

Syeda Razia Bukhari¹**Abstract**

The Coronavirus Disease (COVID-19) pandemic has significantly influenced public mental well-being. The reason for this study is to inquire about the prevalence of depression, anxiety, and stress in common public amid the COVID-19 pandemic. This descriptive and a cross-sectional study was conducted from May 2020 to July 2020 in Islamabad, Pakistan. Total 300 (Male = 157 & Female = 143) (M age 30.96 ± 11.456 years) individuals participated in the study. Apart from obtaining consent and basic demographic data, Depression, Anxiety and Stress Scale-21 (DASS-21) was used to investigate the variables of the study. Descriptive statistics, t test, and one-way ANOVA was used for data analysis on SPSS (v-23). The incidence of depression, anxiety and stress were markedly high among general public. Result indicated no depression 10.3%, mild depression 7.3%, moderate depression 14.3%, severe depression 17.3% and extremely severe depression 58.8%; No anxiety 8.7%, mild anxiety 4.7%, moderate anxiety 9.3%, severe anxiety 13.0% and extremely severe anxiety 64.3% and no stress 19.0%, mild stress 9.7%, moderate stress 15.7%, severe stress 34.0% and extremely severe stress 21.6% in the general public. Further result revealed significant gender, family structure and socioeconomic status difference in depression, anxiety and stress ($p < 0.01$). It was concluded that COVID-19 caused a number of mental wellbeing disorders in people of all communities. Subsequently, it is imperative to secure the mental wellbeing of mankind and to devise constructive methods that can improve the mental wellbeing of vulnerable groups at the time of COVID-19 pandemic.

Keywords: Anxiety, COVID-19, Depression, General Public, Stress

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Introduction

Beginning as a gathering of unexplained events of pneumonia in Wuhan, China, novel COVID-19 ailment has appeared up at the level of a widespread illness affecting nations all over the world. Within the wake of this emergency, many common measures have

been realized to truncate the spread of Coronavirus 19 (Adhikari et al., 2020). In December 2019, within the city of Wuhan, China, uncommon cases of patients with pneumonia referred as Coronavirus (Wilder-Smith & Freedman, 2020) and it spread quickly. Like the standard strategy in such pandemics, a lockdown is for the most part maintained to contain the spread of the affliction and reduce potentially new cases by keeping up social isolating in each open spot. Social activities have been restricted in numerous countries, essentially all not principle singular improvements were blocked as a result of isolation, while the nearby clinical facilities received unexpectedly an enormous number of fundamentally debilitated Coronavirus patients and needed to realize their

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emergency conventions. In this particular circumstance, everyone similarly as by far most of the forefront human administrations workers got defenseless against the emotional effect of Coronavirus infection (Thakur & Jain, 2020) due to both the pandemic and its outcomes around the globe (Chen et al., 2020). Indications of the COVID-19 illness fuse fever, chills, sore throat, ailment, vomiting, and free bowel movements (Holshue et al., 2020). Serious occasions of the contamination resulted in heart and respiratory issues, or even death (Duan & Zhu, 2020). Various mental issues and significant results with respect to mental well-being counting stress, uneasiness, discouragement, dissatisfaction, defenselessness amid COVID-19 flare-up generated drastically (Bandelow & Michaelis, 2015).

Stress is the condition of mental or emotional strain or pressure coming about because of unfavorable results. News about the coronavirus pandemic is disturbing, with a staggering number of new cases and fatalities, it is obscure how the pandemic will influence our future way of life. This unavoidable vulnerability makes it hard to anticipate the future and along these lines creates extra psychosocial stress. Anxiety is characterized as the sentiment of stress, apprehension or unease about something with a dubious result. It ought to be stressed that stress and anxiety are typical responses to a circumstance as compromising and flighty as the coronavirus pandemic (Sagar et al., 2020). Depression is a psychological state, demonstrated by upset sleep or hunger, feelings of misery, sentiments of blame or low self-esteem, sentiments of sluggishness, loss of intrigue or delight, and poor concentration. It might be roundabout because of life changing misfortune, or it might be an incessant condition. It disables an individual's capacity to work properly with everyday exercises of regular day to day

existence. Variables affecting this incorporate day to day environments, neediness, inadequate access to human services, lack of education, danger of joblessness, hereditary foundation, past life encounters and social help (Huang et al., 2019).

The rate of depressive symptomatology extended from 14.6% - to 48.3% than as of late surveyed one-year inescapability (3.6% and 7.2%) of depressiveness within the exposed people (Lei et al., 2020). Numerous threat components were recognized to be related to side effects of misery within the COVID-19 outbreak (Ahmed et al., 2020). Symptomatology of anxiety were evaluated in 11 out of the 19 investigations, with an observable variety in the predominance of anxiety indications extending from 6.33% to 50.9% (Moghanibashi, 2020).

Moreover, internet-based life presentation or regular introduction to news/data regarding COVID-19 was decidedly connected with anxiety symptomatology (Wang et al., 2020). Regarding marital status, one investigation announced that wedded members had more elevated levels of anxiety when contrasted with unmarried members. Wang et al. (2020) did not unequivocally express the occurrence rates, however the related hazard factors for higher depression, anxiety and stress symptomatology were accounted for (i.e., more youthful age gatherings and female gender are expected to develop more mental misery (Qiu et al., 2020).

The Coronavirus infection essentially influences public mental wellbeing. The point of this inquiry is to explore the inescapability of stress, uneasiness, and misery in common public in widespread COVID-19 episode.

Objectives

1. This study was to examine the prevalence of depression, anxiety, and stress in general public during the COVID-19 pandemic.

Hypotheses

- There would be high prevalence of depression, anxiety, and stress in general public during the COVID-19 pandemic
- There would be demographic difference in prevalence of depression, anxiety, and stress in general public during the COVID-19 pandemic.

Method

Research Design and Sample

The study was quantitative in nature. 300 participants were selected from different sectors of Islamabad through purposive sampling technique. Participants age ranged from 18 to 60 years old (mean age and standard deviation was 30.96 ± 11.456 and education criteria was primary to masters. It was challenging to gather information from individuals in light of dread of Coronavirus contamination. The sample population was educated that the information was being gathered for research reason and the researcher would not share their responses to anybody.

Measure

Instruments utilized within the study were Depression, Anxiety and Stress Scale-21 (DASS-21) (Urdu version). There are 7 items for each subscale. The responses were amassed on a 4-point rating scale running from “did not apply to me at all” to 3 “applied to me especially much or most of the time”. Cronbach's alphas were found to be 0.85 for thrust subscale, 0.75 for uneasiness, and 0.80 for pity subscales (Lovibond, 1995).

The Depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The Anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The Stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing,

nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient (DASS-21 Depression; items 3, 10, 17, 26, 31, 38, and 42; Anxiety; items 2, 4, 20, 25, 28, 40, and 41; Stress; items 6, 8, 12, 18, 22, 35, and 39) In depression sub scale Normal = 0-4, Mild = 5-6, Moderate = 7-10, Severe = 11-13 & Extremely Severe = 14 and above. In Anxiety sub scale Normal = 0-3, Mild = 4-5, Moderate = 6-7, Severe = 8-9 & Extremely Severe = 10 and above. In Stress sub scale Normal = 0-7, Mild = 8-9, Moderate = 10-12, Severe = 13-16 & Extremely Severe = 17 and above.

Statistical Analysis

Descriptive statistics, *t* test, one way ANOVA were used for data analysis on SPSS- (v-23.00). Descriptive statistics were computed for descriptive analysis, *t* test and one way ANOVA were used to compute demographic differences.

Ethical Considerations

The selected research scales were applied only on general public, 18 and above in age, also after they gave their consent. Further, individuals who were hesitant, they were counseled that this information is for research purpose and they were properly explained the confidentiality of their identity. All the ethical procedures as determined by the Institutional Ethical Review Board of author's affiliation were followed and applied during the data collection, scoring and analysis by maintaining participant's confidentiality.

Result

Result showed that there were significantly higher level of depression, anxiety and stress among general public during COVID-19 pandemic. It has been found that no depression = 10.3%, mild depression = 7.3%, moderate depression = 14.3%, severe depression = 17.3% and extremely severe depression = 58.8%; No anxiety = 8.7%, mild

anxiety = 4.7, moderate anxiety = 9.3%, severe anxiety = 13.0% and extremely severe anxiety = 64.3% and No stress = 19.0%, mild stress = 9.7%, moderate stress = 15.7% severe stress = 34.0% and extremely severe

stress = 21.6%. Further result revealed significant gender ($p < 0.01$), family structure ($p < 0.01$) and socioeconomic status ($p < 0.01$) difference in depression, anxiety and stress.

Table 1
Demographic Characteristics of the Sample (N=300)

Variables	Frequencies	Percentages
Gender		
Male	157	52.3
Female	143	47.7
Education		
Primary	55	18.3
Middle	17	05.7
Martic	82	27.3
Intermediate	51	17.1
Graduation	58	19.3
Master	37	12.3
Social economic status		
Lower	60	20.0
Middle	156	52.0
Upper	84	28.0
Family structure		
Joint	133	44.3
Nuclear	167	55.7

Table 2
Mean Age and Standard Deviation of the Sample (N=300)

Mean Age	Std. Deviation	Minimum	Maximum
30.96	11.45	18	60

Table 3

Incidence of Depression, Anxiety and Stress among General Public during COVID-19 (N=300)

Levels	Depression		Anxiety		Stress	
	Frequencies	Percentages	Frequencies	Percentages	Frequencies	Percentages
Normal	31	10.3	26	08.7	057	19.0
Mild	22	07.3	14	04.7	029	09.7
Moderate	43	14.3	28	09.3	047	15.7
Severe	52	17.3	39	13.0	102	34.0
Extremely Severe	152	50.8	193	64.3	065	21.6

Table 4

Gender difference in Depression, Anxiety and Stress among General Public during the COVID-19 Pandemic (N=300)

Variable	Gender	N	Mean	SD	df	t	Sig
Depression	Male	157	10.83	5.77	298	-6.47	.000
	Female	143	14.62	4.13			
Anxiety	Male	157	10.27	5.71	298	-6.11	.000
	Female	143	13.77	3.93			
Stress	Male	157	11.11	5.01	298	-5.21	.000
	Female	143	13.78	3.70			

Table 5

Family Structure differences in Depression, Anxiety and Stress among General Public during the COVID-19 Pandemic (N=300)

Variable	Family Structure	N	Mean	SD	df	t	Sig
Depression	Joint	133	10.41	5.75	298	-6.85	.000
	Nuclear	167	14.41	4.35			
Anxiety	Joint	133	9.68	5.41	298	-7.22	.000
	Nuclear	167	13.74	4.33			
Stress	Joint	133	10.53	4.85	298	-6.60	.000
	Nuclear	167	13.86	3.86			

Table 6

Socioeconomic Status (SES) difference in Depression, Anxiety and Stress among General Public during the COVID-19 Pandemic (N=300)

Variable	SES	N	Mean	SD	df	F	Sig
Depression	Lower	60	14.05	4.54	297	10.53	.000
	Middle	156	11.30	5.85			
	Upper	84	14.10	4.37			
Anxiety	Lower	60	13.23	4.50	297	8.82	.000
	Middle	156	10.75	5.74			
	Upper	84	13.23	4.15			
Stress	Lower	60	13.17	3.88	297	5.62	.004
	Middle	156	11.54	5.01			
	Upper	84	13.39	4.08			

Discussion

The main aim of the present research was to investigate the incidence of stress, anxiety, and depression within the public amid the COVID-19 flare-up. The information was collected from different segments of Islamabad through purposive technique. Present research finding showed that depression, anxiety, and stress were exceedingly prevalent among general public during COVID-19 pandemic in Islamabad, Pakistan. Such as level of no depression (10.3%) and mild depression (7.3%) percentage were less comparatively moderate depression (14.3%), severe depression (17.3%) and extremely severe depression (58.8%). In a same manner, a few number of individuals reported no anxiety (8.7%) and mild anxiety (4.7), however much reported moderate anxiety (9.3%), severe anxiety (13.0%) and extremely severe anxiety (64.3%). Similar findings were reported with regards to stress, low number of individuals having no stress (19.0%) and mild stress (9.7%) and higher number of individuals having moderate stress (15.7%), severe stress (34.0%) and extremely severe level of stress (21.6%) were reported (Table 3). Previous researches which were conducted during the pandemic are in line of present research findings which indicated that depression, anxiety and stress were highly prevalent

among general public (Ahmed et al., 2020; Holshue et al., 2020).

The appearance of COVID-19, with its fast increase, has exacerbated psychological distress among people all over the world; it has caused significant mental health problems among people. Individual mental health remained much disturbed in this challenging situation. Research evidence suggested that individuals experienced much stress, depression, anxiety, psychosis, trauma, suicidal thoughts, panic and anxiety (Taylor et al., 2008). Around 40 recent researches reported that COVID-19 has significant impact on psychological health of individuals in form of anxiety, depression, trauma and stress symptoms (Wang et al., 2020). Coronavirus being new and not well explored, rapidly extending, with a huge amount of death and much apprehension about the future can lead to become the major causes of psychological distress among general public (Banerjee, 2020).

Research showed that individuals who exposed themselves to COVID-19 news most of the time, experience more anxiety (World Health Organization, 2020). Maximum news related to coronavirus is stressful and sometimes, news is linked with rumors that are the reason of high anxiety levels in a person who constantly watched coronavirus news. Inappropriately exaggerated and

fabricated news regarding coronavirus can enhance psychological distress among individuals (Moghanibashi, 2020). Regarding this mental health professionals suggest encouraging healthy attitude and behavior such as stop exposure of negative news and utilizing alternative ways of social communication, through the said practices, individuals can prevent themselves from social isolation (Banerjee, 2020).

Gender differences in depression, uneasiness and stress uncovered that female has higher level of discouragement ($M = 14.62$), uneasiness ($M = 13.77$) and stress ($M = 13.78$), than Male misery ($M = 10.83$), uneasiness ($M = 10.27$) and push ($M = 11.11$). Subsequently, the sex contrasts are profoundly noteworthy within the level of misery, uneasiness, and stress ($p < .001$) (Table 4). Previous researches are within the connection of present research findings (Moghanibashi, 2020; Zhou et al., 2020; Wang et al., 2020). There was a higher prevalence of misery, uneasiness, and push among females because of females having more seen social push and lower level of adapting capabilities (Calvete et al., 2014). Another reason for the higher level of misery is in female since the female is profoundly delicate toward feedback, rejection and separation, these are the key features of higher level of depression, anxiety and stress in female than male (Martel, 2013).

There was significant family structure difference in the level of depression, anxiety and stress ($p < .001$). Individuals living in nuclear family setup having higher levels of depression ($M = 14.41$), anxiety ($M = 13.74$) and stress ($M = 13.86$), than individuals living in joint family structure depression ($M = 10.41$), anxiety ($M = 09.68$) and stress ($M = 10.53$) (Table 5). In Pakistan, traditional family system is a joint family system. People live together, sharing the burdens of one another, they have fairly good communication as well as emotional

connection with each other (Mason, 1992). On the other hand, some individuals living in nuclear family setup have less communication with other family relative or friends. Hence, it can be said that individuals with joint family structure can do catharsis to overcome psychological distress but individuals with nuclear family setup can not. As a result, nuclear family structure individuals experienced higher level of psychological distress than joint family structure individuals (Taqui et al., 2007). Further result revealed significant socioeconomic status differences in the frequency of depression, anxiety and stress ($p < .05$). Individuals belonging to upper socioeconomic status having higher level of depression ($M = 14.10$) and Stress ($M = 13.39$) but the level of anxiety is same in lower ($M = 13.23$) and upper ($M = 13.23$) socioeconomic status. On the other hand, there is low level of depression ($M = 11.30$) anxiety ($M = 10.75$) and stress ($M = 11.54$) in middle socioeconomic status. Hence, it can be said that middle socioeconomic status individuals suffered less with depression, anxiety and stress comparatively lower and upper socioeconomic statuses (Table 6). It was found that individuals belonging to lower socioeconomic status had high risk of experiencing depression, anxiety and stress (Lynch & Kaplan, 2000), they had lack of resources to overcome health issues during spread of coronavirus. They were unable to deal with coronavirus pandemic. But the individuals belonging to high socioeconomic status were engaged getting too many resources to save themselves from coronavirus pandemic; this concern caused much depression, anxiety and stress in them. This is the reason, there were higher levels of depression, anxiety and stress among upper and lower socioeconomic statuses as compared to middle socioeconomic status (Bayram & Bilgel 2008; Shamsuddin et al., 2013).

The present research was conducted in Islamabad Pakistan. Pakistan is a developing country having low resources to deal with coronavirus pandemic. Spread of coronavirus in Pakistan worsened the mental health of Pakistani individuals, because of unavailability of required treatment services. Research indicated that COVID-19 pandemic imposes much psychological disturbance in under-developed and developing countries. These countries have low or limited resources and they are in great number of other contagious diseases. Individuals insecurity about the health conditions while they do not have sufficient health care services increased the tendency of these individuals to have a negative psychological impact of COVID-19 outbreak (Bayram & Bilgel, 2008; Shamsuddin et al. 2013).

Conclusion

In conclusion, it is stated that the research findings indicate that general public requires special consideration because of higher prevalence of psychological distress. Hence, in current crises, it is very essential for mental health professionals to identify the vulnerable individuals, so that with the development of appropriate strategies and psychotherapeutic interventions, general publics' psychological health may be improved.

Contribution of Author

Syeda Razia Bukhari: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Writing- Original draft, Writing- Review & Editing

Conflict of Interest

There is no conflict of interest declared by author.

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