ORIGINAL ARTICLE

The Impact of COVID-19 on Mental Health and Quality of Life

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ABSTRACT

Background: The COVID-19 (Coronavirus Disease of 2019) virus has affected millions of people around the world, and it is likely to induce mental health issues in those who have never had one before, as well as worsen the condition of those who already have.

Objective: To determine the effect of COVID-19 on mental health and quality of life.

Methodology: The non-probability convenient sampling strategy was utilized in this cross-sectional research. A sample of 300 Males and Female with age above 30 who have gone through COVID-19 and recovered before one month or more are included in the study. All patients who already had cognitive issues even before COVID-19 were excluded from the study. The study variables were measured using the MMSE (mental health) and WHOQOL-BREF (quality of life).

Results: The results revealed that 128 participants (43%) of the respondents were male and 172 participants (57%) were female. The findings showed that 32 people were with normal mental health, 100 were with mild and 36 were with moderate mental health between the ages of 30-39. 52 people were with normal mental health, 24 were with mild and no one was with moderate mental health between the ages of 40-49. 4 people were with normal mental health, 4 were with mild and 24 were moderate mental health between the ages of 50-59. 12 people were with normal mental health with, 4 were with mild and no one was with moderate mental health between the ages of 60-69. The results also showed that there was a significant association between mental health and quality of life. chi-square test of independence showed significant association between mental health and quality of life with χ^2 (N = 300) = 600.0, p = .000. The findings showed that people with normal mental health had very good quality of life, people with mild mental health have poor quality of life and people with moderate mental health have very poor quality of life.

Conclusion: It was concluded from the study that COVID-19 has badly effected mental health and quality of life of the patients suffered from coronavirus.

Keywords: COVID-19, Mental Health, Quality of Life, Mental State Examination, Chi-Square

INTRODUCTION

The COVID-19 (Coronavirus Disease of 2019) virus has infected millions of individuals worldwide, so it is possible to occur mental health issues in someone who has never had one before, as well as exacerbate the condition of those who already have. Mental health issues are expected to emerge early in the pandemic, and they are likely to persist after the epidemic has ended. Short-term mental health problems can be caused by sickness, a lack of social support, and stigma, and long-term mental illnesses can be induced by causes such as financial damage.

The COVID-19 epidemic is wreaking havoc throughout the world, but little is known about the physical and psychological effects on survivors and their families. Despite the need for statistics on affected people's and their families' experiences, there is only a limited amount of information accessible (1).

COVID-19's immediate and long-term (long COVID-19) impact on persons impacted and their families must be determined for healthcare personnel and government organizations to properly help them. Over the last decade, researchers have gained a better understanding of how a person's health affects the quality of life (QoL) of other family members (2).

In December 2019, unexpected instances of pneumonia caused by the novel Coronavirus (COVID-19) were discovered in Wuhan, China (5s), and the virus's spread quickly became a worldwide health issue (3). In the last 20 years, there have been various viral infections, including SARS in 2004, influenza virus with the H1N1 subtype in 2010, Middle East Respiratory Syndrome (MERS) in 2012, and Ebola virus in 2015.

Despite being a new coronavirus strain, COVID-19 has been associated to diseases ranging from the common cold to more severe illnesses such as SARS and MERS. A Coronavirus infection causes fever, chills, cough, chronic cough, muscle pain, upset stomach, and diarrhea. Men who have a history of underlying ailments are more likely to get the virus and have worse outcomes. Severe cases of the illness can lead to cardiac and respiratory failure, acute respiratory syndrome, and death.

COVID-19 can have a significant impact upon people's quality of life in addition to its physical consequences. During the Virus outbreak, a wide spectrum of psychological issues was detected at the personal, communal, domestic, and global scales. People are more prone to be afraid of being sick or dying, of feeling powerless, and of being prejudiced by others (4). The pandemic has harmed general mental state, perhaps leading to psychiatric breakdowns. (5)

The effectiveness of therapeutic efforts is improved when people are identified early in the course of a mental issue. During health catastrophes like as the COVID-19 pandemic, fear, concern, sadness, or insecurity cause psychological changes in both medical personnel and the general populace.

Nervousness and concern affect practically everyone in a community. According to current research, those who are placed in loneliness or confinement experience tremendous anxiety, wrath, confusion, and stress (6). According to all studies that looked into psychological disorders during the COVID-19 pandemic, those who have been troubled used to have a variety of mental traumatic stress, such as mental anguish, anxiety, strain, mood changes, tiredness, sleeplessness, attention deficit disorder, post-traumatic stress disorder, and frustration (7). In research, frequent media exposure has also been shown to cause distress. Nonetheless, given the current setting, it is impossible to predict the psychological and emotional impacts of COVID-19. According to research conducted in China, the first country to be impacted by the current Virus outbreak, people's fear of the uncertain origin of the Virus may contribute to mental problem (8).

Because of the virus's pathogenic potential, rapid spread, and high mortality rate, COVID-19 may have an impact on the mental health of people at all levels of society, from infected patients and healthcare professionals to families, children,

students, patients with mental illnesses, and even workers in other sectors.

The Coronavirus (COVID-19) virus, which has occurred as a serious threat, has rocked the global economic, social, and medical sectors. We don't know when the virus will be eradicated, how many people will become sick, or how many will die (9). The virus has also spread to Pakistan. The first incidence of COVID-19 was reported in Pakistan on February 26, 2021 (10).

The authorities implemented a nationwide lockdown in early March 2020. Self-quarantine and isolation are the only strategies to prevent COVID-19 from spreading. Governments really had no option other than to impose shutdown, which can be witnessed in almost every country on the planet. However, the lockout, quarantine, and self-isolation caused mental health difficulties.

COVID-19 has been connected to a number of mental illnesses. As a result of the broad lockdown, panic, concern, insecurity, and stress are all on the rise. People in Pakistan who are living at home under confinement and self-isolation are experiencing physical and psychological hardship as a result of COVID-19's arrival. Furthermore, many individuals have lost their employment and are living in extremely stressful situations.

The ramifications of the outbreak in Pakistan have shocked the populace. As a result, the fear of COVID-19 is successfully contributing to suicide in Pakistan, Bangladesh, and India (12). In Pakistan, over 23 suicides have been linked to COVID-19, with seven confirmed and four suspected cases. The mental health crisis in Pakistan is expected to become a major issue that will last long beyond COVID-19. As a result, effective measures to address the country's mental health challenges are vital.

Mental problems and stress have also been documented to promote typical mental illnesses including nervousness and sadness in various regions of the world (13). Persons with pre-existing health disorders such as depression, as well as elderly people who are lonely and alone, are particularly sensitive to mental well-being concerns (14).

Most research papers discussed the causes, symptoms and treatment of COVID-19. Few of them discussed mental health only, but the current study focused on how affected mental health from Covid-19 impacted quality of life.

METHODOLOGY

The study was conducted in a cross-sectional manner. Data was collected from Lahore. After the synopsis approved, the study was completed in four months. Sample size was 300. (28) non-probability convenient sampling technique was used. Male and Female with age above 30 who had gone through COVID-19 and recovered before one month or more. Male and Female with age above 30 who had gone through COVID-19 and recovered before one month or more. All patients who already had cognitive issues even before COVID-19 were excluded from the current study. A written informed consent was filled by the participants before the start of study. In this study researchers used two Performa's for assessing meatal health and quality of life. One was MMSE for measuring mental health and 2nd was WHOQOL-BREF for Quality of life. SPSS statistical software was used to analyze the data.

RESULTS

In the chapter evaluating and interpreting obtained data to determine the link and association between impact of COVID-19 on mental health and quality of life, a sample of 300 individuals suffering from COVID-19 (128 males, 172 females) were selected from Lahore, Pakistan. The information obtained was analyzed using SPSS 21.

The table 1 shows the demographic data of the participants. 176 participants (59%) were in the age between 30-39, 76 (25%) participants were in the age between 40-49, 32(11%) participants were in the age between 50-59. 16 (5%) participants were in the age between 60-69. 128 (43%) participants of the respondents were male and 172 (57%) participants were female. 5% people

were uneducated, 13% people having primary education, 43% people were secondary education and 39% people having Tertiary. In this study 28% of the participants were single, 67% of the people were married, 1.3% people were separated and 4% respondents were widowed. 4% respondents were diagnosed covid-19 less than 4 weeks, 4% respondents were diagnosed covid-19 less than 4 weeks, 14.7% respondents were diagnosed covid-19 for 5-11 weeks and 81.3% respondents were diagnosed covid-19 more than 12 weeks. According to the results, 45% were hospitalized during COVID-19 and 55% were not hospitalized during COVID-19.

Table 1: Demographic Information of Participants

Variables	F	%	M (SD)
Age			1.63 (0.87)
30-39	176	59	
40-49	76	25	
50-59	32	11	
60-69	16	5	
Gender			1.57 (0.49)
Male	128	43	
Female	172	57	
Education Status			
Not at all	16	5	
Primary School	40	13	
Secondary School	128	43	
Tertiary	116	39	
Marital Status			1.91 (0.98)
Single	84	28	
Married	200	67	
Separated	4	1.3	
Widowed	12	4.0	
Number of Weeks			2.77 (0.50)
Less than 4 weeks	12	4.0	
5-11 weeks	44	14.7	
More than 12 weeks	244	81.3	
Hospitalized for COVID-19			1.55 (0.49)
Yes	136	45.3	
No	164	54.7	

Note: f= Frequency, %= Percentage, M= Mean, SD= Standard deviation.

Table 2: Frequency Table showing the responses for rate of QOL

		F	%	VP	CP
Valid	Very Poor	60	20.0	20.0	20.0
	Poor	140	46.7	46.7	66.7
	Good	56	18.7	18.7	85.3
	Very Good	44	14.7	14.7	100.0
Total		300	100.0		

Note: f =Frequency, %=Percentage, VP= Valid Percent, CP=Cumulative Frequency, QOL= Quality of Life

The table 2 shows the responses of participants about rate of QOL. 60(20%) participants were with very poor rate of quality of life. 140(46.7%) participants were with poor rate of quality of life. 56(18.7%) participants were with good rate of quality of life. 44(14.7%) participants were with very good rate of quality of life.

Table 3: Frequency Table showing the responses health satisfaction

		F	%	VP	CP
Valid	Very Dissatisfied	60	20.0	20.0	20.0
	Dissatisfied	140	46.7	46.7	66.7
	Satisfied	100	33.3	33.3	100.0
Total		300	100.0		

Note: f =Frequency, %=Percentage, VP= Valid Percent, CP=Cumulative Frequency

The table 3 shows the responses of participants about health satisfaction. 60(20.0%) participants were very dissatisfied with their health. 140 (46.7%) participants were dissatisfied with their health. 100(33.3%) participants were satisfied with their health.

The table shows the responses of the participants for preventions of ADLs from physical pain. 100(33.3%) participants were with a little prevention of ADLs from physical pain. 140

(46.7%) participants were with very much preventions of ADLs from physical pain and 60(20.0%) participants were with an extreme amount prevention of ADLs from physical pain.

Table 4: Frequency Table showing the responses for preventions of ADLs from Physical Pain

		F	%	VP	CP
Valid	A Little	100	33.3	33.3	33.3
	Very Much	140	46.7	46.7	80.0
	An extreme amount	60	20.0	20.0	100.0
Total		300	100.0		

Note: f =Frequency, %=Percentage, VP= Valid Percent, CP=Cumulative Frequency

Table 5: Frequency Table showing the responses for requirement of medical treatment

		F	%	VP	CP
Valid	A Little	100	33.3	33.3	33.3
	Very Much	140	46.7	46.7	80.0
	An extreme amount	60	20.0	20.0	100.0
Total		300	100.0		

Note: f =Frequency, %=Percentage, VP= Valid Percent, CP=Cumulative Frequency

The table 5 shows the responses of the participants for requirement of medical treatment.100 (33.3%) participants need a little medical treatment. 140(46.7%) participants need very much medical treatment. Whereas 60(20.0%) participants need medical treatment at extreme amount.

Table 6: Frequency Table showing the responses for rate at which you enjoy life

		F	%	VP	CP
Valid	Not at all	60	20.0	20.0	20.0
	A Little	140	46.7	46.7	66.7
	Very Much	56	18.7	18.7	85.3
	An extreme amount	44	14.7	14.7	100.0
Total		300	100.0		

Note: f =Frequency, %=Percentage, VP= Valid Percent, CP=Cumulative Frequency

The table 6 shows the responses of the participants for rate at which you enjoy life. 60(20.0%) participants did not enjoy their life during COVID-19, and they gave response as not at all. 140(46.7%) participants enjoy their life at a little rate. 56(18.7%) participants were enjoyed their life very much. 44 participants (14.7%) enjoy their life in extreme amount

Table 7: Frequency Table showing the responses for level of concentration

		F	%	VP	CP
Valid	Not at all	60	20.0	20.0	20.0
	A Little	140	46.7	46.7	66.7
	Very Much	100	33.3	33.3	100.0
Total		300	100.0		

Note: f =Frequency, %=Percentage, VP= Valid Percent, CP=Cumulative Frequency

Table 8: Frequency Table showing the responses for satisfaction with condition of living place

		F	%	VP	CP
Valid	Very Dissatisfied	60	20.0	20.0	20.0
	Dissatisfied	140	46.7	46.7	66.7
	Satisfied	96	32.0	32.0	98.7
	Very Satisfied	4	1.3	1.3	100.0
Total		300	100.0		

Note: f =Frequency, %=Percentage, VP= Valid Percent, CP=Cumulative Frequency

The table shows the responses of the participants for level of concentration. 60 participants (20.0%) participants cannot concentrate. 140 participants (46.7%) having a little level of concentration. 100 participants (33.3%) having a high level of concentration.

The table 8 shows the responses of the participants for satisfaction with condition of living place. 60 participants (20.0%) are very dissatisfied with condition of their living place. 140 participants (46.7%) are dissatisfied with condition of their living place. 96 participants (32.0%) are satisfied with condition of their living place. 4 participants (1.3%) are very satisfied with condition of their living place.

DISCUSSION

The COVID-19 (Coronavirus Disease of 2019) pandemic has impacted the lives of millions of people around the world and is likely to result in mental health problems among those with no previous mental illness as well as exacerbate the condition of those with pre-existing mental health problems/disorders. Mental health problems are likely to begin early and continue after the pandemic is over. Experience of the disease, breakdown of social support and stigma are possible causes of short-term mental health problems while factors such as economic losses can potentially cause long-term mental health issues. Current study aimed to investigate the impact of the COVID-19 on mental health and quality of life among people living in Lahore, Pakistan.

It was hypothesized that there would likely to be a significant association among between mental health and quality of life. My hypothesis was accepted and according to results there was a significant association between mental health and quality life. It showed significant association between mental health and quality of life with $\Box 2$ (N = 300) = 600.0, p = .000. The findings showed that people with normal mental health have very good quality of life, people with mild mental health have poor quality of life and people with moderate mental health have very poor quality of life.

The study shows that people affected by COVID-19 have a very bad mental health and quality of life. Because Covid-19 has changed life drastically. As shown in the frequency tables that 60 people (20.0%) give rate to their very poor. 140 participants (46.7%) are dissatisfied from their lives.60 participants (20.0%) consider their lives meaningless. Their level of concentration was also very low. 60 participants (20.0%) are with ow level of energy. 140 participants (46.7%) have just a little number of financial resources to meet their needs. 60 participants (20.0%) are very dissatisfied with themselves. 140 participants (46.7%) are dissatisfied with themselves. 96 participants (32.0%) are satisfied with themselves. 4 participants (1.3%) are very satisfied with themselves.

Results are supported by literature. The Coronavirus (COVID-19) pandemic has emerged as a devastating challenge and it has shaken the global economic, social, and healthcare systems. We do not know when it will be ended, how many people will be infected, and how many lives will be claimed by the pandemic (Mamun & Griffiths, 2020). The pandemic has also placed root in Pakistan. The first case of COVID-19 was reported in Pakistan on 26 February 2020 (Waris et al., 2020).

The government introduced lockdown across the country in early March 2020. Self-quarantine and social distancing are the only available remedies to limit the spread of COVID-19 (Harper et al., 2020). There are no options left for governments but to impose lockdown which is observed almost in every country around the World. However, these lockdown, quarantine and self-isolation entailed mental health challenges.

Psychological distress, both long and short term, may interfere with quality of life unless proper preventive measures are taken for rampant emotional recovery (Panthee et al., 2020; Shechter et al., 2020). Social distancing decreases the interactions between individuals in a broader community so that the infection of any disease can be contained (Wilder-Smith and Freedman, 2020).

In other parts of the World, mental challenges and stress are also reported to trigger common mental disorder like anxiety and

depression (Dar et al., 2017). The COVID-19 pandemic has created panic among the population, both infected and vulnerable people (Melo and Soares, 2020; Zubayer et al., 2020). Health authorities, however, in most countries, including Bangladesh, mainly focus on controlling the number of new cases and deaths to a minimum, but psychological distress and its associated reverberations are often overlooked. Psychological distress does not emerge only from the panic of being infected with COVID-19; several other factors also play rigorous roles (Islam et al., 2020; Mahmud et al., 2020; Nyarko et al., 2020).

After data collection it was also analyzed from the results in the form of frequency tables that people have not enough money to meet their needs like medical treatment, housing etc. people are destroyed psychologically and are not satisfied their quality of lives. They are facing number of challenges psychologically, morally, socially, and physically in the form of low self-satisfaction, lack of support from friends and family, cognitive impairment, lack of concentration, low level of energy etc.

As shown in the frequency tables that for frequency of negative thoughts. 60 participants (20.0%) have seldom frequency of negative thoughts. 140 participants (46.7%) often have negative thoughts. 100 participants (33.3%) always have negative thoughts. 60 participants (20.0%) are very dissatisfied with access to health services. 140 participants (46.7%) are dissatisfied with access to health services. 100 participants (33.3%) are satisfied with access to health services.

60 participants (20.0%) are very dissatisfied with support from friends. 140 participants (46.7%) are dissatisfied with support from friends. 100 participants (33.3%) are satisfied with support from friends. 60 participants (20.0%) are very dissatisfied with their personal relationship. 140 participants (46.7%) are dissatisfied with their personal relationship. 100 participants (33.3%) are satisfied with their personal relationship.

Results are supported by literature. The mental health sufferings due to COVID-19 are widely observed (Lima et al., 2020). This extensive lockdown is creating panic, fear, sense of insecurity, and stress in societies. With the advent of COVID-19 in Pakistan, people staying at home in quarantine and self-isolation are under physical and psychological pressure. Moreover, many people have lost their jobs and they are seriously in tense conditions.

Most countries follow social distancing as the principal strategy to limit the number of new cases (Das et al., 2020; Melo and Soares, 2020). The critical part of social distancing is creating loneliness, disrupting regular activities, limiting freedom of movement, decreasing employment and income, and creating a lack of medical services to treat diseases other than COVID-19 (Kaufman et al., 2020; Ripon et al., 2020; Serafini et al., 2021). Experience from countries such as China, Singapore, South Korea, and Japan endorsed that government strategies such as social distancing effectively contain the further spread and transmission of COVID-19 and lead to moderate psychological distress (Sajed and Amgain, 2020).

Thus, people will have less chance of being exposed to the virus and being infected. Even though this distancing makes people feel lonely (Fawaz and Samaha, 2020; Mukhtar, 2020), considering the disastrous consequences of this infectious disease, they are happy that they will not suffer (Melo and Soares, 2020). In contrast, Wiederhold (2020) found that individuals during the COVID-19 outbreak might experience extreme psychological cessation, i.e., loneliness, boredom, and anger, due to the social distancing, quarantine, and isolation (Cenat et al., 2021; Shacham et al., 2020; Zubayer et al., 2020). In line with attachment theory's conceptualization, we posit that social distancing contributes to increased psychological distress due to attachment insecurity and insecurity during the COVID-19 pandemic (Byrne et al., 2017).

Psychological distress refers to unpleasant feelings or emotions and psychological discomfort that adversely affect the normal functioning of human beings (Rey et al., 2016). Studies evidenced that psychological distress influences the quality of life (Asadi et al., 2019; Gamage et al., 2020; Ramirez et al., 2012). Gamage et al. (2020) found that existential anxiety significantly diminished patients' quality of life. The COVID-19 outbreak creates more panic and illness and negatively influences quality of life (Uysal et al., 2016).

Conversely, lower psychological distress develops a commitment of emotions and self-efficacy, which, in turn, improves quality of life (Cummins, 2005; Shacham et al., 2020). Zhang and Ma (2020) reported that the COVID-19 outbreak caused mild psychological stress, i.e., physical and mental health, and this psychological stress influenced quality of life. Furthermore, learned helplessness theory states that the helplessness of individuals with psychological disorders may result in a low quality of life (Abramson et al., 1978; Teitelman and Priddy, 1988). Consequently, psychological stress has a powerful negative effect on quality of life (Abramson et al., 1978).

CONCLUSION

The COVID-19 pandemic was associated to a minor psychological impact on people, according to the study. It did, however, have some beneficial effects on family support and mental health awareness. There is a need to raise awareness of psychological issues during pandemics through multiple media channels, as well as the significance of getting treatment and engaging in physical exercise for the management of mental health illnesses. Moreover, it is critical that health care practitioners become more aware of the need of identifying and addressing high-risk sections of the population who are at risk of acquiring mental health disorders. Low-income families and individuals who have lost their employment require moral and financial assistance from governments and authorities. In addition, to decrease the strain on individuals during the present epidemic, working hours must be regulated.

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