

Psychological Distress Among People During Covid-19 Pandemic: A Cross-Sectional Study

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ABSTRACT

The COVID - 19 pandemic and lockdown have had profound effects on everyday life worldwide. The aim of this study is to examine the anxiety level of the people during the initial period of COVID - 19. The cross-sectional online survey was done using the Zung Self - rating Anxiety Scale (SAS) and Zung self-rating depression scale. Out of 250 responders, 19.2 %, 6.4 %, and 0.8 % experienced mild, moderate, and marked levels of anxiety. According to analysis, female (OR = 1.3, 95 % CI = 0.55 - 3.3, P = 0.524), above the age of 59 years (OR = 1.6, CI = (0.33 - 7.72), P = 0.555), were experiencing moderate level of anxiety when compared with others. Related to depression, 36.4 %, 16.4 % and 5.2 % experienced mild, moderate, and marked levels of depression. The findings show that female (OR = 0.79, 95 % CI = 0.36 - 1.7, P = 0.1 of 0.845), above the age of 59 years (OR = 4.4, CI = 0.75 - 25.8, P = 0.101) were experiencing marked level of depression than others. The main causes for anxiety and depression among the people is due to financial constraints, dual role of women, work from home, fear of infection, unemployment and online education.

KEYWORDS

COVID - 19, Psychological problems, Anxiety, Depression

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INTRODUCTION

In the city of Wuhan, China, unusual cases of patients with pneumonia were reported. They reported that it was caused by the new coronavirus (COVID - 19) reported.¹ and that it quickly spread across the globe posing a threat to global health.² Multiple preventive measures were implemented to halt the rapid spread of this global health crisis.

In the context of the virus outbreak, a wide range of emotional outcomes have been observed, at the individual, community, national, and international levels. As individuals, people were affected both at the psychological and emotional level. Their major issues were helplessness, fear of getting sick, and being stereotyped.³

There has been a harmful impact on the public's mental health, including psychological crises associated with the pandemic.⁴ Health crises, such as the COVID - 19 pandemic, cause psychological changes among medical workers and the masses , and these changes are triggered by dread, anxiety, depression, or insecurity.⁵ This study aims to assess the psychological distress among people during COVID - 19 pandemic.⁶

MATERIALS AND METHODS

It included access the study is being conducted to assess the level of anxiety and depression among people in Saudi Arabia during COVID - 19 and lockdown. A cross-sectional descriptive online survey was used to conduct this study.

The research occurred between 15 June and 15 July, 2020. The poll was created using Google Forms and distributed to participants *via* Whatsapp. The survey participants were recruited on a voluntary basis using the snow ball technique, and consent was sought prior to the start of the survey. The research instruments utilized in this study contained basic demographic information such as gender, age, education level, and occupation.

Study Instruments

The Zung anxiety self-rating scale and Zung Self-rating Depression Scale (SDS) were used. In this study, the Zung anxiety self-rating scale was used to assess the anxiety level. The scale score is assessed follows:

< 50 - ordinary range. (ii) 50 - 59 - mild, (iii) 60-69 - moderate. (iv) > 70 is classified as severe anxiety.⁶

The Zung Depression self-rating scale (SDS) consists of 20 items and is used to measure the degree of depression. This is a four point system. (i) 50 - 59 - mild depression, (ii) 60 - 69 -moderate depression, (iii) 60 - 69 - moderate depression, (iv) > 70 points - severe depression.⁷

Data Analysis

IBM SPSS version 20 software was used in the data analysis and a multiple regression procedure was used to assess the psychological distress among people f during COVID - 19 pandemic.

Ethical Approval

The study has obtained ethical clearance from the Institution Review Board (IRB) of the university (REC 41 / 5 / 141) (Tables 1-4).

RESULTS

The demographic characteristics of the respondents are shown in Table 1. Among the 250 respondents, 85.2 % were women, of which 59.2 % were in 19 – 29, and 4 % were above 60 years of age. In regard to the education level of the respondents, almost 36.4 % had no formal education, 41.2 % were undergraduates, 6.8 % were housewives, 31.2 % were unemployed, and 29.6 % were studying.

Demographic Variables	Frequenc y	Percentag e
Age in years		
19 – 29	148	59.2
30 – 30	-	-
40 – 49	89	35.6
50 – 59	3	1.2
Above 60	10	4
Sex		
Male	37	14.8

Female	213	85.2
Education		
No formal education	91	36.4
School education	9	3.6
Undergraduate	103	41.2
Post Graduate	44	17.6
Doctorate	3	1.2
Type of occupation		
Unemployed	78	31.2
Housewife / Accompanying person / Retired	17	6.8
Private sector	74	29.6
Teacher / Lecturer / Asst. Professor / Training Specialist	35	14
Nurse / Intern Nurse / Doctor's Assistant	10	4
Doctor / Dentist / Intern Doctor / Specialist	12	4.8
Administration / School Director / Security Observer / Engineer / Technician / Accountant / Delivery / Soldier	22	8.8
Business / Self Employed	2	0.8
Table 1. Frequency and Percentage Distribution of Demographic Variables of the Public.		

As per Table 2, among 250 respondents, 19.2 % had mild anxiety, 6.4 % showed moderate anxiety, and 0.8% experienced severe anxiety levels. Analyzing the depression levels, 36.4 % had mild depression, 16.4 % showed moderate

Depression and 5.2 % of respondents have experienced severe depression.

Distribution	Anxiety		Depression	
	No.	%	No.	%
Normal Range (< 50)	184	74	105	42
Mild (50 – 59)	48	19	91	36.4
Moderate (60 – 69)	16	6.4	41	16.4
Severe (≥ 70)	2		13	5.2

Table 2. Frequency and Percentage Distribution of Anxiety and Depression Level Among General Public During Corona Virus Outbreak.

Table 3. Shows the results of multiple logistic regressions. Women (OR = 1.3, 95 % CI = 0.55 –

3.3, P = 0.524), over 59 years old (OR = 1.6, CI = (0.33 – 7.72), P = 0.555), were experienced anxiety compared with other categories (Table 4).

Demographic Variables	Non-Anxiety Group (n=184)	Anxiety Group (n=66)	χ ²	p value	Multiple Logistic Regression Analysis	
					OR (95% CI)	p-Value
Age in years						
19 – 29	108 (43.2%)	40 (16%)		1	0	
30 – 30	-	-	1	0.76	-	-

40 – 49	66 (26.4%)	23 (9.2%)		1.01	0.967
				(0.54 – 1.9)	
50 – 59	3 (1.2%)	0 (0%)		0	0.999
Above 60	7 (2.8%)	3 (1.2%)		1.6 (0.33 – 7.72)	0.555
Sex					
Male	29 (11.6%)	8 (3.2%)	1 8	0.4 1	-
Female	155 (62.0%)	58 (23.2%)		1.3 (0.55 – 3.3)	0.524
Education					
No formal education	64 (25.6%)	27 (10.8%)		1	-
School education	8 (3.2%)	1 (0.4%)		0.38 (0.2 – 8.1)	0.539
Undergraduate	77 (30.8%)	26(10.4%)	3 0.6	2 (0.25 – 15.8)	0.516
Post Graduate	32 (12.8%)	12 (4.8%)		2.1 (0.11 – 37.4)	0.627
Doctorate	3 (1.2%)	0 (0%)		0	0.999
Type of occupation					
Unemployed	51 (20.4%)	27 (10.8%)		1	-
Housewife / Accompanying person / Retired	16 (6.4%)	1 (0.4%)		0.12 (0.01 – 1.04)	0.055
Student / Intern student / Private education	57 (22.8%)	17 (6.8%)		0.32 (0.04 – 2.6)	0.281
Teacher / Lecturer / Asst. Prof. / Training Specialist	25 (10.0%)	10 (4.0%)		0.43 (0.02 – 7.9)	0.569
Nurse / Intern Nurse / Doctor’s Assistant	8 (3.2%)	2 (0.8%)	9 7	0.2 0.25 (0.02 – 3.3)	0.291
Doctor / Dentist / Intern Doctor / Specialist	10 (4.0%)	2 (0.8%)		0.19 (0.01 – 4.6)	0.308
	15 (6.0%)	7 (2.8%)		0.77 (0.08 – 7.8)	0.823
Private / Administration / School Director / Security Observer / Engineer / Technician / Accountant / Delivery / Soldier					
Business / Self Employed	2 (0.8%)	0 (0%)		0	0.999

Table 3. Multiple Logistic Regression of Anxiety – Related Factors of the Public During the Corona Virus Outbreak.

Demographic Variables	Non-Depression Group (n = 105)	Depression Group (n = 145)	χ^2	p value	Multiple Logistic Regression Analysis	
					OR	p Value
						(95% CI)
Age in years			4.9	0.2		
19 – 29	67 (26.8 %)	81 (32.4 %)			1	-
30 – 30	-	-			-	-
40 – 49	36(14.4 %)	53(21.2 %)			1.2	0.445
						(0.71 – 2.2)

50 – 59	0 (0 %)	3 (1.2 %)	0	0.999
Above 60	2 (0.8 %)	8 (3.2%)	4.4 (0.75 – 25.8)	0.101
Sex			0	0.8
Male	15 (6 %)	22 (8.8 %)	1	-
Female	90 (36.0 %)	123 (49.2 %)	0.79 (0.36 – 1.7)	0.562
Education			5.9	0.2
No formal education	30 (12.0 %)	61 (24.4 %)	1	-
School education	3 (1.2 %)	6 (2.4 %)	13.2 (0.77–227.36)	0.076
Undergraduate	49 (19.6 %)	54 (21.6 %)	3.3 (0.37 – 29.5)	0.286
Post Graduate	22 (8.8 %)	22 (8.8 %)	2.6 (0.13 – 50.0)	0.531
Doctorate	1 (0.1 %)	2 (0.8 %)	5.6 (0.15 – 203.6)	0.349
Type of occupation			13	0.1
Unemployed	24 (9.6 %)	54 (21.6 %)	1	-
Housewife / Accompanying person / Retired	5 (2.0 %)	12 (4.8 %)	0.78 (0.23 – 2.6)	0.682
Student / Intern student / Private education	36 (14.4 %)	38 (15.2 %)	0.14 (0.015 – 1.3)	0.08
Teacher / Lecturer / Asst. Professor / Training Specialist	16 (6.4 %)	19 (7.6)	0.17 (0.01 – 3.4)	0.251
Nurse / Intern Nurse / Doctor’s Assistant	4 (1.6 %)	6 (2.4 %)	0.22 (0.02 – 2.8)	0.239
Doctor / Dentist / Intern Doctor / Specialist	6 (2.4 %)	6 (2.4 %)	0.15 (0.01- 3.3)	0.226
Private / Administration / School Director / Security Observer / Engineer / Technician / Accountant / Delivery / Soldier	14 (5.6 %)	8 (3.2 %)	0.04 (0.003 – 0.45)	0.01
Business / Self Employed	0 (0 %)	2 (0.8 %)	0	0.999

Table 4. Multiple Logistic Regression of Depression – Related Factors of the Public During the Corona Virus Outbreak.

Table 4, Related to depression, 36.4 % had mild depression, 16.4 % showed moderate depression, and 5.2 % of respondents have experienced severe

DISCUSSION

Disease condition the study examines anxiety and depression levels among people in Jazan region, Kingdom of Saudi Arabia. The COVID - 19 pandemic and lockdown period between 16 March to 21 June, 2020. In these inexorable circumstances, which are beyond the ordinary, people feel stress, anxiety, and a sense of helplessness. It was evidenced by this study finding.

Based on the analysis and findings, the anxiety level was higher in women than in men, the results are similar to those of.⁸ It is believed that women express emotions to a greater extent than men.

Depression according to analysis Females (OR = 0.79,95 % CI = 0.36 – 1.7, P = 0.845), age above 59 years (OR = 4.4, CI = (0.75 – 25.8), P = 0.101) experienced more depression than other groups.

Many studies show that women have a lower tolerance threshold than men. Women are unable to cope with strategies in times of uncertainty and stressful condition.⁹ Among the Australian population, women were also found to be more exposed to stress, depression, and anxiety than men in this pandemic situation.¹⁰

In this study, it was found that the anxiety and depression levels of people of younger age group were high. Well known fact is that the youngsters’ are constantly engaged in using media and the information shared on social media regarding COVID - 19 could have played a pivotal role in increasing the anxiety and depression level of the younger ones / students.¹¹ The other contributor to anxiety

and depression levels was a sudden shift from face to face class to online classes, which indirectly resulted in academic stress.

Similarly, a study conducted among Spanish population revealed that students, women, and people with a lower income and those who do not have the required space per person in their homes, suffer from a higher psychological impact in terms of emotional distress and deteriorating mental health.^{12,13} Another recent study found that university students frequently experience academic stress and have poor coping skills overall.

During the lockdown period, many researches have been carried out and the finding shows that during the lockdown period, the sudden shift of online education, fear of academic achievement, loneliness, dual role of women, unemployment, economic constraints, unpredicted life, fear of infection, dependency, increased burden over women in the home, induced psychological problems among the people.¹⁴⁻¹⁶ The present study also implies same.

Many of the individuals in their late adulthood (above 60 years) experienced anxiety and depression during the COVID - 19 pandemic.¹⁷ Older adults could also experience difficulties in maintaining relationships through new channels of communication in a virtual form during the pandemic due to less experience with new technologies or age-related health problems (e.g., poor eyesight, problems with motor coordination). Thus, keeping relationships with others, especially friends at a similar age, could have been particularly difficult for the oldest group.¹⁸

Finally, unemployed person continuity was related to anxiety and depressive symptoms; likewise, another study revealed that women, young people, and those who lost their jobs during the health crisis showed more negative psychological symptoms like higher levels of stress.

CONCLUSION

According to the findings of this study, age, gender, academic performance, and occupation were all strongly linked to anxiety and depression among those who experienced anxiety and depression. Throughout COVID - 19 and the lockdown phase. Remote online learning was the most common source of stress, which was unrelated to their academic achievement, economic constraints, loneliness, job loss, and a change in their typical routine life style contributes psychological problems among people.

The analysis and findings imply that there is an urgent need for online support by health care professionals, and the hospitals should have call centers for 24 hours to provide mental health assistance and that will direct applicants to available community services when needed.

It is a necessary and urgent need to plan new strategies to manage the psychological problems of the public and update the public with current information about COVID 19 and psychological support services. These support services might reduce the anxiety and depression levels and will help in the wellbeing of the individual.

REFERENCES

1. Bai Y, Yao L, Wei T, et al. Presumed asymptomatic carrier transmission of COVID-19. *JAMA* 2020;323(14):1406–1407.
2. Wang C, Horby PW, Hayden FG, et al. A novel coronavirus outbreak of global health concern *Lancet*. 2020;395(10223):470–473.
3. Hall RC, Hall RC, Chapman MJ. The 1995 Kikwit Ebola outbreak: lessons hospitals and physicians can apply to future viral epidemics. *Gen Hosp Psychiatry* 2008;30(5):446–452.
4. Xiang YT, Yang Y, Li W, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *Lancet Psychiatry* 2020;7(3):228–229.
5. Zhang J, Lu H, Zeng H, et al. The differential psychological distress of populations affected by the COVID-19 pandemic. *Brain Behav Immun* 2020;87:49–50.
6. McLean CP, Asnaani A, Litz BT, et al. Gender differences in anxiety disorders: prevalence, course of illness, comorbidity and burden of illness. *J Psychiatr Res* 2011;45(8):1027–1035.
7. Chaplin TM, Cole PM. The role of emotion regulation in the development of psychopathology. In: Hankin BL, Abela JRZ, editors. *Development of psychopathology: A vulnerability-stress perspective*. Sage Thousand Oaks 2005;49–74.
8. Gurvich C, Thomas N, Thomas E H, et al. Coping styles and mental health in response to societal changes during the COVID-19 pandemic. *Int J Soc Psychiatry* 2020;4:20764020961790.
9. Xiang YT, Yang Y, Li W, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *Lancet Psychiatry* 2020;7:228–229.
10. Parrado Gonzalez, A Leon Jariego J. COVID-19: Factors associated with emotional distress and psychic morbidity in Spanish population. *Span J Public Health* 2020;94:202006058.
11. Joseph N, Nallapati A, Machado MX, et al. Assessment of academic stress and its coping mechanisms among medical undergraduate students in a large Midwestern university. *Curr Psychol* 2020;7903.
12. Crayne MP. The traumatic impact of job loss and job search in the aftermath of COVID-19. *Psychol Trauma* 2020 12(1): 180–182.
13. Haider N, Osman AY, Gadzekpo A et al. Lockdown measures in response to COVID-19 in nine sub-Saharan African countries. *BMJ Global Health* 2020;5:003319.

14. Li HY, Cao H, Leung DYP, et al. The Psychological Impacts of a COVID-19 Outbreak on College Students in China: A Longitudinal Study. *Int J Environ Res Public Health* 2020;17:3933.
15. Mukhtar S. Psychological impact of COVID-19 on older adults. *Curr Med Res Pract* 2020;10(4):201–202. [GoogleScholar] [PubMed]
16. Ambin M, Sekowski M, Wozniak-Prus M, et al. Generalized anxiety and depressive symptoms in various age groups during the COVID-19 lockdown in Poland. Specific predictors and differences in symptoms severity. *Compr Psychiatry* 2021;105:152222.
17. Kate Keenan, Alison E Hipwell. Preadolescent clues to understanding depression in girls. *Clin Child Fam Psychol Rev* 2005; 8(2):89-105
18. Rodriguez-Rey R, Garrido-Hernansaiz H, Collado S. Psychological impact and associated factors during the initial stage of the coronavirus (COVID-19) pandemic among the general population in Spain. *Front Psychol* 2020;11:1540.