Research Article

Mental Well-being and Loneliness Among Residents of Karachi During the Second Lockdown of COVID-19

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Abstract

Background: Covid-19 emerged as a global pandemic and its catastrophic effects have been felt throughout the world. The pandemic has caused a serious impact on mental health and loneliness of the people. The aim of the present research was to analyze the impact of the Covid-19 on the psychological health of residents of Karachi during the second lockdown.

Method: It was a cross-sectional study conducted during the second wave of corona virus via an online survey, in which 380 persons participated. The survey consists of questions for the assessment of symptoms of depression, anxiety, stress by using DAAS-21 scale and for the questions related to loneliness, the UCLA-3 Item Loneliness Scale was used. Participants were selected by convenient and snow ball sampling method.

Results: The results revealed that the psychological health was affected by the lockdown. It is also highlighted that women experienced more stress, anxiety, and depression than men and there is also significant difference between men and women in terms of loneliness.

Conclusion: During the second lock down in Karachi the residents suffered from moderate level of depression, severe level of stress and mild level of anxiety. It is also evident that men have experienced less psychological impact of COVID 19 pandemic and with low level of loneliness than women. The outbreak of this pandemic indicates the need to pay greater attention to this issue to prevent and reduce the psychological outcomes of the pandemic.

Keywords: Covid -19; Stress; Anxiety; Depression; Loneliness; DASS-21; UCLA-3

Introduction

Within the last 20 years, several viral diseases have been reported like Severe Acute Respiratory Syndrome (SARS) in 2003, the H1N1 subtype of influenza virus in 2009, Middle East Respiratory Syndrome (MERS) in 2012, and Ebola virus in 2014 [1,2]. On 31 December 2019, a novel Coronavirus type (2019-nCoV) was detected as a causative factor in cases of pneumonia in the Chinese city of Wuhan [3]. Later the virus, COVID-19, spread rapidly around the globe and on the 30th of January, 2020 World Health Organization declared international health emergency [4]. In re-

sponse to this global health emergency, strict measures have been taken for the public safety and to prevent viral spread through quarantines and public contact avoidance [5]. Quarantine relates to the separation of men or animals in an effort to prevent the spread of disease [6].
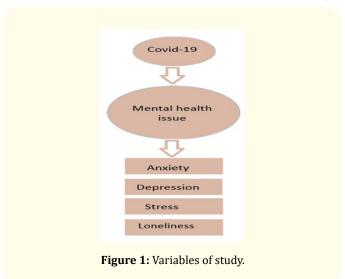
Research Studies found out that exceptional circumstances of detention have caused psychological effect including loneliness and higher levels of anxiety and stress [7-10]. These uncertain conditions are also deemed as triggering elements for anxiety and de-

pression in certain population sub-groups [11]. The isolation from society caused mental and physical health issues and it is also evident that psychological health issues are more common in people who are in quarantine [7]. This paper shed light on the effect of isolation and uncertain conditions due to Covid 19 Pandemic on the mental health status of individual in terms of stress, depression, anxiety and spiritual well-being.

An additional research study conducted that a broad range of psychological sequels have been observed during the outbreak of Virus, from individual to international level, like the feeling of helplessness and the fear of death, which have been commonly experienced by individuals during an epidemic [12]. Researchers also agreed on the assertion that the pandemic has affected people's mental health and it can turn into psychological problem, but the early recognition of a psychological disorder makes the intervention strategies more useful [13]. It is also observed that the recent pandemic has affected the people's psychological health not only in health workers but also in general population and the causative factors behind this are insecurity and fear [14].

Anxiousness and tension in the society affected each person separately during this out break and it is evident that individual in isolation faces high levels of anxiety, loneliness, and stress [3]. Moreover, the present situation of pandemic has increased healthcare needs whether one is inside or outside of his house. Families are facing the strain of confinement; especially female members of the families are affected most due to the burden of care they are used to deal in such situation [15]. It is also reported that during this critical period of social loneliness and separation amid COVID-19, the cases of domestic violence have increased [16]. So it is right to state that female members of society are more prone to unwanted mental and physical burden of work [17].

There are few studies which have provided evidences on gender related differences of COVID -19 impact on Psychological health issues and feeling of loneliness under confinement [14,18-20]. Moreover, research study revealed a strong correlation between females and feeling of loneliness during the Covid-19 pandemic [20]. But no study so far has been conducted on the psychological impact in terms of depression, stress, anxiety, and feeling of loneliness among the residents of Karachi. The objective of the current cross sectional study is to investigate the gender role in the psychological impact of the Covid- 19 outbreak in Karachi during the second wave of lockdown by using the variables mentioned in figure 1.

Figure 1: Variables of study.

Methods

Study design

The cross sectional study was conducted between 22 November to 6 December 2020 using online survey via social media platforms through a google form link with the aim to access possible maximum population. Convenient and snow ball sampling techniques were used to collect the data. The questionnaire consisted of 24 questions and the completion time required was about 3 minutes [20].

Sample

To access the population's sample, social networking channels i.e. WhatsApp, Facebook and email were used considering convenient sampling and then in addition snowball technique for further data collection was adopted [18].

Participation criteria

Participants had to be over 18 years old and living in Karachi during Covid-19.

Research instrument

Sociodemographic factors

It included age (18-25, 26-40, 41-60); gender (man, woman), marital Status (single, married, divorced, widow), income (≤ 35,000 PKR, 35,001 to 100,000 PKR, ≥ 100,000 PKR)

Feeling of loneliness

It was measured by the 3-item version of the UCLA Loneliness

Scale (UCLA-3). It is the shorter version of the original 20 question instrument (UCLA Loneliness Scale, 2004)

Stress, anxiety and stress

To examine mental health, DASS-21 (Depression, Anxiety, and Stress Scale) was used. It consists of 21 questions to assess depression, anxiety and stress. This scale evaluates three negative emotional states in an individual i.e depression, anxiety and stress. These feelings were rated on a 4-point Likert scale which ranges from 1-4 (It did not apply to me at all:1- It applied to me very much or most of the time: 4). The sum of scores of depression, anxiety and stress were then further categorized and classified as "normal", "mild", "moderate", "severe" or "extremely severe".

Statistical analysis

Data was analyzed by IBM SPSS Version 21. The t test was conducted to compare the means between men and women and significance level p-value < 0.05 was chosen. For the evaluation of sociodemographic features, questions were developed to collect data on age, gender identity, marital status and income level.

Results

Sample characteristics

A total of 420 questionnaires were distributed out of which 380 were completed and considered as valid for analysis. Response rate was 90.47% of confidence interval with 5% of margin of error. Female participants were 230 while male were 150. Age groups: 18-25, 26-40, 41- 60. The age groups 26-40 showed the highest response rates as compared to the other age groups. Sociodemographic characteristics of samples are shown in table 1.

Gender and DASS 21

The results regarding of the mean of anxiety, stress and depression with regards to gender are illustrated in table 2. Results of the t-test showed that women experienced more anxiety, stress and depression than men (P = 0.001).

Gender and anxiety

The anxiety score reached among both females (4.82 ± 3.95) and males (3.43 ± 2.50) a significant level (P = 0.001).

Gender and stress

The stress score reached among both females (8.54 ± 4.65) and males (6.52 ± 5.70) a significant level (P = 0.001).

Variable	n (%)
Gender	
Male	150 (39)
Female	230 (65)
Age	
18-25	110 (29)
26-40	190 (50)
41-60	80 (21)
Marital Status	
Single	180 (47)
Married	130 (35)
Divorced	50 (13)
Widower	20 (5)
Income	
≤ 35,000 PKR	200 (52)
35,001 to 100,000 PKR	130 (35)
≥ 100,000 PKR	50 (13)

Table 1: Socio-demographic characteristics.

DASS 21 Score			
Gender	**Anxiety**	**Stress**	**Depression**
Female	4.82 ± 3.95	8.54 ± 4.65	6.69 ± 3.21
Male	3.43 ± 2.50	6.52 ± 5.70	4.43 ± 3.11
P value	0.001	0.001	0.001

Table 2: DASS-21 Scores on Gender basis.

Gender and depression

The depression score reached among both females (6.69 ± 3.21) and males (4.43 ± 3.11) a significant level (P = 0.001).

Gender and UCLA-3

The loneliness score reached among both females (8.85 ± 4.96) and males (3.44 ± 2.72) a significant level (P = 0.001) table 2. Illustrates DASS-21 Scores on gender basis and table 3 illustrates UCLA-3 Scores on gender basis.

Gender	UCLA-3
Female (230)	8.85 ± 4.96
Male (150)	3.44 ± 2.27
P value	0.001

Table 3: UCLA-3Scores on Gender basis.

Discussion

The present study is a contribution to the literature that provides evidence that Covid-19 affects the mental health in terms of anxiety, stress depression and loneliness among the residents of Karachi. The research data shows that during the second wave of lockdown women were prominently affected in all studied variables. It was also observed that women's levels of loneliness also increased. On the contrary, men presented fewer depressive, anxious symptoms, less loneliness and greater well-being in both measurements. Women suffered a greater impact from the prolonged confinement (isolation) in all the studied variables. Studies revealed that during lockdown women felt discomfort and suffered due to overburden and increase demand of care in their daily life [23,24]. In Pakistan, this issue has already been under consideration, and a survey was conducted during the outbreak of virus and more than three hundred women were found with mental health issues. Amazingly more than 90 women from this group had no previous mental issues [25]. Research studies also noticed that incidents of domestic violence have also increased during pandemic [16,26]. So it is suggested to raise awareness of this particular situation and there is a need to develop policies to diminish these harmful outcomes [17]. Researchers offered a few suggestions in this regard like decrease in the number of working hours, serve the needs of single moms considering the work burden on females and there is also need to increase awareness of gender inequalities [27].

The present study evaluated the gender based mental health issues and loneliness among 380 residents of Karachi during the second wave of Corona Virus using the DASS-21 and Loneliness Scale (UCLA-3). Questionnaires. DASS-21 (Depression, Anxiety, and Stress Scale) were used to examine mental health; the first one includes 21 questions to assess depression, anxiety and stress and the second one measures feeling of loneliness by the 3-item version. The latter is a shorter version of the original 20 question instrument (UCLA Loneliness Scale). The results indicated significant differences between men and women's levels of Depression, Anxiety, and Stress and loneliness. Findings of the DASS-21 showed gender status has a significant effect on depression, anxiety, and stress values, depression and anxiety scores were higher in women than in men. Similarly, the results finding of UCLA Loneliness (UCLA-3) showed that women experienced more loneliness than men amid lockdown. Moreover, results indicated highest stress and loneliness followed by depression and anxiety in women and men in general.

The present research study has some limitations. Firstly, the results drawn from current study are on the basis of a cross sectional study and the sample size was also limited. It does not reflect the characteristics of whole population of Pakistan. Furthermore, this research carried the data of only urban population and no information regarding mental health issues of rural population. So the future investigation is recommended at national level with large sample size this regard.

Conclusion

The present study reveals the mental health issues and loneliness among men and women in Karachi. Greater psychological impact of Covid-19 was noticed on women, with higher levels of stress and feeling of loneliness, moderate level of depressive symptoms and mild levels of anxiety. Females in the age group (26- 40) were more vulnerable in this regard. On the contrary, least psychological impact of the pandemic was observed on men in terms of stress, depression, anxiety and loneliness. The outbreak emphasizes the need to pay more attention to the women to prevent and mitigate the psychological outcome of the pandemic. In the light of these findings necessary assistance should be provided via virtual support teams and through awareness programs on social media to reduce the psychological impact of pandemic.

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