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Mental Health Service Users experience of Covid-19 and prevention measures in Trinidad and Tobago: A Cross Sectional Survey

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Abstract

The emergence of the Covid-19 pandemic had a significant impact on health services in Trinidad and Tobago, especially the impact on mental health services users. It then begs the question whether they can understand and comply with changing government regulations. A cross sectional survey of mental health service users was carried out in seven (7) psychiatric outpatient clinics. 384 participants in this survey, 142 (36.9%) were men and 242 (63.1%) were females. None of the service users reported any Covid-19 symptoms or previously tested positive for Covid-19. There were significant differences between males and females in their knowledge about Covid-19 and the prevention measures. Gender difference is reflected in the response and reaction to the lockdown measures except leaving home occasionally against government measures. The findings of this study showed that male and females mental health service users differ in their knowledge of the COVID-19 virus as well as their reaction and response to the different governmental measures. It also shows they were equally affected by the pandemic like the general population despite the negative perception about their ability to understand and follow government instituted guidelines.

Keywords: Mental health service, users experience, COVID-19, prevention measures.

Introduction

The COVID-19 pandemic is considered the defining health challenge since World War 2 (UNDP, 2020). The impact is further aggravated by the memory of recent infectious diseases, that includes severe acute respiratory syndrome (SARS), the 2009 Influenza (H1N1) and middle east respiratory syndrome (MERS) on the affected communities (UNDP, 2020, Van Bortel et al., 2016) and the disruptions that pandemic can create within societies (Brooks et al., 2020) are well documented. Disruptions to mental health services are said to be disproportionately affecting people with pre-existing mental health conditions because of limited access and support services according to the World Health Organization.

The alarm bell about COVID-19 being a potential danger was raised in January 2020 in Trinidad and Tobago, with instructions for all government departments to prepare for the possible spread of the virus into the country (Trinidad Express, 2020). Preparation began gradually, but intensified in late February to early March 2020. Trinidad and Tobago recorded its first case of COVID-19 on March 12th, 2020 (Nurse, 2020) followed by first and second cases of community spread in July 2020. It should be noted that the Caribbean region can be described as one that is well tested in terms

of its disaster preparedness and management, this is evident from the yearly preparation for the hurricane seasons, but this threat is different and has no borders.

The emergence of the virus and the follow-up measures were associated with changes to the usual health service delivery with the creation of a parallel health system to manage people suspected or diagnosed with COVID-19. This second system did not implicitly mention how individuals with mental illness will be managed; therefore, further exposing the gaps in how the mentally ill are treated. The attitude and perception make the threat of the virus real for individuals with mental illness because of difficulties associated with stigma and discrimination (Schomerus & Angermeyer, 2008) which makes the experience of the illness worse than the condition (Corrigan, 2004). There is the perception of the mentally ill as being dangerous (Link et al., 1987) a situation that makes it difficult to access help in an environment with sub-optimal mental health services, especially support services like housing and income support. The family members may also find themselves in situations where they hide their relatives in a bid to avoid "family shame" due to society's negative view of factors responsible for mental illness (Kleinman & Lin, 2013). These discriminatory practices by family and society (Kramer et al., 2002) may therefore influence help-seeking behaviour especially when individuals with mental illness develop flu-like symptoms or other symptoms associated with COVID-19. This may be further complicated by misinformation that may be associated with fear, stigma, and blame (Chattopadhyay, 2020) especially in situations where mentally ill persons may not be able to adhere to governmental regulations. It is then easy to blame mental health service users for the spread of the virus as a result of these challenges. The other social consequences of the COVID-19 pandemic is the effect of lockdown on females with mental illness with increase reports of domestic violence as a result of the lockdown (Ptnews, 2020) which can be very consequential on patients and relatives alike and an environment full of misunderstanding, distrust, and accusations.

The direct impact of lockdown and reactions

The direct impact of the virus on any population including mental health service users can be inferred from previous studies (Wang et al., 2011), with the increasing development of psychiatric disorders following exposure to viral illness with higher rates of anxiety (Selten et al., 1999) and depression (Dahl et al., 2014). The COVID-19 virus could therefore impact the severity of prevailing mental illness, especially depression and anxiety (Hampson, 2021). It, therefore, means there may be increased demand for mental health services despite the underfunding because of the pandemic. The current study is focused on the impact of the pandemic on mental health service users attending psychiatric outpatient clinics. These are service users who are stable enough not to require hospitalization. It is a popular belief that these individuals are more susceptible to contracting the COVID-19 virus due to lifestyle and inability to navigate the frequently changing guidelines on how to avoid contracting it. In addition to the worsening of pre-existing mental conditions, they may also develop additional co-morbid psychiatric disorders (Goldmann & Galea, 2014). The emphasis has been to focus on the spread of the virus, especially among the vulnerable group that includes individuals with co-morbid medical conditions like diabetes, hypertension, heart disease, and systemic lupus erythematosus (SLE).

Unfortunately, mental health service users have not been operationally classified with this group, despite the associated impairment. Additional distress may be associated with changing guidelines with unclear information and communication that is common in the initial period of disease outbreaks (Sarjit, 2009). This is further complicated by misinformation and fake news in social media related to the COVID-19 virus. It can be escalated in situations where service users have to be tested and placed in quarantine, which may further erode their sense of being and can create additional emotional strain (Tansey, 2007) from isolation and rejections by society and family. The isolation and restriction of movement could potentially elevate domestic violence towards the mental health service users (Afe et al., 2016) since many of the service users engage in domestic and odd jobs that are most affected by the pandemic.

Methods

Participants

This is a cross-sectional survey of mental health service users who attend psychiatric outpatient clinics in the North West Region of Trinidad and Tobago. Trinidad is the southernmost island of the Lesser Antilles in the Caribbean. The population of Trinidad is multi-ethnic but mainly of East Indian and African ancestry. The survey involves service users diagnosed with different conditions, but stable enough to continue receiving services in the outpatient clinics. Ethical approval was obtained from the ethics committee of the North West Regional Health Authority (NWRHA), Trinidad and Tobago. The authority is responsible for providing health services to about 500000 persons which include mental health services. The inclusion criteria were a) mental health service users registered in the participating clinics, b) mentally stable without requiring hospitalization, c) above the age of 18 years. A total of 385 (142 males and 243 females) mental health service users agreed to participate in the survey. They were invited to answer the question in a survey form questionnaire. A few patients needed the assistance of family members to complete the survey questions. One survey questionnaire was rejected because it was partially done.

Survey Instrument

The survey instrument was designed to be very simple. The questionnaire focused on issues related to the impact of lockdown due to COVID-19, like awareness of COVID-19, and difficulties experienced during the lockdown. An initial pilot study was done on 20 service users to know the difficulty level of the items in the questionnaire. The participant's ages varied from 18 years. The participants in the pilot phase were not included in the main study. The survey included questions on the impact of the lockdown on mental health service users and their relatives. A scoring system was used which made it very simple for the participant to select from; yes, no, don't know. Likert scale was used to determine the response to the psychological impact of the lockdown; "strongly agree", “agree", "neutral", "disagree" and “strongly disagree” with a scoring range 1 to 5.

Procedure

The mental health service users were approached face to face in the outpatient clinic. They visit the clinics by appointment only. The survey was explained to them and they were given adequate time to ask questions. If they gave verbal consent, they were then allowed to complete one questionnaire each. The service users who were acutely ill were excluded from the survey.

Statistical analysis

The data was computed for demographic variables. The association between the variables and COVID-19 knowledge and other measures were analysed using Pearson Chi-Square. The roles of certain variables that are relevant in the study were compared. This included gender and age. Data entry and statistical analysis were performed using the Statistical Program for Social Sciences (IBM SPSS Corp, SPSS Statistic ver. 16, USA). The Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. Testing if there is a statistically significant difference to the questions based on gender. Kruskal- Wallis Test is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable.

Results from Analysis

A total of 385 participants, who are mental health service users, took part in the survey. This included 142 males and 243 females. In the questions that covered knowledge about COVID-19 and governmental measures, there were significant differences between males and females except in the measure of social distancing (see Table 1**).**

Table1:

Knowledge of Covid-19 and prevention measures

Survey Questions	Male		Female		Pearson Chi-Square
	Yes	No	Yes	No	
Do you know about covid-19	108	22	205	15	0.017
It can be transmitted through touching	120	13	231	7	0.001
It can be transmitted through close contact	117	19	226	12	0.014
It can be transmitted through droplets	122	14	229	9	0.026
Social distances	131	7	235	4	**0.071**
Regular handwashing	134	3	234	4	0.045
Avoid persons with symptoms	131	8	237	2	0.014
Staying at home	134	12	229	7	0.030

Pearson Chi Square: knowledge and prevention measures.

Most of the respondents (78.1%) either agreed or strongly agreed that they worried about themselves or a loved one contracting COVID-19. Due to the ordinal nature of the data, the median was computed. The median, a measure of central tendency is 2, and the interquartile range (IQR) that describes the spread of the responses is 1, which indicates consensus for this question.

A greater percentage of the respondents (59.7) agreed or strongly agreed that their daily lives have been disturbed /affected by covid-19. The median is 2, and the IQR is 3 which indicate a bit more variation in the responses. Most of the respondents (83.6%) either agreed or strongly agreed that they think staying at home can prevent covid-19 spread. This median is 2 and the interquartile range (IQR) is 1, which indicates consensus for this question. A greater percentage of the respondents (55.4%) indicated that the government measures did not affect their illness.

Table2:

Gender response to difficulties during lockdown

Survey Questions	Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
You worry about yourself or a loved one contracting covid 19.	male	142	212.80	30218.0	14299.0	43702.0	-2.949	.003
	female	242	180.59	43702.0				
Your daily life has been disturbed/affected by covid 19.	male	142	211.68	30058.0	14175.0	43095.0	-2.846	.004
	female	240	179.56	43095.0				
Do you think staying at home can prevent covid spread	male	142	218.01	30957.0	13560.0	42963.0	-3.747	.000
	female	242	177.53	42963.0				

How did the male government measures affect you emotionally	male	142	209.76	29785.5	14305.5	42985.5	-2.834	.005
	female	239	179.86	42985.5				

a. **Grouping Variable: gender**

In Table 2, there is a statistically significant difference in how males responded to the question of worrying about themselves or a loved one contracting covid-19 when compared with females. Comparing the mean ranks, males had a higher mean rank, which may indicate that on average, males were more likely to respond on the higher end of the Likert scale when compared with females.

There is a statistically significant difference in how males responded to the question of their daily lives being affected by covid-19 when compared with females. Comparing the mean ranks, males had a higher mean rank, which may indicate that on average, males were more likely to respond on the higher end of the Likert scale when compared with females.

There is a statistically significant difference in how males responded to the question of if they think staying at home can prevent covid-19 spread when compared with females. Comparing the mean ranks, males had a higher mean rank, which may indicate that on average, males were more likely to respond on the higher end of the Likert scale when compared with the females.

There is a statistically significant difference in how males responded to the question of how the government measures affected them emotionally when compared with females. Comparing the mean ranks, males had a higher mean rank, which may indicate that on average, males were more likely to respond on the higher end of the Likert scale when compared with the females.

Table 3:
Age response to impact of the pandemic

	age	**N**	**Mean Rank**	**Chi-Square**	**df**	**Asymp. Sig.**
you worry about yourself or a loved one contracting covid 19	18-24	39	214.64			
	25-34	72	191.08			
	35-44	70	183.30			
	45-54	54	182.91			
	55-64	92	183.01			
	over 65	55	208.71	4.960	5	.421
your daily life has been disturbed/affected by covid 19	18-24	39	206.00			
	25-34	72	186.53			
	35-44	70	169.56			
	45-54	54	193.54			
	55-64	91	183.40			
	over 65	54	220.68	8.489	5	.131
do you think staying at home can prevent covid spread	18-24	39	195.82			
	25-34	72	213.85			
	35-44	70	200.44			
	45-54	55	190.78			
	55-64	92	179.62			

	over 65	54	167.96	8.239	5	.144
how did the government measures affect you emotionally	18-24	39	207.03			
	25-34	72	176.75			
	35-44	70	178.64			
	45-54	55	206.75			
	55-64	89	188.84			
	over 65	54	194.95	5.084	5	.406

Chi Square: age response to impact of pandemic

In Table 3, the results of the Kruskal- Wallis test indicated that there is no statistically significant difference in the responses to the questions based on age.

Table 4:
Reaction to the lockdown

Survey Questions	**Male**		**Female**		**Pearson Chi**
	Yes	**No**	**Yes**	**No**	**Square**
Found it difficult to stay at home	60	79	53	182	0.000
Left home occasionally	122	17	200	36	0.647
Occasionally spends time with friends	35	104	29	207	0.005
Feeling stressed out	54	84	127	109	0.023

Comparison of male and female mental health services users.

An analysis of the reaction to the government measures (Table 4), there is a statistically significant difference in how males responded to the question of difficulty staying at home, occasionally spending time with friends and feeling stressed out. There were no significant differences when asked if they left home occasionally.

Discussion

The COVID-19 pandemic and the government measures affected both male and female mental health service users in Trinidad and Tobago. While there may be a disparity between males and females, fundamentally the survey showed that mental health service users were equally affected by the pandemic like the general population (Hoffart et al., 2020). The gender differences in the areas of knowledge, impact, and the response to COVID-19 is very important because of the different roles played by each gender. Traditionally it is customary for females to play dual roles of engaging in employment and also being homemakers. These roles may affect the way females respond to the outbreak, especially fear of not only contracting the virus but also worry about their children and family members getting the same. The significant impact will be loss of income as a result of the nature of their predominant role as frontline healthcare workers, domestic workers, shop keepers, and other non-skilled jobs that make them vulnerable to exposure to the virus. These forms of employment mean you are only paid when you perform employment-related duties.

The knowledge base of participants about the COVID-19 varied when males were compared with females. The male participants were significantly less knowledgeable in the understanding of the measures necessary to curtail the spread of the virus. This could not be explained directly by any measures related to the general attitude of males and females. This knowledge-seeking behaviour of females can be explained by their role in the society of homemakers and providers, with increased risk of exposure due to the nature of their jobs.

However, there were no significant differences when asked about social distancing. These differences of opinion can be due to multiple factors that include but not limited to the diagnosis or mental disorder of the participants, the age, the side effect of medication, and the access to information. The findings of the differences between males and females while informative, the overall knowledge about COVID-19 and governmental measures is comparable to what was reported from the general population from other countries (Wolf et al., 2020).

Many of the mental health service users may have limited access to social media or traditional media like television and radio to obtain information about events around them as the majority of the general population as reported from previous findings (Zhang et al., 2020). The ability to understand changing information can be difficult in the face of these limitations, especially since the key to the acquisition of knowledge about the pandemic requires exposure to knowledge. In situations where stigma and discrimination are pervasive, the risk of exposure increases due to limitations in information acquisition and family actions or inactions. Many of the actions may include hiding family members because of inherent discriminatory practices in the communities or shielding them from being accused wrongly of spreading the virus because of the inability to manage the necessary social measures advocated by the governments. This action or inaction may then explain the lack of significant differences between males and females when asked about the social distancing.

The majority of respondents expressed worry about family members contracting COVID-19 as a result of which there is significant fear due to uncertainty around the virus. They also expressed other displeasures around the COVID-19 virus as well as prevention measures like staying at home, which is affecting their daily life. Males were more likely to respond on the higher end of the Likert scale when compared with the females on the effect of the virus, government measures, and emotionally as well. The disparity between males and females can be explained by the direct effect on how males and females socialize. The acceptable social behaviour may have more externalizing in males and less in females. The other explanation is the demands associated with caring for children and other family members. The females may be homemakers or not employed by secular employment arrangements. In Trinidad and Tobago, many of these mental health service users are employed by the community-based environmental protection and enhancement program (CEPEP) and unemployment relief program (URP) that provide a temporary source of income for households that are mainly headed by females. When the response to the effect of the government measures was compared by age there were no significant differences between the age groups.

The reaction to the social measures was compared between males and females. The men expressed more difficulty with coping with the lockdown as a result of which they have difficulty staying home ($p=0.000$), and subsequently spent time with friends ($p=0.005$). The male and female respondents do not have significant differences about leaving the house to socialize or engage in other activities but the men felt more stressed out ($p=0.023$) by the general measures. The result shows that mental health service users are equally affected by the pandemic like the general population.

Limitations

There are limitations to the study. These include the methodology that involves using a convenient sample of mental health service users in designated seven (Schomerus & Angermeyer, 2008) outpatient clinics. There is also the issue of the ability of the service user to understand the purpose of the survey, therefore, responding to survey questions based on their educational limitations. The fear of retribution for not participating could be a factor in objecting to taking part in the survey. The study did not compare the current group of service users to the general population which limits the interpretation that can be inferred from the

findings. Also a few of the service users were assisted by family members to understand and complete the survey questions.

Recommendations

The study did not compare the current group of service users to the general population which limits the interpretation that can be inferred from the finding. Further research is required to explore how the pandemic affected mental health service users with varying diagnosis of mental disorders.

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