does not attract enough attention as it ought to, in addition; the death of a close family member or friend due to the virus can have an impact on the mental health of individuals. "Currently, scientific study on the impact of COVID-19 in Jamaica is rapidly emerging, however, evidence on the relationship between COVID-19 and mental health in Jamaica, and more broadly, in the Caribbean region, is lacking.", stated (Abel, et al, 2021). In a research conducted with persons that were diagnosed with COVID-19 shows that those same individuals may also suffer from anxiety, depression, insomnia and in some cases, especially if the patient has been hospitalized, Post Traumatic Stress Disorder (PTSD) (Hinck, 2021). This research has revealed some of the impacts that Covid-19 has on the mental health of Jamaicans.

Research Questions

This research will seek to highlight some of the effects Covid-19 has on the mental health of individuals living in Kingston, Jamaica. The research questions that we will consider when completing this study are:

1. What is the correlation between social isolation from the Corona Virus and anxiety?
2. How has COVID-19 related deaths trigger depression among relatives and friends of the deceased?
3. How does the respiratory effects of COVID-19 affect social withdrawal?

Significance of the Study

Jamaicans, particularly those individuals living in Kingston will benefit from the findings of this research as well as the respective officials from various organizations affiliated with mental health. This research seeks to find the connection of isolation and/or social distancing due to COVID-19 on anxiety, the connection of death due to COVID-19 and depression as well as the linkage between respiratory illnesses and social withdrawal. The aim of this study is also to identify the various mental health challenges experienced by Jamaicans living in Kingston, to describe the effects of the living in the COVID-19 pandemic on residents of Kingston, Jamaica and to develop recommendations to help respective agencies, ministries and/or organizations in an effort to promote awareness of mental health among Jamaicans living in Kingston particularly. It is imperative to research the facts related to COVID-19 and the mental health of Jamaicans to not only bring awareness but to also educate the public about the linkage, causes and effects of the two phenomenon.

Literature Review

Socialization is a crucial aspect of one's well-being and with the emergence of the Corona Virus, this aspect of the lives of Jamaicans has been affected especially as it relates to the psychological aspect of individuals. This is because of perpetual isolation for COVID-19 infected persons from others without the virus and social distancing protocols by the general public in an effort to prevent the rise and/or spread of COVID-19 cases in the island, according to (Banton, et al, 2021). The entire population has been affected including children who have been challenged with a limited amount of interaction, which may lead to lasting indicators of withdrawal, according to (Walters, 2021), there has also been implications as it relates to depression on Jamaicans due to the increase in deaths due to COVID-19.

Banton, et al, (2021) stated, "Social interaction is important to human beings. It has a role to play in overall health, but most importantly mental health. With stay at home orders being in place for the past several months in Jamaica, one begins to think that there must be some effect on the psychological wellbeing of Jamaicans at this time in the pandemic.". In the study conducted by (Banton, et al, 2021) it was found that social isolation negatively affected individuals and social isolation speaks to having an inadequate amount of social interaction which can lead to the lack of connecting with family, friends and acquaintances up to the wider society. In addition, in a study conducted and published in the year 2020 it was found that adults and children have a higher possibility of having an increased rate in anxiety and depression during and after isolation periods; this may increase as isolation periods continue, (Banton, et al, 2021). Another study by (Banton, et al, 2021) showed that isolation and loneliness that comes from being isolated has tangible implications on not only the physical but also mental health of individuals over the age of sixty; reports concluded that persons within this age group are at a high risk of being isolated due to the Corona Virus and are more likely to become lonely. "Anxiety, depression, poor sleep quality and physical inactivity were highlighted as major adverse effects resulting from social isolation measures.", (Banton, et al, 2021). (Banton, et al, 2021) also continued by stating that "...the prevalence of anxiety and depression during COVID-19 which varied across the studies having touch points averaging from 8.3% to 49.7% for anxiety and 14.6% to 47.2% for depression.". (Abel, et al, 2021) stated that the psychological reactions to isolation includes anxiety, stress, etcetera which have been connected to elements such as the practices, understanding and attitudes about COVID-19. "Some studies indicate that level of knowledge, optimistic attitudes and employment of preventative measures are linked to lower levels of anxiety symptoms.", stated (Abel, et al, 2021). A research booklet published by the (Ministry of Health, 2020) stated that life-altering events such as COVID-19 has the ability to lead to a rise in mental health challenges in the affected population. (Ministry of Health, 2020) continued by stating that a research conducted proved that the majority of the participants in the study felt like the Corona Virus had significantly impacted their lives, in addition; the occurrence of anxiety and depressive symptoms among participants was 49.2% and 54.7% correspondingly.

Mitchell, (2021) conducted a study to discover the prominence of depressive and anxiety symptoms among Jamaicans living in the Corona Virus. This study comprised the use of online surveys whilst using social media platforms such as Facebook to reach the target population of persons eighteen years and older; data on the attitude towards COVID-19, demographic data and knowledge of the virus was captured, (Mitchell, 2021). "Mental health issues including depressive and anxiety symptoms were assessed with questionnaire items from the Patient Health Questionnaire (PHQ-2) and the Generalized Anxiety Disorder (GAD-2).", according to (Mitchell, 2021). The research found that the younger participants, participants of a lower educational level and unemployed participants displayed substantial depressive symptoms while only being of a younger age and having a lower educational level were associated with significant anxiety indicators, (Mitchell, 2021).

Vivyan, (2021) stated that without consistent social interaction many of individuals begin to recognize that they are having low moods and depressive signs begin to introduce themselves; this depressive cycle results in several children and teenagers to withdraw from social interactions. The withdrawal that affect individuals can negatively affect them being comfortable in social spaces and may even result in having difficulties in reverting to regular daily activities such as attending school, church or other social gatherings, (Vivyan, 2021). However, "It is good to maintain familiar routines in daily life as much as possible, or create new routines...", according to (Walters, 2021). A study executed by (Ubillos-Landa, Puente-Martinez, & González-Castro, 2021) it was found that disturbances and withdrawal were associated with more mental health indications, growth models disclosed that social dysfunction increased as time progressed while dysphoric symptoms decreased. "The use of withdrawal aggravated social dysfunction symptoms. Young people who

use more withdrawal experienced more social dysfunction and dysphoria over time than those who used less withdrawal strategies.”, (Ubillós-Landa, Puente-Martínez, & González-Castro, 2021).

There is a multiplicity of gaps in the research articles used for this study. In the study conducted by (Abel et al, 2021) there was an aspect of concern as it relates to the amount of female respondents utilized for the research, to elaborate; there was an over-representation of females in the research as 90% of the respondents were found to be females. In addition, the research was executed between the months of August and September of the year 2020 and with the fast alterations made in relations to the Corona Virus pandemic there may be implications on the generalizability of the findings presented for this study, (Abel et al, 2021). This study also had limitations with the use of online surveys as the research may not have been able to capture data from individuals who did not have access to technological devices and/or access to the internet, (Abel et al, 2021). In addition to this, there may have been an unreasonable inclusion of respondents who as a result of economic, social and/or demographic factors, have and utilize social media accounts and this may have led to selection bias, (Abel et al, 2021).

Another gap in this study was as it relates to the use of brief screening tools for anxiety and depression related symptoms as they were restricted based on a two-week recollection as opposed to the onset of the Corona Virus pandemic, (Abel et al, 2021). As a result of this other elements could add to these symptoms such as being stressed in general from experiencing the pandemic, among other potential stressors; this would hence require added historical information beyond the scope of this research, (Abel et al, 2021). “Lastly, being a cross sectional study, it was not possible to establish causality between ‘explanatory and outcome variables; nevertheless, our findings may contribute to the understanding of the mental health effects on the population during a COVID-19 outbreak.”, (Abel et al, 2021). There were no other observed gaps in the other articles.

Mental Health in Jamaica

In the study done by (Abel et al, 2021) stated that the mental health of people living in Jamaica should be prioritized, to elaborate; programmes and resources should be established to cater to the mental health effects of Jamaicans. More mental health and psychosocial initiatives should be included in the country’s fight against the virus as well as coping mechanisms should be promoted more through the use of mass media and other communication avenues, (Abel et al, 2021). Due to diversity being present among those at risk there ought to be uniquely tailored interventions to fit the needs of the vulnerable, there should also be more training of community based health care workers in relations to the guidelines for mental health support, (Abel et al, 2021).

Findings of Prior Studies

There is a multiplicity of findings from the research articles reviewed. In the study by (Abel et al, 2021) it was found that there were four hundred and eight five respondents and of that amount four hundred and thirty-two were females and the remaining forty-four were males. “The age range of respondents spanned between 18 and 83 years with the most represented age groups being 31-40 years (22.2%) and 41-50 years (21.9%). Most persons lived in urban parishes (59.9%), were affiliated with Christianity (85.4%), and were single...” (Abel et al, 2021). It was also found that 99.4% of respondents had heard about the COVID-19 virus; 92.4% reported knowing a great deal of information while 7.2% stated that they knew some information and 0.4% of respondents did not know much information, (Abel et al, 2021). 95.5% of respondents stated that the virus is ‘highly infectious’, 97% of respondents stated that the virus can be spread through droplets from coughing or sneezing by an infected person and 96% mentioned that there can be an increased chance of getting the virus by touching your face, (Abel et al, 2021). 57.2% of respondents reported having a change in their employment status due to the Corona Virus; to elaborate 39.9% mentioned having a loss of employment while 29.1% reported having ‘fewer contracts’, (Abel et al, 2021). As it relates to depressive symptoms 54.7% of respondents reported having major depressive symptoms and 49.2% reported having major anxiety symptoms, (Abel et al, 2021).

In the study conducted by (Bantan, et al, 2021) 60.30% of respondents were isolated voluntarily to prevent getting the virus or to protect someone in their household because of having an increased risk of exposure to the virus. 36.68% of respondents were isolated due to having a potential exposure to the virus while the remaining 3.02% were isolated because they had contracted the virus, (Bantan, et al, 2021). 63.32% of respondents reported living with other people in their homes, 14.7% lived with others in a dorm, connected housing or an apartment, 11.3% mentioned living alone in a house and 11.3% reported living along in a dorm, connected housing or apartment, (Bantan, et al, 2021). This study found that 49.87% of respondents mentioned the people they live with do not isolate themselves from the respondent but isolate from others outside their homes while 29.33% of respondents reported that the people they live with isolate from the respondent as well as others outside the home, (Bantan, et al, 2021). In addition, as it relates to the psychological well-being of Jamaicans it was proven that during the pandemic the well-being of respondents declined, to elaborate; before the pandemic 80% of Jamaicans indicated that their psychological well-being was high in comparison to 74.5% of respondents during the pandemic, (Bantan, et al, 2021).

The study done by (Ubillós-Landa, Puente-Martínez, & González-Castro, 2021) showed that withdrawal among respondents was associated with having more mental health related symptoms; between 39% and 41% reported having mental distress.

The findings of the (Ministry of Health, 2020) reported having four hundred and eighty-five respondents where 90.8% were female and 9.2% males; of this amount, 97.7% of respondents believed the COVID-19 had significantly affected their lives. There was a notable frequency of depressive symptoms of 54.7% and anxiety symptoms of 49.2%; it was reported that a great amount of associations of younger age, unemployment or unstable employment and having a lower educational level reflected a higher prevalence of depressive and anxiety symptoms among respondents, (Ministry of Health, 2020). In addition, 67.4% of participants reported "yes" or "maybe" to requiring extra support to cope during the Corona Virus pandemic, (Ministry of Health, 2020).

In the research by (Abel, et al, 2021) it was concluded that the Corona Virus pandemic has caused several challenges across the world including Jamaica, there is a need for government and non-governmental organizations to formulate mental health initiatives for person who are greatly at risk of displaying anxiety related and depressive symptoms, (Abel, et al, 2021). Individuals mostly at risk were reported to be the under or unemployed, persons with a lower educational level as well as young adults, (Abel, et al, 2021).

It was concluded that the Corona Virus brought its impacts on the psychological well-being of people, while emphasis is placed on the physical effects there are also psychological impacts imposed by fear of getting the virus, (Bantan, et al, 2021). It has been established that the psychological state of Jamaicans worsened during the pandemic which also introduced several preventative measures such as frequent hand sanitizing, wearing masks, etcetera, (Bantan, et al, 2021). Though the intention of the concept of social isolation is good it has negative impacts on the psychological state of Jamaicans; many persons are not accustomed to these changes which causes an increased level of fear, frustration, apprehension, income and job difficulties and these factors account for stress caused by the virus, (Bantan, et al, 2021). The fear and anxiety caused by the pandemic in addition to previously existing psychological issues among Jamaicans have caused a great strain to be imposed on the mental health of Jamaicans, (Bantan, et al, 2021).

Ubillos-Landa, et al., (2021) concluded that the differences in the trends of social dysfunction as opposed to dysphoria symptoms suggests an adaptation procedure following the stress imposed from the lockdowns caused by the Corona Virus. Persons of an older age were found more associated to having less mental health difficulties and also had age related developments in emotional regulation, (Ubillos-Landa, Puente-Martinez, & González-Castro, 2021). The (Ministry of Health, 2020) concluded that the findings suggest that there is a need for the government body to formulate mental health initiatives for persons with a lower educational level, young adults and persons underemployed or unemployed. The primary objective of this research was to establish a cause and effect relationship between the Corona Virus and the mental health of Jamaicans who had a close family member or friend that died from the virus; living in Kingston particularly.

2. MATERIELS AND METHDS

2.1 Mixed Method Approach

The methodology used speaks to the strategy and methods that will be used in order to achieve the objectives of this research, according to (McCombs, 2021).

A mixed method approach was utilized as the methodological strategy for this research through the use of qualitative and quantitative methods. According to (Bhandari, 2022), a qualitative research includes gathering and analyzing non numerical data such as videos, texts or audio in an effort to comprehend experiences, thoughts and concepts. "It can be used to gather in-depth insights into a problem or generate new ideas for research.", stated (Bhandari, 2022). As it relates to using a qualitative approach the specific approach used is a phenomenological research which speaks to researchers examining a phenomenon by means of describing and interpreting experiences of participants, as stated by (Bhandari, 2022).

2.2 Data Collection Methods

The data collection method utilized includes the use of questionnaires with both open and closed ended questions. Data such the age ranges, employment status, educational level, income range, gender, relationship status and parental status of participants will be collected through the use of questionnaires. The sources for data collection for this research was from primary and secondary sources. The primary sources included the questionnaires that will be completed while the secondary sources include obtaining data from publications from government bodies as well as journal articles. The sample size used was a total of fifty respondents from ages twenty to sixty years old. Questionnaires were sent to persons emails for completion as well as through means of random sampling. The questionnaire consisted of twenty-five questions; twenty-four of these questions were used to collect quantitative data and the final question collected qualitative data from the respondents. A five-point scale was used and this questionnaire was created and completed using the Google Forms platform.

2.3 Study population

The respondents for this research were individuals who lived in Kingston, Jamaica and are currently living in Kingston, Jamaica since the start of the Corona Virus pandemic. The criteria for respondents to participate in this research included having a family member and/or close friend who died from the Corona Virus, respondents must be living in Kingston at

the time the research is being conducted, respondents must have been living in Jamaica since the start of the pandemic in the year 2020. These individuals were a mix of both males and females ranging from ages twenty to sixty years old. This age group was utilized for this research as it is believed that individuals from this age range may have a better understanding of the public information about the pandemic hence may internalize such information in a way that could cause impacts on their mental health. In addition, according to (Anxiety and Depression Association of America, 2021); "Anxiety disorders also often co-occur with other disorders such as depression... Anxiety is as common among older adults as among the young." The sample size target was fifty respondents however there were forty-five responses and these respondents were selected using a non-probability sampling approach. "Non-probability sampling involves non-random selection based on convenience or other criteria, allowing you to easily collect data.", according to (McCombs, 2022). To elaborate, the specific sampling method used is the Purposive Sampling. The Purposive Sampling is also referred to as judgement sampling and entails the researcher utilizing their knowledge and experience to select a sample that is most suitable for the purposes of the research, according to (McCombs, 2022).

2.4 Data Analysis

The analytical tools used is the Microsoft Excel and Microsoft Access software application. In addition; the Content Analysis approach was utilized. "Content analysis can be both quantitative (focused on counting and measuring) and qualitative (focused on interpreting and understanding). In both types, you categorize or "code" words, themes, and concepts within the texts and then analyze the results.", according to (Luo, 2021). In addition, a Descriptive Statistics approach will be utilized in an effort to summarize the features of the data collected. This analytical approach was most suitable as this research will include both quantitative and qualitative data.

3. RESULTS AND DISCUSSIN

There were a total of forty-five respondents to the questionnaire, from which several results were observed. Among the respondents, 46.7% were in the age group of twenty to thirty years old, 40% were between thirty-one and forty years old, 4.4% were between forty-one and fifty years old, and 8.9% were between fifty-one and sixty years old. In terms of gender, 77.8% were females, while the remaining 22.2% were males.

Regarding employment status, 68.9% of respondents were employed full-time, 15.6% were students, 6.7% were entrepreneurs, 6.7% were employed part-time, and the remaining 2.2% were unemployed. In terms of religious belief, 97.8% identified as Christians, while 2.2% selected 'Other.'

When it came to family size, 48.9% of respondents had one to three members in their family, 44.4% had four to six members, 4.4% had seven to nine members, and 2.2% had thirteen or more members. Regarding living in Kingston since 2020 or before, 62.2% of respondents answered 'Yes,' 35.6% answered 'No,' and 2.2% selected 'Strongly Agree.'

In terms of COVID-19 experiences, 68.9% of respondents reported never having contracted the virus, while 28.9% had been infected, and 2.2% selected 'Strongly Agree.' Additionally, 77.8% reported that a close relative or friend had contracted the virus, 20% responded with 'No,' and 2.2% responded with 'Disagree.' As for deaths in the family due to the virus, 73.3% of respondents did not experience any, while 24.4% did, and 2.2% responded with 'Disagree.'

Regarding the relationship to the person who died from the virus, 86.7% responded with 'Other,' 6.7% had an aunt or uncle who died, and 6.7% had a close friend who passed away. When asked about living arrangements at the time of the death, 55.6% selected 'Other,' 40% selected 'Immediate Family,' and 4.4% selected 'Alone.'

The respondents were asked various questions about the impact of the pandemic on their mental health. When asked if social distancing had a negative impact on their mental health, 26.7% disagreed, 22.2% strongly disagreed, 20% agreed, 17.8% selected 'Not Sure,' and 13.3% strongly agreed. Regarding feelings of overwhelming sadness since the start of the pandemic, 33.3% agreed, 26.7% disagreed, 15.6% strongly agreed, 13.3% were uncertain, and 11.1% strongly disagreed.

Respondents were also asked about their experiences since the start of the pandemic in 2020. In response to the question about a lack of interest or pleasure in activities, 37.8% agreed, 26.7% disagreed, 15.6% strongly agreed, 13.3% were uncertain, and 6.7% strongly disagreed. Similarly, 33.3% agreed, 26.7% disagreed, 15.6% strongly agreed, 13.3% strongly disagreed, and 11.1% were uncertain regarding feelings of being down, depressed, or hopeless.

When asked about feeling tired or having little energy since the start of the pandemic, 31.1% agreed, 26.7% disagreed, 22.2% strongly agreed, 11.1% were uncertain, and 8.9% strongly disagreed. In terms of appetite changes, 37.8% agreed, 31.1% disagreed, 11.1% agreed, 11.1% were uncertain, and 8.9% strongly disagreed. Regarding feeling like they have let themselves or their family down, 33.3% disagreed, 22.2% strongly disagreed, 20% agreed, 15.6% were uncertain, and 8.9% strongly agreed.

The respondents were also asked about thoughts of self-harm or suicide. When asked about thoughts of being better off dead or hurting oneself, 42.2% strongly disagreed, 31.1% disagreed, 15.6% were uncertain, 6.7% agreed, and 4.4% strongly agreed. Regarding feelings of worry, anticipation of the worst, fearfulness, or irritability, 40% agreed, 17.8% agreed, 17.8% disagreed, 15.6% were uncertain, and 8.9% strongly disagreed.

Respondents were asked if they felt anxious about the COVID-19 vaccination process. In response, 31.1% agreed, 28.9% strongly agreed, 20% disagreed, 11.1% were uncertain, and 8.9% strongly disagreed. When asked about experiencing feelings of tension, fatigability, startle response, easy tearfulness, trembling, restlessness, or inability to relax, 37.8% agreed, 24.4% disagreed, 15.6% strongly disagreed, 13.3% were uncertain, and 8.9% strongly agreed.

Regarding sleep disturbances, 42.2% agreed, 17.8% strongly agreed, 15.6% strongly disagreed, 13.3% disagreed, and 11.1% were uncertain when asked about difficulties falling asleep, broken sleep, unsatisfying sleep, fatigue upon waking, dreams, nightmares, or night terrors. When asked about physical symptoms such as dry mouth, flushing, pallor, sweating, giddiness, tension, headache, or hair raising, 42.2% disagreed, 17.8% agreed, 17.8% strongly disagreed, 15.6% were uncertain, and 6.7% strongly agreed.

In an open-ended question, thirty-five of the forty-five respondents provided their opinions on whether getting help from a mental health professional was necessary. One respondent stated that it was necessary due to the mental breakdowns resulting from social isolation and the inability to engage in regular activities. Another respondent emphasized the importance of professional help in understanding one's experiences and identifying triggers. However, another respondent mentioned finding manageable ways of coping without professional help during the pandemic.

Table 1: Age, sex and employment

| | Age | | Sex | | Employment Status | |
|---|--------------------|------------|--------|------------|----------------------|------------|
| 1 | 20 to 30 years old | 21 (46.7%) | Male | 10 (22.2%) | Employment Full-Time | 31 (68.9%) |
| 2 | 31 to 40 years old | 18 (40%) | | | Employment Part-Time | 3 (6.7%) |
| 3 | 41 to 50 years old | 2 (4.4%) | Female | 35 (77.8%) | Unemployed | 1 (2.2%) |
| 4 | 51 to 60 years old | 4 (8.9%) | | | Entrepreneur | 3 (6.7%) |
| 5 | | | | | Student | 7 (15.6%) |

Table 2: Religion, family size, and residence in Jamaica since 2020 status.

| # | Religion | Family size | | Residences Status | |
|---|--------------|-------------|--------------------|-------------------|-------------------------|
| 1 | Christianity | 44 (97.8%) | 1 to 3 members | 22 (48.9%) | Yes 28 (62.2%) |
| 2 | Other | 1 (2.2%) | 4 to 6 members | 20 (44.4%) | No 16 (35.6%) |
| 3 | | | 7 to 9 members | 2 (4.4%) | Strongly Agree 1 (2.2%) |
| 4 | | | 13 or more members | 1 (2.2%) | |

Table 3: COVID-19 information.

| # | Question | Have you ever contracted COVID-19? | Have any of your close relatives and/or friends contracted COVID-19? |
|---|----------|------------------------------------|--|
| 1 | Yes | 13 (28.9%) | 35 (77.8%) |
| 2 | No | 31 (68.9%) | 9 (20%) |
| 3 | Disagree | 1 (2.2%) | 1 (2.2%) |

Table 4: Covid-19 related death information

| # | Have you had a death in your family resulting from the Corona Virus? | What relation to you the person who died from COVID-19 virus? | |
|---|--|---|-----------------------|
| 1 | Yes | 11 (24.4%) | Aunt/Uncle 3 (6.7%) |
| 2 | No | 33 (73.3%) | Close Friend 3 (6.7%) |
| 3 | Not sure | 1 (2.2%) | Other 39 (86.7%) |

Table 5: Living situation with death of family member or friend due to Covid-19. With whom were you living when the death happened?

| | |
|-----------------------|------------|
| Alone | 2 (4.4%) |
| With immediate family | 18 (40.0%) |
| Other | 25 (55.6%) |

Table 6: Impact of social distancing on mental health.

| Do you think social distancing since the pandemic has had a negative impact on your mental health? | |
|--|------------|
| Strongly agree | 6 (13.3%) |
| Agree | 9 (20.0%) |
| Not sure | 8 (17.8%) |
| Disagree | 12 (26.7%) |
| Strongly disagree | 10 (22.2%) |

Table 7: Depression symptoms experienced during COVID-19.

| # | Response | Have you felt an overwhelming amount of sadness since the start of the COVID-19 pandemic? | Little interest or pleasure in doing activities? | Feeling down, depressed, or hopeless? | Feeling tired or having little energy? | Poor appetite or overeating? |
|---|-------------------|---|--|---------------------------------------|--|------------------------------|
| 1 | Strongly agree | 7 (15.6%) | 7 (15.6%) | 7 (15.6%) | 10 (22.2%) | 5 (11.1%) |
| 2 | Agree | 15 (33.3%) | 17 (37.8%) | 15 (33.3%) | 14 (31.1%) | 17 (37.8%) |
| 3 | Not sure | 6 (13.3%) | 6 (13.3%) | 5 (11.1%) | 5 (11.1%) | 5 (11.1%) |
| 4 | Disagree | 12 (26.7%) | 12 (26.7%) | 12 (26.7%) | 12 (26.7%) | 14 (31.1%) |
| 5 | Strongly disagree | 5 (11.1%) | 3 (6.7%) | 6 (13.3%) | 4 (8.9%) | 4 (8.9%) |

| # | Response | Feeling about yourself - or that you is a failure or that you have let yourself or family down? | Thoughts that you would be better off dead, or of hurting yourself in some way? |
|---|-------------------|---|---|
| 1 | Strongly agree | 4 (8.9%) | 2 (4.4%) |
| 2 | Agree | 9 (20%) | 3 (6.7%) |
| 3 | Not sure | 7 (15.6%) | 7 (15.6%) |
| 4 | Disagree | 15 (33.3%) | 14 (31.1%) |
| 5 | Strongly disagree | 10 (22.2%) | 19 (42.2%) |

Table 8: Table presents the stress and the anxiety symptoms.

| # | Response | Have you felt worried, anticipation of the worst, fearful anticipation and or irritability? | Have you felt anxious about the vaccination process for the Corona Virus? |
|---|-------------------|---|---|
| 1 | Strongly agree | 8 (17.8%) | 13 (28.9%) |
| 2 | Agree | 18 (40.0%) | 14 (31.1%) |
| 3 | Not sure | 7 (15.6%) | 5 (11.1%) |
| 4 | Disagree | 8 (17.8%) | 9 (20.0%) |
| 5 | Strongly disagree | 4 (8.9%) | 4 (8.9%) |

| # | Response | Have you had feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness and/or inability to relax? |
|---|-------------------|---|
| 1 | Strongly Agree | 4 (8.9%) |
| 2 | Agree | 17 (37.8%) |
| 3 | Not sure | 6 (13.3%) |
| 4 | Disagree | 11 (24.4%) |
| 5 | Strongly Disagree | 7 (15.6%) |

| # | Response | Have you had feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness and/or inability to relax? |
|---|-------------------|---|
| 1 | Strongly Agree | 4 (8.9%) |
| 2 | Agree | 17 (37.8%) |
| 3 | Not sure | 6 (13.3%) |
| 4 | Disagree | 11 (24.4%) |
| 5 | Strongly Disagree | 7 (15.6%) |

Table 9: Anxiety symptoms related to COVID-19.

| # | Response | Have you had difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, nightmares and/or night terrors? | Have you experienced dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache and/or raising of hair |
|---|-------------------|---|---|
| 1 | Strongly Agree | 8 (17.8%) | 3 (6.7%) |
| 2 | Agree | 19 (42.2%) | 8 (17.8%) |
| 3 | Not sure | 5 (11.1%) | 7 (15.6%) |
| 4 | Disagree | 6 (13.3%) | 19 (42.2%) |
| 5 | Strongly Disagree | 7 (15.6%) | 8 (17.8%) |

In present study, a total of forty-five respondents completed the questionnaire, providing valuable insights into various aspects related to the COVID-19 pandemic and its impact on mental health. The demographic information revealed that the majority of respondents fell within the age range of twenty to forty years old, with a higher percentage of females compared to males. Employment status varied, with a significant proportion being employed full-time.

Regarding religious beliefs, the majority identified as Christians. Family sizes ranged from one to six members, and a significant number of respondents reported having close relatives or friends who contracted the virus.

When assessing the impact of social distancing on mental health, a diverse range of responses was obtained. A notable portion of respondents disagreed or strongly disagreed that social distancing had a negative impact on their mental health. Similarly, when asked about feelings of overwhelming sadness since the start of the pandemic, the responses varied, with a relatively equal distribution across the options provided.

Questions related to the start of the pandemic in 2020 revealed mixed responses. Some respondents reported a lack of interest or pleasure in activities, feeling down or depressed, fatigue or low energy levels, poor appetite or overeating, and feelings of letting down oneself or family. Concerning more severe symptoms, such as thoughts of self-harm, the majority disagreed or strongly disagreed.

Anxiety-related symptoms, including worry, anticipation of the worst, and irritability, evoked mixed responses. Similarly, feelings of tension, fatigue, restlessness, and difficulty relaxing received diverse reactions. Sleep disturbances, such as difficulty falling asleep and nightmares, were reported by a substantial number of respondents. Physical symptoms, such as dry mouth, sweating, and headaches, elicited varied responses.

In response to the open-ended question about the necessity of seeking help from a mental health professional, several themes emerged. Some respondents believed it was essential to seek professional help, citing the mental breakdown experienced by individuals affected by the virus and the need for support in understanding and managing their emotions. Others expressed that they had found manageable ways of coping without professional assistance.

Comparing our results with other similar scientific studies, it is important to note the variability in findings across different populations and contexts. While our study focused specifically on Jamaican respondents, other studies have examined mental health impacts in diverse populations worldwide. For example, Kobayashi (2023) conducted a study in the United States, which found similar patterns of mental health challenges during the COVID-19 pandemic. They observed elevated levels of anxiety and depression symptoms.

Furthermore, a study by Wang, et al. (2021) explored the mental health effects of the pandemic in a Chinese population. They reported a significant increase in stress, anxiety, and depressive symptoms among their respondents. It is crucial to consider the cultural, social, and economic factors that can influence the experiences and responses of individuals during the pandemic (Tang, et al., 2022). These factors can contribute to variations in the impact of COVID-19 on mental health outcomes.

Overall, our study highlights the complex and multifaceted nature of the impact of the COVID-19 pandemic on mental health. The diverse range of responses and experiences observed among our respondents underscores the need for tailored interventions and support systems to address the unique challenges faced by individuals in different settings. Further research and collaborative efforts are necessary to better understand and mitigate the mental health consequences of the ongoing pandemic.

Despite the valuable information gathered for this research, it is crucial to acknowledge the limitations associated with it. The specific limitations of this study include, but are not limited to, the following:

- Small sample size: The study was conducted with a limited number of participants, which may affect the generalizability of the findings to a larger population.
- Insufficient previous studies: There was a lack of extensive existing research conducted on the topic, which might have limited the availability of comprehensive background information and comparison points.
- Time constraints: The research faced time limitations, which may have impacted the depth and breadth of data collection and analysis.
- Geographic focus: The research was primarily focused on individuals in Kingston, Jamaica, which restricts the generalizability of the findings to other regions or contexts.
- Technological requirement: Participation in the study was limited to individuals who had access to electronic devices and the internet, potentially excluding those without such resources and introducing bias in the sample.
- Gender imbalance: The distribution of respondents was skewed, with a significantly higher proportion of female participants (77.8%). This imbalance may affect the representation and interpretation of the findings.

These limitations should be considered when interpreting the results of the study and should be addressed in future research to enhance the robustness and applicability of the findings.

Recommendations: Following a detailed observation and analysis of the findings from the questionnaire executed there are a multiplicity of recommendations. These recommendations are mostly primarily centered around improving future and existing policies and research to be executed. Based on the findings we can see that the Corona Virus has had an impact on several Jamaicans across the island in one way or another, as such; it is recommended that intention work is done to cushion the effects of the Corona Virus on the mental health of Jamaicans all across the island. This

can be done by promoting the availability of mental health services such as counselling to the public through means of mass media; once people know where to get help that puts them one step further in the right direction to address their concerns.

In addition, the use of mass media and the influential persons within the society could be used to break the barrier and end the stigma in Jamaica associated with mental health concerns and getting help for same. More information concerning practical grief and stress coping mechanisms could be disseminated to the public through the use of various mediums such as mass media and different seminars. Using a wider scope in location for the research and by extension a larger sample size could aid with better results from the findings. Given that most of the respondents were female in comparison to males, it is recommended to get more males involved in the fight towards proper grief coping mechanisms and by extension good mental health.

5. CONCLUSION

In conclusion, the COVID-19 pandemic has had significant effects on the studied population of Jamaica, specifically those residing in Kingston. Based on the findings of this research, it is evident that concerted efforts are required from government entities, non-governmental organizations, and non-profit organizations to address these effects. The aim should be to foster a society where individuals are not only well-informed about the causes and consequences of poor mental health, grief, and stress, but also aware of the available professional support. By promoting awareness and access to appropriate resources, it is possible to create a supportive environment that facilitates proper mental health management and coping strategies for the people of Jamaica.

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