

Tele-Psychiatry during COVID-19 at HMC Peshawar

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ABSTRACT

OBJECTIVE: The main objectives of the current study were to find out the frequencies of Psychiatric disorders in the general population during COVID-19 and to compare the gender-based association between newly diagnosed patients during COVID-19 with already existing psychiatric patients in Peshawar to provide patient care on priority bases.

METHODOLOGY: This Cross-sectional design study was carried out in the Department of Psychiatry and Behavioral Sciences, HMC/MTI, from May to August 2020. Those patients who approached psychiatry OPD through video/audio online calls and could understand and respond to suggestions were included. The bio-data was collected, and DSM-5 criteria were used for diagnosis. Descriptive statistics were used for statistical significance, and the statistical package of social sciences (SPSS-21) was used for analysis and results.

RESULTS: The results findings of the current study revealed that 59.3% of the patients approached for telepsychiatry consultation were from the district of Peshawar. Among them, 54% were female, and most patients were young married females (50.7%) with no job outside the home. The finding further revealed that most of the sample affected by psychiatric illness were uneducated (31.3%) and unemployed (28%). Furthermore, in the present findings, 46% of patients were diagnosed with depression, and 12% had Dissociative disorders.

CONCLUSION: It is concluded from the present study that in the Covid-19 Pandemic, primarily females who were married with no job description are more vulnerable to psychiatric illness. Furthermore, during Covid-19 mostly cases were reported with depression and dissociative disorders.

KEYWORDS: Tele-psychiatry, Covid-19, depression, anxiety, new patients and area of living.

INTRODUCTION

In December 2019, cases related to acute respiratory illnesses were reported most frequently in Wuhan city of China. After thoroughly investigating the disease, the severity of the symptom and the high fatality ratio in the reported cases, scientists named this novel virus a coronavirus previously unknown in humans. Furthermore, the new virus is easily transmittable from one person to another and is called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2)¹. This virus not only affects the respiratory system of an individual but can also infect the central nervous system of an individual². In a brief period, coronavirus spread very quickly from China to other countries in Asia, Australia, Africa, America and Europe and resulted in covid-19 Pandemic all around the globe. It is concluded from the study that the COVID-19 Pandemic adversely affected people all around the world. The adverse effect is not only due to the virus

and its worse impact on individual respiratory and other physiological symptoms but also because of restriction from social interaction. Furthermore, social factors associated with Covid-19, such as social distancing, lockdown, quarantine, high death rate, particularly of a close family member, relatives or friends, unemployment and uncertainty about the future negatively affected people's mental well-being all around the world. This is the reason behind increased psychological cases such as anxiety about COVID-19 or "Corona phobia"³.

As the outbreak of COVID-19 has become a global health crisis, psychological issues also increased and the number of people affected by various mental health problems also increased⁴. Recent studies also confirmed the high prevalence of generalized anxiety disorders, depression, sleep disorders, and post-traumatic stress disorder symptoms during this pandemic⁵⁻⁹.

Standard operational procedures (SOP) were formulated and strictly adopted during this Pandemic, for example, social distancing, lockdown and quarantine. These procedures protect people from virus transmission but also adversely affect their mental health and give rise to severe psychiatric disorders in some individuals¹⁰. Moreover, some people cannot bear the emotional burdens of loneliness and develop minor psychiatric disorders that the specific clinical measures in previous

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doi: 10.22442/jlumhs.2023.00935

Received: 12-12-2021

Revised: 06-01-2023

Accepted: 11-01-23

Published Online: 06-02-2023



research¹¹⁻¹³ cannot capture. Well-described demographic effects on mental health, such as gender, age, socioeconomic resources, and pre-pandemic life circumstances, will likely remain important determinants of public mental health.

Tele-psychiatry is the term specified to the application of Telemedicine within the speciality of psychiatry. Tele-mental health and Tele-psychology are related terms referring to the provision of psychological services or therapeutic interventions via mechanical means and telecommunication. Compared to more surgical/procedural-based specialities, psychiatry is relatively more suitable to help its clients via Telemedicine. Functionally, Tele-psychiatry typically involves an interaction between a psychiatrist and a patient via telephone or video conference. Research has indicated that Tele-psychiatry is as good as face-to-face interaction/sessions regarding the reliability of clinical assessments and treatment outcomes¹³.

Multiple studies also indicated that patients diagnosed with COVID-19 are more vulnerable to developing psychiatric disorders. Furthermore, it is concluded that they remain isolated and feel lonely compared to the general population. There are various factors which may contribute to the development of the psychiatric disorder in COVID-19 patients, such as female gender and young age etc. on the other hand, employment and having a support system, such as living with a partner, are considered as the protective factors in such illness. The study also reported psychological impact, including general psychiatric disorders and loneliness in the general public during COVID-19¹⁴.

METHODOLOGY

This Cross-sectional study design was carried out in the Department of Psychiatry and Behavioral Sciences, HMC/MTI, from May to August 2020. Convenient sampling was used, and we included 150 patients (males/females) out of all those patients who contacted us online from different areas of Khyber Pakhtunkhwa. The current study included patients who could communicate through video/audio online calls and understand and communicate about the illness. Patients with difficulty understanding and communicating "due to severity of illness" were excluded. Patients who were chronically ill, disoriented and could not communicate verbally or not giving consent were not included in the study. A semi-structured interview Performa was used to collect basic information about age, gender, education, marital status (number of kids), socioeconomic status, locality and previous psychiatric history.

All patients were diagnosed according to DSM-5¹⁶ criteria for specific psychiatric disorders. The Chi-square significance between the gender of Patients and the onset of illness was calculated, and the standard p-value of 0.05 would be necessary for statistical significance. Our null hypothesis with 95% confidence will determine that there is no association between the gender of Patients and the onset of

illness. The statistical package of social sciences (SPSS-21) was used for analysis, and the results were discussed.

RESULTS

Descriptive statistics of the demographic characteristics of participants are mentioned in **Table I**.

Table I: Descriptive statistics of demographic characteristics of participants (Total participants = 150)

Variable	Category	Frequency	Percent	Valid Percent
Age Ranges	10-20	32	21.3	21.3
	21-30	52	34.7	34.7
	31-40	41	27.3	27.3
	41-50	17	11.3	11.3
	51-60	8	5.3	5.3
Gender	Male	69	46.0	46.0
	Female	81	54.0	54.0
Total		150	100.0	100.0
Marital Status	Single	73	48.7	48.7
	Married	76	50.7	50.7
	Divorced	1	.7	.7
Education	Uneducated	47	31.3	31.3
	Primary	7	4.7	4.7
	Middle	11	7.3	7.3
	Matric	24	16.0	16.0
	Inter	33	22.0	22.0
	Graduate/above	28	18.7	18.7
Region	Peshawar	89	59.3	59.3
	Mardan	10	6.7	6.7
	Sawabi	5	3.3	3.3
	Malakand	7	4.7	4.7
	Bannu	2	1.3	1.3
	Kohat	5	3.3	3.3
	Nowshera	1	.7	.7
	Swat	7	4.7	4.7
	Tribal area	17	11.3	11.3
Karak	7	4.7	4.7	

Descriptive statistics of psychiatric disorder is mentioned in **Table II**.

Table II: Descriptive statistics of psychiatric disorder (Total participants = 150)

	Frequency	Percent	Valid Percent
Anxiety disorders	13	8.7	8.7
Depression	69	46.0	46.0
Bipolar disorders	3	2.0	2.0
Dissociative	18	12.0	12.0
Ocd	8	5.3	5.3
Paranoid psychosis/schizo	10	6.7	6.7
Acute stress related	3	2.0	2.0
Epilepsy	7	4.7	4.7

Drug addiction	3	2.0	2.0
Phobic symptoms	13	8.7	8.7
Others	3	2.0	2.0
Total	150	100.0	100.0

The Chi-square significance is .015, so there is statistical significance between the gender of Patients and the onset of illness. **Table III** p-value is smaller than the standard p-value of 0.05, and that is statistically significant. Therefore, we reject the null hypothesis with 95% confidence and determine that there is evidence of an association between the gender of Patients and the onset of illness.

Table III: Cross-tabulation of the gender of patients and onset of illness

		New	Old	Total	Value	Df	P-Value
Gender	Male	31	38	69	5.940	1	0.015
	Female	21	60	81			
	Total	52	98	150			

DISCUSSION

Based on data analysis and result finding, it is concluded that Covid-19 negatively affects psychological well-being. Furthermore, stress, anxieties and depression were the common psychological problem in the general population¹⁶.

During Covid-19, women were more affected psychologically and socially compared to men both as a worker and at home because of the high workload at home and in the work environment. Similarly, during the strict lockdown period, women faced domestic issues within their homes, adversely affecting their mental well-being. Studies have shown that women with previous psychiatric disorders reported a high level of depression and anxiety compared to those without a history of psychiatric disorders^{18,19}.

In this Pandemic, most patients were from the younger population, which is also supported by several international studies. The reason behind the effectiveness of the younger population is the closure of the school, social distancing, and restriction on social interaction, which adversely affect their learning ability and social life. In addition, younger and fresh employees are more vulnerable to job loss than old and experienced employees²⁰.

Multiple reasons adversely affect the physical and psychological health during the Covid Pandemic, among which the most significant one is loneliness due to social distancing and, on a broader level, countries' strict lockdown. It is also indicated by a study conducted by Bao and Zhong (2021)²¹ that during COVID-19, the most common prevalent feeling was that of loneliness, and they are 2.5-fold greater chances of having mental health problems and 1.6-fold more urges to avail any mental health facilities from mental health professionals. The increases in the

prevalence of psychiatric disorders were associated with the increased rates of infection with SARS-CoV-2 and decreased social mobility. Reducing the transmission of the virus, restricting the public to avail public transport, closing schools and businesses and, at a more extreme level, the stay-at-home order and enforced lockdown were considered the most critical factors²².

Furthermore, it is reported that providing mental health services improves their psychological well-being. A research study in the United Kingdom concluded that during Covid-19, loneliness increased from 27% to 50.8% in the general population^{23,24}.

The current study findings further revealed that people most frequently report depression compared to other mental disorders, supported by a study conducted in Beijing. A study conducted in Beijing concluded that depression is the most prevalent mental disorder, followed by other neurotic spectrum disorders such as anxiety and post-traumatic stress disorder (PTSD)²⁵. In international literature, published studies indicate how population shock, such as uncertainty about events, adversely affects environmental, social, financial and, more specifically, health-related factors that can increase the prevalence of depression and anxiety disorders. After the economic turmoil in 2009, Frasilho and colleagues²⁶ identified several studies showing the increase in common psychiatric disorders in the general population.

CONCLUSION

The covid-19 Pandemic has disrupted the personal, social, economic, educational, industrial and even religious aspects of life in almost all countries around the globe. The increased prevalence of common psychiatric disorders and their impact among females and younger populations is worrisome. Therefore we suggest that tackling this impact on mental health is an immediate challenge, and short- and long-term policies are needed to protect and promote mental health services in our population. Neglecting mental health problems should not be an option.

Ethical permission: MTI Hayatabad Medical Complex Peshawar IRB letter No. 345/REC/B&PSC/2020.

Conflict of Interest: No conflicts of interest, as stated by our authors.

Financial Disclosure / Grant Approval: No funding agency was involved in this research.

Data Sharing Statement: The corresponding author can provide the data proving the findings of this study on request. Privacy or ethical restrictions bound us from sharing the data publically.

AUTHOR CONTRIBUTIONS

Akhunzada WA: Writing and statistical analysis

Laghari DK: Abstract writing, revisions and submissions

Rasheed H: Results presentation and tabulation

Abbas A: SPSS and comparisons analysis
 Hameed N: Discussion Writing
 Ayub S: Conclusions and future implications
 Mughal H: References and manuscript revision

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