



# DEPRESSION AND PSYCHOLOGICAL WELL-BEING AMONG PEOPLE HAVING COVID- 19 UNDERGONE QUARANTINE

Laraib Khursheed<sup>1</sup>, Dr. Sadaf Hafeez Chohan<sup>2\*</sup>, Amna Alvi<sup>3</sup>

<sup>1</sup>M. Phil Scholar, Ripah International University, Faisalabad, Pakistan 

<sup>2\*</sup>Assistant Professor, College of Clinical Psychology, Ziauddin University, Karachi, Pakistan 

<sup>3</sup>Lecturer, Ripah International University, Faisalabad, Pakistan 

## ABSTRACT

**Aims Of Study:** Coronavirus is a potentially deadly disease that mostly affects human lung tissue. Multiple cases of unexplained respiratory tract infections were reported to the World Health Organization China in December 2019. The focus of this research was to assess association between depression and PWB in patients who had been isolated due to covid-19.

**Methodology:** A sample of 250 people with covid-19 post quarantine, with age ranges from 25 to 45 were selected by using purposive sampling methods. Depression, anxiety, stress scale and psychological well-being scales were administered. Regression analysis and t-test were employed for statistical analysis.

**Results:** Obtained results evidenced that depression is significantly predict psychological health in the covid-19 population [B= -.015, -.019, F (7.915) sig= .000]. Gender difference is also observed in variable of depression also [(4.78) =.030, p.000].

**Limitations and future implications:** Future research may base on longitudinal analyses focusing on familial and social factors that may influence the psychological well-being of people living in quarantine.

**Originality:** I certify that the intellectual substance of this article is the result of my own effort and that all assistance and sources used in the preparation of this article have been acknowledged.

**Conclusion:** It was concluded that Depression affects people with COVID-19 and PWB after quarantine. future research may focus more on the influence of the interaction between quarantine and adults' mental health to fully comprehend the link.

**Keywords:** *Depression, adults, psychological wellbeing, under-gone, quarantine, covid-19.*

## Introduction

Infections that affect millions of people across several nations and have the potential to spread throughout the globe are known as pandemics<sup>1</sup>. In recent ages, there have been a lot of pandemics, posing a threat to humanity Taylor (2019). The World Health Organization (WHO) officially labeled COVID-19 a global pandemic on March 11, 2020<sup>1</sup>. Pre-proclamation, China has already formally reported it. This new coronavirus has been designated according to the WHO, the world's sixth-most urgent public health issue<sup>2</sup>.

With a total of 5,593,631 confirmed and death cases, respectively, and 216 nations, areas, or territories reporting confirmed cases as of May 28, 2020, the global mortality rate was 6.32 percent.

<sup>1</sup> According to clinical research, typical symptoms include fever, dry cough, and exhaustion of

\*Assistant Professor, College of Clinical Psychology, Ziauddin University, Karachi, Pakistan

**Email:** sadafchohan@gmail.com

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a novel coronavirus, unlike the more common complaints of aches and pains and sinus congestion, diarrhea, smell and taste changes, respiratory difficulties, and various other strange symptoms<sup>1,3,4</sup>. In addition to an epidemiological crisis, pandemics like the coronavirus induce a mental breakdown (i.e., anxiety, depression, insomnia, trauma, anger, psychosis, panic, and boredom)<sup>5,6</sup>. According to new research, nearly half of those polled are dealing with effects on emotional stability of the current epidemic<sup>7,8</sup>.

Governments are taking drastic measures to stop COVID-19 from spreading. This new global pandemic has brought society to a halt and is wreaking havoc on the worldwide budget.<sup>9</sup> The survival of trades and economies throughout the universe is a monumental task. Several industries have already begun to lay off workers, while others are thriving.<sup>10</sup> More than a million individuals have previously been laid off, many others are suffering as a result of COVID-19's impacts.<sup>11</sup> People's fears of economic and social anxiety arose as a result of this uncertain situation, resulting in a slew of psychological and physiological diseases<sup>12</sup>.

In some respects, social networks and other new kinds of nontraditional mass media aggravate the situation. The lack of control over rumors, as well as inaccurate and untrustworthy information, has pushed COVID-19 dread to unprecedented levels<sup>13</sup>. As a result, people become frightened, unhappy, disappointed, and stigmatized, and many of them attempt suicide due to their uncertain condition<sup>14,15</sup>, argued that clinical signs of distress and nervousness were found during infectious disease outbreaks. Once again, there is a strong link between distress, apprehension, and unhappiness<sup>16</sup>.

More exposure to misinformation via social media, Chinese researchers say is more likely to exacerbate symptoms of mental illness like depression and other depressive symptoms. It is possible to isolate in quarantined areas and quarantine in unaffected areas. Individuals who have been isolated in the past are at risk of illness and isolation, both of which can be exceedingly upsetting to their mental health<sup>17</sup>.

Depression is a term that refers to a variety of undesirable effects on one's mental health. Loneliness has been linked to less time in bed while sleeping (7 percent less regrettable sleep productivity) and more waking time after sleep begins<sup>18</sup>. Loneliness, when combined with a low self-rated feeling of well-being, a low utilitarian position, visual impairments, and a perceived worrisome change in one's life quality, can lead to heightened misery symptomatology. Depression has been linked to a gradual deterioration in cognition, just like depressive side effects<sup>18</sup>.

Psychological well-being is a subjective and global assessment of one's ability to cope with a wide range of emotions. Psychological well-being has two important components. The main concern is the amount of pleasant sensations and blissful sentiments that humans experience. Emotional prosperity is another term for this aspect of mental wealth. Mental well-being is linked to a person's ability to persuade others in the face of common issues to collaborate with them. Low levels of PWB, despite this, are linked to the requirements of the individual. The quality of one's mental health is closely tied to the quality of one's outlook and inner resources. Mental well-being has many other important aspects, such as how happy and enchanting people feel when they are experiencing high levels of mental happiness and well-being<sup>19</sup>.

Mental health research involves subjective situations and good tonic results. A sense of contentment with one's life, joy, and confidence in one's own skills are all examples of psychological well-being. These well-being markers require good emotions. Existential happiness indices, like the meaning of life, may be linked to neutral or negative emotions, but they promote positive ones<sup>20</sup>.

Previous research has shown that in a COVID-19-affected society, sadness levels and related variables are elevated. Solemnity, fear of death, sleep problems, feelings of worthlessness and alcoholism were among the symptoms encountered by members who had to relocate during the seclusion. Those who spent time with their family took time for themselves, or were otherwise engaged in residential training or jobs were less likely to receive demoralizing scores<sup>21</sup>.

The primary objectives of the study was to assess the degree of depression and overall psychological health among people who have been institutionalized with Covid-19. Anxiety, depression, stress, sleep difficulties, and panic attacks are on the rise as a result of the ongoing COVID-19 pandemic, according to reports from a number of nations. These issues are increasing drug use and, in some cases, suicidal ideation. In the first scenario, those who are imprisoned incur the chance of being ill as well as being alone themselves, which could be highly hard on their mental health. Anxiety, despair, stress, sleep difficulties, and terror were all factors that this study sought to better understand in relation to the residents' COVID-19 preventive behaviors.

### Methodology

Gender, marital status, education, and time spent in quarantine were all taken into account in this study. The (DASS-21 scale was used. There would be three self-report evaluations compiled into the English version of the DASS–Short Form Scale-21 (DASS-21): grief, discomfort, and stretching. Subscales with differing degrees of content are created from each of the seven items on the DASS-21 scales. Cronbach's alpha values of 0.81, 0.89, and 0.78 for the depression, discomfort and use of subscales confirmed the DASS-21's unwavering quality. racial oppression validity, and the composite unwavering quality all garnered excellent reviews from the community members<sup>22</sup>.

Another scale was used which was the Psychological Well-being Scale (Ryff) Measures of psychological well-being are employed in the English translation through the usage of the mental well-being scale.<sup>23</sup> For the consider (I disagree), a 42-point scale, for instance, the Likert scale response, varying between 6 and 1. (I disagree with this idea) to (I agree with this idea), was employed. As you move up the scale, your mental health improves. Freedom, natural exchange, individual evolution, strong interpersonal links, and the rationale for one's life and activities are all included in this explanation list of six characteristics of mental health. The PEB Scale's constant quality coefficients range varying 0.78 to 0.97<sup>23</sup>. For statistical analysis IBM SPSS 25.0 was used to conduct the statistical analysis of the dataset. Analyzing the data necessitated both descriptive and inferential statistics. The descriptive analysis relied on basic metrics like counts and percentages, as well as the mean and standard deviation. The researchers used correlation, regression, and a t-test on independent samples to examine the study's hypothesis.

### Research Design

A correlational study approach was applied in this study. In a correlational design, this strategy aids in the exploration of connections between traits without controlling or altering each of them. Correlational research is an excellent approach to quickly getting data from natural settings. So that their conclusions can be applied to real-world situations in an objectively acceptable manner.

### Population of the study

Only the covid-19 survivors who made it through quarantine are included in this inquiry. In terms of their educational, financial, and familial statuses, the participants had a wide range. After obtaining informed consent, the study's participants, both men, and women were drawn from the Covid-19 population.

### Sample

After quarantine, for this study, N=250 patients in Faisalabad, Pakistan with Covid-19 were selected. Between the ages of 25 and 45, the population age groups were chosen. The sample

included 125 men and 125 women. People from Covid-19 were included in the sample after quarantine. A-priori sample size student t-test online calculator was used to support the study's sample.

### Sampling Technique and Procedure

Data was gathered through random selection from various parts of the city. Written consent and questionnaires were provided to participants during the research, along with a short summary of the study's purpose.

### Hypotheses

**H<sub>1</sub>.** Those who had Covid-19 after quarantine would have a substantial association between depression and PWB.

**H<sub>2</sub>.** Depression predicts negative psychological wellbeing in Covid-19 following quarantine.

**H<sub>3</sub>.** Patients with Covid-19 would experience substantial gender differences in depression and psychological well-being following quarantine.

## Results

Covid-19 patients who had been isolated owing to depression and psychological well-being were the primary focus of the study. To calculate the results SPSS (SPSS) were used. A bivariate correlation analysis was used to show the correlations between success measures. The frequencies and percentages of each demographic group examined in this study are displayed in Table 1.

Variables	Classes	Frequency	%
Gender	Female	125	50
	Male	125	50
	Total	250	100
Marital Status	Married	135	54.0
	Unmarried	115	46.0
	Total	250	100.0
	0-15	27	10.8
Days of quarantine	15-30	69	27.6
	30-45	85	34.0
	45-60	54	21.6
	More than 60 days	15	6.0
	Total	250	100.0

*Table 1: Demographic characteristics of the sample (N= 250)*

The percentages and frequencies of various demographics are shown in the table above. It was noted that 54% people are married and 46% people are unmarried in total sample size. Moreover most of the people 34% (were quarantine to 30 to 45 days), 27.6%, (were quarantine to 15 to 30 days), 21.6%, (were quarantine to 45 to 60 days), 10.8 %, were quarantine to 0 to 15 days), and 6% were (quarantine to more than 60 days) overall the sample.

Variable	N	Min	Max	M	Std. D
Age	250	22.00	46.00	33.8800	5.66409

*Table 2: Demographics in Relation to Age (N=250)*

According to Table 2, the age descriptive statistics have a mean of 33.88 and a standard deviation of 5.66.

Scales	K	M	SD	A	Range		Skewnes	Kurtosis
					Potential	Actual		
DASS	21	31.3	21.82	0.94	0-3	56	.27	1.78
Ryff	18	56.87	32.1	0.87	0-7	100	.507	.611

Table 3: Descriptive Statistics and Alpha Reliabilities for all Study Variables (N = 250)

Table 3 demonstrates that the PWB Scales.87 and the DASS.94 have alpha reliability coefficients that are significantly acceptable. These data also suggested that these measures might occur prior to the sample's total analysis.

Variables	Ryff	DASS	Depression
Ryff	-		
DASS	-.045	-	
D	-.035	.042	-

Table 4: Correlation Matrix for all the Variables of the study (N = 250)

Level (1-tailed).

\*\* . Correlation is significant at the 0.01 level (1-tailed).

According to the results of this study's findings, self-esteem is negatively associated with both the DASS's and depression subscale. At p,000, similarly psychological well-being correlates negatively with DASS and its depression subscale.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	B			Lower Bound	Upper Bound
(Constant)	17.994	2.273		7.915	.000	17.994	2.273
PWB	-.010	.043	-.015	-.236	.814	-.010	.043

Table 5: Coefficient statistics of depression, and psychological wellbeing among people of Covid-19 after quarantine (N=250)

a. Dependent Variable: Depression

b. Predictors: (Constant Psychological Well-being scale (Ryff))

Depression was found to be a significant negative predictor of psychological health in covid-19 persons after quarantine [B= -.015, -.019, F (7.915) = p>.000].

	Gender	N	M	S.D	t	P	95% CI	
							LL	LU
RSES	F	125	17.7920	8.44917	2.55099	.108	-1.137	248
	M	125	15.4640	4.88504			-1.137	245.865
D	F	125	32.6320	17.64605	50.359	.000	-5.115	248
	M	125	23.4080	10.73365			-5.115	206.895

Table 6: Differences in depression, psychological well-being, and gender (male and female) (N=250)

Findings (Table 6) show that people with covid-19 following quarantine show a substantial gender difference in the factors of depression. Females were experiencing more depression (t 50.359 p value.000) as compare to males.

### Discussion

This study adds a lot to the body of knowledge on the link between mental health and depression in Covid-19 people who had been quarantined. The first hypothesis was “There would be a strong positive correlation between depression and psychological well-being among people with covid-19 after quarantine” In patients who had been quarantined with Covid-19, depression and psychological well-being were found to have a significant negative correlation. The COVID-19 epidemic has had a detrimental effect on the mental and psychological health of many people. For

example, they found that many of the quarantined individuals had some degree of anxiety or depression (as well as socioeconomic status). This could suggest a bad quality of life or an unsatisfactory life<sup>24</sup>. Most at risk were those who had been isolated. Help is urgently needed for young adults and those who have previously been vulnerable. People aren't paying much attention to the COVID-19 facts being disseminated. This could be exacerbated by a lack of data from public health professionals<sup>25</sup>. COVID-19-induced sadness has a significant impact on future professional anxiety, which comes full circle in a complete intercession. People are becoming more and more pessimistic and anxious about their futures, which has a long-term negative effect on the human psyche<sup>26</sup>.

There is a pressing need for psychological remedies that can identify or treat individuals at various stages of mental discomfort. Even though they have different meanings, isolation and quarantine are two ways of being cut off from loved ones. Depressed people tended to be more isolated than those who were close to their loved ones, with 40% of those polled having depression<sup>27</sup>. COVID-19 patients under quarantine may benefit from regular communication to keep their spirits up. Quarantined persons with symptoms of depression were more likely to complain of depression than those without symptoms. Telephone and text messaging communication with loved ones and friends helped people cope with their emotions of loneliness<sup>28</sup>. Many public health measures, such as quarantine, are employed in the fight against the spread of contagious diseases. Quarantine restrictions were frequently associated with negative psychological effects and suffering. People's perceptions of personal risk may have been heightened as a result of the high prevalence of COVID-19 transmission and the severity and rapidity of its spread<sup>28,29</sup>. During COVID-19, physical disturbance is a substantial risk factor for depression. The underlying response of individuals to the epidemic could potentially contribute to sadness and mental health issues. The major driver of the link between self-esteem and psychological well-being is psychological health, not the environment<sup>27,29</sup>.

Depression has a considerable detrimental impact on psychological wellbeing among Covid-19 persons after quarantine, according to a study. Coronavirus infection in 2019 has caused havoc on the psychological and mental health of sufferers. In order to treat psychosocial issues, there is a lack of information on the topic of Covid 19<sup>28,29</sup>. Earlier research highlighted the possible harmful impact of COVID-19's antidepressant effects on the disease itself. Symptoms of depression include a general de-activation of the body and mind, as well as a decrease in an emotional state and pleasure-seeking behavior. As well as that, researchers discovered that anxiety was closely related to feelings of tension and anxiety, both of which have been linked to depression<sup>29</sup>. This suggests a fear-to-anxiety-to-depression pathway. Self-esteem and psychological wellness were negatively correlated with depression because of its buffering effect, which prevented unpleasant psychological components from being linked<sup>30</sup>.

We came to the third conclusion that "After quarantine, there would be significant gender variations in depression and psychological well-being between patients with Covid-19". A new study has found that women in the study had higher mean scores on depression and psychological well-being than men. In contrast to male undergraduates, female undergraduates scored higher on depression and psychological wellness. One of the socioeconomic characteristics most linked to psychological distress in students was the female gender. During the outbreak, this characteristic was associated to feelings of melancholy, anxiety, and stress. No matter how many studies demonstrate men with COVID-19 have a worse prognosis, mounting data suggests the psychological toll on women is harsher<sup>27</sup>. In this study results shows that women are more depressed and upset than men. COVID-19 had a considerable effect on the physical and mental well-being of college pupils, despite the small number of students who participated in the study, according to earlier research<sup>31</sup>. In the wake of long-term job losses, human healthcare, family services, and financial concerns have all come to the forefront. The heightened impact of

quarantine has resulted in a high percentage of distress, melancholy, worry, tension, and even self-reported suicide thoughts<sup>32</sup>.

People with a history of mental illness are at the highest risk of emotional distress, according to our findings, and should be given priority for psychological evaluation. Lack of income, poor housing, physical exercise and high levels of physical activity, and not remaining with parents were all associated to mental health issues<sup>33</sup>. Being a woman over the age of 40 and having a chronic or mental illness were among the risk variables linked to hypertension. Being a woman was associated with despair, pressure, and stretching among the Italian masses<sup>35</sup>. The Chinese population's high levels of depression, stress, and anxiety were found to be linked to three factors: being a student, having genuine side effects, and believing oneself to be chronically weak<sup>34</sup>. Detainees' levels of depression grew by 1.3 units as their isolation time increased. People's failure to adjust to new environments could be to blame. Depression was 2.5 times as common in female quarantines than in male quarantines<sup>35</sup>.

## Conclusion

The study on the COVID-19 epidemic found a link between increased stress, anxiety, and depression in those who were isolated for a short period of time. People who have been placed in home confinement as a result of lockdown measures must also focus on their psychological well-being and mental health.

### AUTHORS' CONTRIBUTION:

The following authors have made substantial contributions to the manuscript as under:

**Conception or Design:** Lariab Khursheed, Sadaf Hafeez Chohan

**Acquisition, Analysis or Interpretation of Data:** Sadaf Hafeez Chohan, Lariab Khursheed, Amna Alvi

**Manuscript Approval & Writing:** Sadaf Chohan, Lariab Khursheed and Amna Alvi

All authors acknowledge their accountability for all facets of the research, ensuring that any concerns regarding the accuracy or integrity of the work are duly investigated and resolved.

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