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THE CATASTROPHIC TRAP: ASSOCIATION OF GENDER DIFFERENCES WITH DEPRESSION AND ANXIETY DURING THE COVID-19 PANDEMIC AMONG PAKISTANI SOCIAL MEDIA USERS

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ABSTRACT

Throughout history, pandemic outbreaks have always proven to be inducers of stress, uncertainty, anxiety, and depression. The present study aims to inspect the gender differences in anxiety, depression, and the associated factors during the Coronavirus (COVID-19) outbreak among Pakistani social media users. The examination was a cross-sectional study of 577 participants recruited through social media across Pakistan who took a sociodemographic survey along with a COVID-19 pandemic-related questionnaire, Patient Health Questionnaire index (PHQ-2), the Generalized Anxiety Disorder index (GAD-2), and the Connor Davidson Resilience Scale (CD-RISC-10). To Statistically Analyse the data, ANOVA and Chi-square tests were applied for data description and binary logistic regression along with multiple regression analysis for scrutinizing factors associated with anxiety, depression and, resilience. Overall, 24.8% and 23.2% of study members screened positive for depression and anxiety respectively. There were notable gender differences in anxiety and depression as these symptoms were more strongly experienced by females, while no major gender differences were observed for resilience against stress. The findings of the present study could be applied in raising awareness for mainstream society to get authentic information related to the COVID-19 crises from legitimate sources in order to stay away from infodemic and to enhance their psychological wellbeing.

Keywords: COVID-19; gender differences; mental health; social media; depression; anxiety.

INTRODUCTION

Uncertainty and perturbation are random reactions to unprecedented circumstances such as the Coronavirus pandemic (Coelho et al., 2020). This is likely one reason that mental problems were excessively recorded during the COVID-19 catastrophe (Qui et al., 2020). World Health Organization, in March 2020, delegated the novel coronavirus (COVID-19) outbreak a worldwide pandemic (Wang et al., 2020; WHO, 2020). The COVID-19 episode, beginning in late 2019 and enduring for the duration of the time the current composition was formulated, poses significant risks to the physical and mental health of people worldwide. In specific nations, the pandemic had additionally prompted a halfway and transient collapse of the health care framework due to the high rate of patients seeking medical treatment. These impending threats have led governments around the world to adopt a variety of measures to try to stem the tide of the pandemic, going from the pronouncement of social distancing to absolute lockdowns (Hasan et al., 2021).

The mental repercussions of the pandemic and the measures to confine it will in general outlast their physical effects, and has consequential psycho-social outcomes. Because of the severe physical separation measures, individuals were vigorously dependent on media, particularly online media, to gain proficiency with the most recent news about the pandemic and to keep up with connectivity. Online social platforms are viewed as quite possibly the most utilized wellsprings of data around the globe, especially as a source of getting COVID-19 related information, people when asked from where they

got the news/information, 36 percent people specified a news application or website; social media was named by 35 percent people; 20 percent indicated some search engine; a news firm email or alert was recalled by 15 percent; 9 percent people told it was some other information source, and 7 percent people said a relative text. (Bhatta et al., 2020). The reasonable admittance to the web, simple to sign in, and the presence of countless clients make web-based media one of the most effortless and compelling strategies to disperse data. During the COVID-19 emergency, the reaction of individuals is a more noteworthy quest for data identified with the COVID-19 episode. Web-based media stages have assumed a positive and negative part during the COVID-19 pandemic. Social media has become a supportive instrument for people to speak with loved ones during isolated periods to limit the contrary impact of separation which has been connected with uneasiness, stress, and depression. Likewise, it serves to quickly spread vital data, recognizing side effects, sharing treatment, and utilizing control measures from different nations, and adjusting them with accessible assets. In the difference, the COVID-19 pandemic has opened up different issues via online media stages, including the deceptive gossipy tidbits, falsehood, life-imperiling results of upcoming cure of the infection, etiology, counteractions, immunizations, and paranoid ideas about the cause of this infection. The hazardous issue is that falsehood and bits of gossip spread via web-based media quicker than dependable data, harming the validness, equilibrium of the news framework, specifically wellbeing frameworks (Kushner, 2020). It is presently verifiable that the use of social media during COVID-19 radically transformed the life pattern of most people from today's social orders, apparently adding to the psychological trauma related to the COVID-19 pandemic.

Gender differences are eminent in psychological disorders and can present a window into the initial processes and maintenance of active disruption for both men and women (Altemus et al., 2014). With the plethora of dissimilarities in brain structure and stress responsivity, along with the variance in production of reproductive hormones, social stereotypes and expectations, Women in Pakistan have a double probability to suffer from common psychological disorders than men (Qadir et al., 2011). According to a national study, the pervasiveness of anxiety and depression was 45.5% in females which is twice the percentage of Anxiety and depression rates in men which were reported to be 21.7% (Mirza & Jenkins, 2004). COVID-19 impacted the Psychological health of men and women in different ways too. Women's mental health was affected because of the overburdening of household chores and associated matters. Men felt anxious and depressed because of the lack of concentration and outside exposure that they were used to. Different genders also have different coping strategies against depression and anxiety, also there exists contradistinction in consumption of social media (Lin, 2016); yet it remained a less scrutinized phenomenon since the COVID-19 pandemic outbreak.

Throughout history, pandemic outbreaks have always proven to be inducers of stress, uncertainty, anxiety and depression. COVID-19 outbreak was nothing different in this regard, COVID-19 created permanent impressions on people's mental and psychological health. The mental effect was of variant degrees and forms and had different implications on different genders. The present study aims to look into the gender distinctions of anxiety and depression symptoms and to scrutinize the factors associated with mental health among Pakistani users of social media during the crises of COVID-19.

REVIEW OF LITERATURE

Widespread outbursts of infectious ailments, such as COVID-19, are linked with mental distress and symptoms of psychological illness (Bao et al., 2020). Zandifar and Badrfam (2020) highlighted the role of uncertainty, the severity of the disease, social isolation and misinformation in contributing to depression and anxiety. The research pinpointed the necessity for both mental health services, particularly for vulnerable populations, and the strengthening of social capital to reduce the adverse psychological impact of the outbreak. Dong and Bouey (2020) revealed that the wide spread of COVID-19 could turn into a true mental health crisis, particularly in regions with high cases which would necessitate both psychosocial crisis interventions and the incorporation of psychological health care in disaster management plans in the future.

Ferreira and Borges (2020) designed a study that took as a starting point the importance and dependence of the media to obtain information about the pandemic. The dependency theory of the media system was developed in the 1970s when mass media were the dominant source of information. Now,

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at a time when media choices have become abundant, studies are needed to understand the phenomenon of media dependence in light of new dimensions made important by the transformations that have taken place in the social and media fields—where the coexistence of mass media with social media platforms stands out. The results revealed the existence of a phenomenon of dependence on the media, with a strong exposure (both active and accidental) to informative content, with conventional media being privileged as the main source, and positively distinguished in terms of confidence. Finally, a statistically significant association of a positive sign was identified between the use of social media as the main source and the acceptance of misinformation.

Saha1, Torous, Caine, Choudhur conducted a research in 2020 aiming to provide insights regarding people's psychosocial concerns during the COVID-19 pandemic by leveraging social media data. The results showed that all of the examined psychosocial expressions have significantly increased during the COVID-19 crisis – mental health symptomatic expressions have increased by ~14%, and support seeking expressions have increased by ~5%, both thematically related to COVID-19. Ahmad and Murad (2020) conducted a research to determine how social media affects self-reported mental health and the spread of panic about COVID-19 in the Kurdistan Region of Iraq. It was found that a significant positive statistical correlation between self-reported social media use and the spread of panic related to COVID-19 (R=.8701).

Gender differences are prominent in mood and anxiety disorders and may provide a window into mechanisms of onset and maintenance of affective disturbances in both men and women. Empirical evidence suggests that the onset of anxiety and depressive disorders peaks during adolescence and early adulthood, with females being at significantly greater risk than males. Women have twice the lifetime rates of depression and most anxiety disorders (Kessler et al., 1994). The lifetime prevalence of generalized anxiety disorder is higher in women 6.6% vs. 3.6% in men (Kessler et al., 1994). A research study conducted by Lenzoa, Ellen, Tripodia and Quattropania (2016) pointed out that gender differences can play an important role in the clinical efficacy of treatments. Summarily, the literature has ample evidence to indicate that maximized dependence on media, induced by health catastrophes like COVID-19 can stimulate and exacerbate psychological disorders in mainstream society with varied intensity levels between men and women.

METHODOLOGY

Study Design

The study team initiated to recruit the participants on 20th May 2021 by Snowball sampling technique where initially research team forwarded recruitment link which comprised a questionnaire, on four universal social networking platforms in Pakistan: Facebook Messenger, WhatsApp, and Instagram. The initial wave members from different areas of belonging were straightforwardly sent from research group individuals' informal community to fill the questionnaire. When completed the overview, members were endorsed to disperse the link further via their personal contacts on social media to select the second and third stage contacts of the principal wave members. The enrolment method proceeded up till the group ended on May, 30th 2021.

Of note, social communication platforms opted to share comparative highlighted capacities including messaging, voice calling and video calling, photograph sharing, monetary overseeing, map route, ticket booking, instalment, etc. All the social media platforms opted for the present study are owned by Facebook, all with more than one billion monthly users each (Rozgonjuk, 2021; Statista Research Department, 2021).

For fair and diverse representation, five districts were selected from Pakistan. The selected districts were: Lahore, Rawalpindi, Dera Ismail Khan, Karachi and Gilgit. The research group was situated in Punjab Province in the city of Lahore. As the responses from respondents were collected online so it was manageable to get in contact with respondents belonging from cities of variant distances.

Inclusion criteria were not predetermined for prospective respondents. However, participants residing external to the territory of Pakistan were excluded. In addition to that, the respondents were obliged to read and approve the permission before the survey. 589 copies of the online survey were received.

The survey along with the online consent was validated by the Ethics Council of University of the Punjab.

Measures

The present study used a sociodemographic survey to gather respondent's information which included attributes like age, educational status, gender, marital status, occupation and wellbeing status. Likewise, a survey was built up to gather data that might be identified with the psychological wellness as well as COVID-19 pandemic, comprising the residence region, the sum total of individuals residing in a single household, quarantine status, primary source of COVID-19 related data, time spent on looking for data related to COVID-19 and adjustment to quarantine.

The Patient Health Questionnaire depression index (PHQ-2) was applied to examine the depression symptoms. This depression module is a 4-point scale, extracted from 10 items Patient Health Questionnaire, going from 0 (not at all or hardly ever) to 3 (almost every day). It assesses the recurrence of "feeling depressed, down or sad" and "less delight or interest in performing everyday activities" in the last fourteen days (Levis et al., 2020). The absolute score goes from zero to 6, and a score more prominent than 3 shows depression. This depression disorder scale has been approved and utilized in Pakistan (Ahmad et al., 2018; Gallis, 2018).

The Generalized Anxiety Disorder Index (GAD-2) extracted from the Generalized Anxiety Disorder Index-7 (GAD-7) was applied to examine anxiety symptoms. GAD-2 is a 4-point scale starting with 0 (not at all) and going up to 3 (almost daily). This scale assesses the recurrence of "apprehension, restlessness, or anxiety" and "not having the option to cease or control stressing" in the last fourteen days (Sapra et al., 2020; Ahn et al., 2019). The absolute score goes from zero to six, and a score more noteworthy than three shows anxiety. The GAD-7 has been approved and utilized in Pakistan (Ahmed et al., 2017; Arshad & Islam, 2021).

To explore an individual's resilience against stress, the Connor-Davidson Resilience Scale (CD-RISC-10) was utilized. The CD-RISC-10, extracted items from the Connor-Davidson Resilience Scale-25, is a 5-level scale starting with 0 (not true at all) and going up to 4 (almost every time true). It assesses capacities like adjusting to change, adaption to stress, clear thinking, management of things and issues, disappointments, and horrendous emotions (Shin et al, 2018). The sum score goes from zero to forty, where a greater score shows higher resilience against adverse occasions. CD-RISC-10 has been approved and used in Pakistan (Mustafa, 2016).

Data Analysis

In the current study, SPSS version 20 was utilized and 0.05 was set as statistical significance. A total of 589 copies of the online survey were received post recruitment. However, during data cleaning, 12 respondents living outside of Pakistan were excluded. Ultimately, 577 copies of the online survey were eligible for analysis so the sample consisted of 577 Individuals living in different districts of Pakistan. Of the 577 respondents, 320 were males and 257 were females.

The study sought the background characteristics of the respondents. Firstly respondent's occupation was divided into three categories: medical professionals (doctors, nurses and other medical professionals), employed (working in professions other than medical), unemployed (Students and people with no current income). Second, the respondent's health status was recorded into two categories: healthy and with some disease (diagnosed with any psychiatric or physical diseases). Third, based on the respondent's area of residence, variables were classified as: living in metropolitans (urban areas), rural areas (villages) and others. Forth, Quarantine status was measured in three categories: Quarantined for treatment, quarantined for medical observation and home quarantined. Fifth, the primary information source related to COVID-19, was recorded in two classes: traditional and social media (radio, TV, magazines, people, newspaper and forums, websites and apps). Finally, respondent's time spent on social media was recorded in two classes: less than 30 minutes, 30 to 60 minutes and more than an hour.

Analytic plan

The characters were compared between male and female respondents by Chi-square test for categorical variables and for continuous variables one-way ANOVA was used.

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Firstly for categorical variables, binary logistic regression analysis was conducted between anxiety/depression and prospectively associated variables, followed by Multiple regression analysis with significant variables in the binary logistic regression analysis against CDRISC-10 scores. The adjusted value of R-squared and value of F were chosen to evaluate the model's fitness where higher values show better model fitness.

RESULTS

In the current study, the respondent age limit was 18 to 87 years old with a mean of 27.59 ± 8.64 . A majority of respondents (404, 97%) were unmarried. 49 respondents (8.5%) were medical professionals, 276 respondents (47.7%) were employed and 252 respondents (43.5%) were unemployed. Most respondents (308, 53.2%) were graduated, 242 of them (41.8%) had received a college degree and 27 of them (4.7%) had completed high school. Among all respondents, 502 of them (86.7%) were healthy while 75 of them (13%) were diagnosed with one or more psychological or physical diseases. A major portion of respondents (422, 72.9%) were residing in metropolitan cities, 152 of them (26.3%) were residing in rural areas while 3 respondents (0.5%) chose "other" as their place of residence.

Only a small number of residents (20, 3.5%) were living alone during the pandemic and a majority of respondents (369, 63.7%) lived with 2 to 5 people while the rest of them (188, 32.5%) lived with 6 or more people. Among all respondents, 435 of them (75.1%) were home quarantined, 83 of them (14.3%) were quarantined for medical observation while 59 (10.2%) respondents were quarantined for treatment. Daily, 229 (39.6%) respondents were spending less than 30 minutes, 200 (34.5%) respondents were spending more than an hour and 148 (25.6%) respondents were spending between 30 to 60 minutes seeking information related to COVID-19. A majority of respondents (233, 40.2%) were adapted to the new living conditions, 226 (39%) respondents were not adapted while the rest of the respondents (118, 20.4%) were very adapted. Lastly, most of the respondents (486, 83.9%) named social media as their primary information source while only 91 (15.7%) respondents used traditional media.

Depression rate was recorded at 24.8% (143/577) with a mean PHQ-2 score of 2.20 ± 1.10 . The pervasiveness of depression was 20.31% (65/320) in males with a significant difference of 30.35% (78/257) in females. The pervasiveness of anxiety was 23.2% (134/577) with a mean GAD-2 score of 2.11 ± 1.27 . A notable difference was observed in the pervasiveness of anxiety of males and females with the anxiety rate of 19.68% (63/320) and 27.62 (71/257) respectively. The CD-RISC-10 mean score was 20.40 \pm 6.04.

In various aspects, gender differences were found. In sociodemographic, it was observed that the unemployment rate was higher in women (59.92% vs. 30%) and the rate of respondents living in rural areas was higher in men (36.25 vs. 14%). It was also recorded that women spent less time seeking Covid-19 related information than females (24.5% vs. 42.8%) while men were less adapted than females (49% vs. 26.8%). The PHQ-2 and GAD-2 scores indicated that that females were more prone to anxiety and depression than men (2.16 \pm 1.35 vs. 2.06 \pm 1.19, 2.26 \pm 1.23 vs. 2.16 \pm 0.98,). Meanwhile, both males and females showed nearly similar stress resilience with a CD-RISC-10 mean score of 20.71 \pm 6.79 vs. 20.02 \pm 4.95. More details are presented in Table 1.

Variables	Male	Female	Total	<i>p</i> -value
	320 (55.5%)	257 (44.5%)	577(100%)	-
Age in years (mean,SD)	28.34±8.32	26.65±8.96	27.59±8.65	.020
Education Level				<.001
High School or less	15 (4.7%)	12 (4.7%)	27 (4.7%)	
College Degree	171 (53.4%)	71(27.6%)	242 (41.%)	
Graduate or Above	134 (41.%)	174 (67.7%)	308(53.4%)	
Marital Status				.471
Single	228(71.3%)	176(68.5%)	404(70.0%)	
Married	2(28.7%)	81(31.5%)	173(30.0)	
Occupation				<.001
Medical personnel	28(8.8%)	21(8.2%)	49(8.55)	
Employed	194(60.6%)	82(31.%)	276(47.8%)	

Table 1. Socio demographic information of respondents

Unemployed	98(30.6%)	154(59.9%)	252(43.7%)	
Health Status				.178
Health	273(85.3%)	22(89.1%)	502(87%)	
Any disease	47(14.7%)	28(10.9%)	75(13.0%)	
Residence				<.001
Living in Metropolitan	204(63.7%)	221(86.0%)	425(73.7%)	
Rural Area	116(36.3%)	36(14%)	152(26.3%)	
Quarantine Status				.222
Quarantined for Treatment	32 (10%)	27 (10.5)	59(10.2%)	
Quarantined for Medical Observation	39 (12.2%)	44 (17.1%)	83 (14.4%)	
Home Quarantine	249 (77.8%)	186 (72.4%)	435 (75.4%)	
Family Status				.141
Alone	10(3.1%)	10(3.%)	20(3.5%0	
2-5	216(67.5%)	153(5.5%)	36(64.0%)	
>6	94(2.4%)	94(36.6%)	188(32.6%)	
Time Spent on seeking information				<.001
<30	94(29.4%)	135(52.5%)	229(39.7%)	
30-60	89(27.8%)	59(23%)	148(25.6%)	
>60	137(42.8%)	63(24 5%)	200(34.7%)	
COVID-19 related information source	157(42.070)	05(24.5700	200(34.7700	209
Traditional media	45(14%)	46(17%)	91(15.8%)	.209
Social media	275(85.%)	211(82.1%)	486(84.2%)	
Adaption of respondent	270(00170)			<.001
Very adapted	52(16.3%)	66(25.7%)	118(20.5%)	
Adapted	111(34.7)	66(25.7%)	233(404%)	
Not Adapted	157(34.7%)	122(47.5%)	226(39.2%)	
GAD-2				.025
Not anxiety	257(80.3%)	186(72.4%)	443(76.8%)	
Anxiety	63(1.7%)	71(27.6%)	134(23.2%)	
PHQ-2				.006
Not Depressed	255(7.7%)	17(6.6%)	434(75.2%)	
Depressed	65(20.3%)	78(30.4%)	143(24.8%)	
CD-RISC-10 (mean, SD)	20.71 ± 6.794	20.02 ± 4.954	20.40 ± 6.049	0.172

Binary logistic regression analysis of depression

After binary logistic regression analysis, it was recorded that respondents' time spent seeking information related to COVID-19, education, gender and residence were associated with depression (shown in table 2). Thus, in multiple regression analysis, these variables were included.

Binary logistic regression analysis of anxiety

After binary logistic regression analysis, it was recorded that respondents' time spent seeking information related to COVID-19, quarantine status, education, gender and residence were associated with depression (shown in table 2). Thus, in multiple regression analysis, these variables were included.

Table 2.	Binary	logistic	regression	analysis for	PHO-2 an	d GAD-2
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	Depression				Anxiety			
Variables	β	р	Odd	95%CI	β	Odd	р	95%CI
Age (years)	-0.06	<.001	0.94	0.90-0.8	0.02	0.94	1.02	0.63-1.65
Gender								
Male	-	-	-	-				
Female	0.06	0.82	1.06	0.65-	-0.07	0.00	0.94	0.90-0.98
				1.71				
Education Level								
High School or less	-	-	-	-				
College Degree	-0.45	0.37	0.63	0.24-	-0.45	0.37	0.64	0.24-1.71
				1.71				

Graduate or Above	-1.02	0.00	0.36	0.22-	-0.98	0.00	0.38	0.22-0.63
Marital Status				0.00				
Single	-	-	-	-				
Married	-0.82	0.01	0.44	0.23- 0.84	-0.81	0.01	0.44	0.23-0.85
Occupation								
Medical personnel								
Employed	-1.20	0.03	0.30	0.11- 0.86	-1.16	0.03	0.31	0.11-0.90
Unemployed	-0.32	0.21	0.72	0.44- 1.20	-0.31	0.23	0.73	0.44-1.21
Health Status								
Health								
Any disease	-1.42	0.00	0.24	0.12- 0.49	-1.46	0.00	0.23	0.11-0.48
Residence								
Living Metropolitan								
Rural Area	0.11	0.69	1.11	0.65- 1.91	0.09	0.74	1.10	0.64-1.88
Quarantine Status			İ					
Quarantined for Treatment								
Quarantined for Medical	0.78	0.03	2.17	1.09	4.32	0.82	0.02	2.26-1.13
Observation								
Home	0.65	0.04	1.92	1.02	3.62	0.69	0.03	1.99-1.05
Family Status								
Alone								
2-5	0.78	0.03	2.17	1.09- 4.32	-0.45	0.43	0.64	0.21-1.95
>6	0.65	0.04	1.92	1.02- 3.62	-0.92	0.00	0.40	0.25-0.63
Time Spent on seeking information								
related to COVID-19 (Minutes)								
<30								
30-60	0.19	0.52	1.20	0.69- 2.11	0.17	0.54	1.19	0.68-2.09
>60	0.59	0.05	1.81	1.01- 3.25	0.57	0.06	1.77	0.98-3.17
Information source related to COVID-19								
Traditional media			İ					
Social media	0.09	0.75	1.10	0.61- 1.98	0.10	0.73	1.11	0.62-1.99
Adaption of respondent								
Very adapted								
Adapted	-0.44	0.21	0.64	0.32- 1.28	-0.46	0.19	0.63	0.32-1.25
Not Adapted	0.36	0.17	1.43	0.85-2.39	0.35	0.18	1.42	0.85-2.38
CD-RISC-10 Score	0.045	0.006	1.046	1.01- 1.08				

Multiple regression analysis of resilience

The study showed that respondent's CD-RISC-10 score would decrease 1.38 points with respondent's time spent on seeking information related to COVID-19. Comparing with respondents who were quarantined for medical treatment, the CD-RISC-10 score would be higher with 0.102 points than home quarantined respondents. Comparing with respondents who only had college education, the CD-RISC-10 score would be higher with 0.121 points for graduate respondents. Meanwhile, the CD-RISC-10 score of respondents who lived in rural areas would be 0.110 points lower than those who lived in metropolitans (details are shown in table 3).

Table 5. Summary of Multi	pic Kegi cosi	JII. Effect of find	cpendent variabl		
Variables	B	SE	В	t	р
Respondents Time Spent on	968	.298	138	-3.251	.001**
seeking Information Related to					
COVID-19 (Minutes)					
Quarantine Status of the	.943	.375	.102	2.516	.012*
Respondent					
Education of the Respondent	1.244	.433	.121	2.876	.004**
Gender of the Respondent	-1.697	.526	140	-3.227	.001**
Residence of the Respondent	-1.515	.579	110	-2.618	.009**

Table 3. Summary	y of Multiple I	Regression:	Effect of inde	pendent variable on	CDRISC Score
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Note: only those variables are included which one was statistically significant, R²=0.074

DISCUSSION

In the current investigation, we revealed the pervasiveness of depression was 24.8% and the pervasiveness of anxiety was 23.2%. Gender differences existed in the seriousness of depression and anxiety symptoms where females were encountering more extreme anxiety and depression symptoms while no major differences were seen in the rate of the resilience of both the genders to stress. Also, our examination showed that being more established and more noteworthy stress flexibility would diminish the seriousness of depression, contrary to that, being little adapted to the pandemic, unemployed and encountering high pressure will increase the severity. Likewise, it was seen that getting advanced education and more noteworthy stress resilience would diminish the seriousness of anxiety. It was also revealed that being female, seeking data related to COVID-19 for more than 60 minutes, less adjusted to the COVID-19 crises and encountering a high level of stress would expand the seriousness of the mental illness.

The commonness of anxiety and depression in this investigation was higher than the previous results from Pakistan reported in 2017, where the pervasiveness of depression and anxiety was 17.2% and 21.4% (Khalid et al., 2018). The outcomes are consistent with past investigations announcing expanded psychological issues during pandemics. This was also founded that the commonness of anxiety and depression in this research was less than that in those examinations. The distinctions might come about because of the accompanying clarifications. In the first place, the government actuated the Public Health Emergency Responses which included mental wellbeing emergency intercessions, for instance, guiding through psychological helplines and social media promotions, psychological health awareness programs on TV and social media. Secondly, it is accepted that the early attention to the pandemic composed the mainstream society.

The present study did not explore the relationship between psychological health and WHO emphasized COVID-19 "infodemic" (Zarocostas, 2020). However, the study declared social media as the primary source of informing the participants about the pandemic of COVID-19 where no gender differences were recorded in the rate of traditional media usage as the primary source of information related to COVID-19. It was worth noting finding that when respondents seek information related to COVID-19 for more than 60 minutes, they were prone to much severe anxiety as compared to those who spent time, less than 60 mins.

All through the COVID-19 pandemic, people have searched out emergency-related news at expanded limits prompting an aggregate increase in worldwide online media use. As within 24 hours, 19 million notices of COVID-19 were circulated across web-based media around the planet (Molla, 2020). As more individuals depended on online media to look for and share wellbeing data, social media

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utilization turns into an invite help from a wellbeing calamity like the COVID-19 pandemic. Without a doubt, the simple admittance to wellbeing data via web-based media enabled people, in general, to be more dynamic in assessing health data and overseeing health concerns. At the point when people effectively or inactively get data from social media about COVID-19 (e.g., confirmed cases, what's more, death rates), they may see COVID-19 as a health danger and experience resulting depression and anxiety. Also, when individuals express intense misery via web-based media, such sentiments can be moved to other people intentionally or subliminally through social networks. This infers that negative and depressive states during the pandemic might be enhanced through social media, prompting more individuals to announce anxiety and burdensome indications. Also, it was noted that there exists no behaviour code or limitations for social media during the catastrophe of COVID-19. The study findings reaffirm that it is essential to create the behaviour code for web-based media to look out for the psychologically vulnerable users and provide psychological aid to them. Based on our current findings, it is also very advisable to help users to find authentic platforms on social media for genuine information and shield users from over-exposure to pandemic-related data.

There are certain limitations regarding the present research. First, we did not scrutinize the casual relationships in this study as current research is a cross-sectional study to get a quick picture of mental health conditions during the pandemic. Second, the data were recruited online which could make the sample highly vulnerable to sampling error and selection bias. Third, the acute psychological impact was not studied as the study was not conducted right at the time of the COVID-19 pandemic outbreak.

CONCLUSION

The present study shows the increased pervasiveness of anxiety and depression in the general population of Pakistan during the pandemic of COVID-19, and females are encountering more intense anxiety and depression symptoms as compared to men. One factor that sets the COVID-19 emergency apart from all the previous health emergencies is the social media factor, which benefitted the general public and medical fraternity in some ways like raising awareness about the virus and SOP's but also sabotaged the mainstream society. COVID-19 related information which was just one swipe away on social media gave rise to infodemic which consequently vandalized the psychological health of society. These implications were seen to affect both genders differently. Based on this research, it is suggested to build up a code of behaviours for social media to report pandemic data and carry out emotional well-being mediations; and it is similarly significant for social media authorities to distinguish the mentally vulnerable people from social media platforms and give them the psychological help they need.

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ABBREVIATIONS

PHQ: The patient health questionnaire index; COVID-19: Novel Coronavirus Disease; GAD: The Generalized Anxiety Disorder Index; CD-RISC: Connor Davidson Resilience Scale; ANOVA: Analysis of variance; WHO: World Health Organization.

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