



ORIGINAL RESEARCH PAPER

Psychology

MENTAL HEALTH CHALLENGES, RESILIENCE AND COPING STYLE CONTRIBUTING TO THE WELL BEING OF PATIENTS RECOVERED FROM COVID - 19.

KEY WORDS: COVID - 19, Pandemic, Coping, Resilience, Quality of life

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ABSTRACT

BACKGROUND: COVID- 19 has been a difficult time for the world and with economic shutdown, the new normal ways of wearing a mask, the quarantine procedures and many different ways to function and adapt has elicited mental health challenges among many. The changing ways of situations and the fear of contracting the virus has elicited serious mental health challenges among people. Hence this study aims to understand the mental health challenges among COVID-19 recovered patients and to understand the resilience and coping style of people recovered from contracting the illness. **METHODS:** 41 Participants who contracted the COVID-19 virus in Chennai participated in the study. Participants who recovered from COVID-19, were contacted via telephone and participants who consented to the study were assessed using Impact of Event-revised (IES-R) scale, Patient health Questionnaire (PHQ -9), Coping scale, brief resilience scale and Quality of life scale. The data obtained will be analysed using Pearson correlation co-efficient. **RESULTS:** The results of the study depicts the mental health challenges of the patients recovered from COVID - 19, on the different psychological issues along side the resilience and coping strategies used by them. The study also depict an understanding of these factors on the quality of life of the participants in their recovered stage.

1. Introduction

When the WHO declared the pandemic due to the COVID - 19, a virus that originated in china, many lives around the world was halted. The pandemic has brought about significant changes in everyone's life. India is one of the countries that was severely affected by the pandemic. It has caused significant distress in physical and mental health of people. The pandemic has caused desperation, fear, and anxiety that has caused radical changes in the quality of life of people, the coping strategies and affected their well being. COVID - 19. The social isolation and quarantine measures that has negative impact on the psychological resilience and the quality of life of everyone.

1.1 Mental health challenges

Fear, worry, and stress are normal responses to perceived or real threats, and at times when we are faced with uncertainty or the unknown. So it is normal and understandable that people are experiencing fear in the context of the COVID-19 pandemic (WHO, 2020). Jalloh et al (2018) conducted a study on Impact of Ebola experiences and risk perceptions on mental health in Sierra Leone and found that symptoms of Post-Traumatic Stress Disorder (PTSD) and anxiety-depression were more prevalent even after 1 year of Ebola response. This is also in corresponding to the HIV pandemic. Wang et al (2020) conducted an online survey among 1210 participants in china, and they were screened for Depression, anxiety and stress scale and Impact of event - revised scale and found that 16.5% moderate to severe depressive symptoms; 28.8% moderate to severe anxiety symptoms; 8.1% moderate to severe stress.

1.2 Resilience

Resilience in general terms known as the ability of the person to bounce back from the distress. The American Psychological Association (2014) defines resilience as the "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress". Resilience as a factors plays a huge role in the recovery. It is also important to note that trauma survivors who develop PTSD may be just as resilient as trauma survivors who don't develop PTSD (Yehuda & Flory, 2007). Many studies have found that resilience is higher in people recovering from illness and during adverse situations, research has shown that there tend to be lower rates of resilience to infectious disease outbreaks (Bonanno G.A, 2004).

1.3 Coping style

Lazarus and Folkman (1984) defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person". The type of coping style has an impact on the recovery of the person from illness. In a study done in China on nurses who have been exposed to COVID - 19, it was found that factors such as job satisfaction, male and positive coping had low post traumatic scores which reduced the risk of psychological impairment (WangYK et al, 2020).

COVID - 19 is regarded as a highly infectious disease that affects the physical health of the individual, however the impact of the illness impairs the mental health of the person impacting various areas of the life. Thus the present study aims to study the Mental health challenges, the coping style and resilience factors that have an impact on the Quality of life of patients recovered from COVID - 19 from Chennai.

2. METHODOLOGY

2.1 Study design

An exploratory design was adopted. The participants for the study was recruited using a structured questionnaire from recovered COVID - 19 participants in Chennai. Participants who recovered from COVID- 19, were contacted and an online consent was obtained from them. The study excluded participants with prolonged symptoms of COVID - 19 and under treatment of psychiatric disorders. The study included participants who had recovered from the illness within one month and participants who could read and write English belonging to Chennai.

2.2 Hypothesis

- There is no significant relationship between resilience and Physical domain of QOL among COVID - 19 recovered patients.
- There is no significant relationship between resilience and Psychological domain of QOL among COVID - 19 recovered patients.
- There is no significant relationship between resilience and Social domain of QOL among COVID - 19 recovered patients.
- There is no significant relationship between resilience and Environmental domain of QOL among COVID - 19 recovered patients.

- There is no significant association between mental health challenges and coping style among recovered COVID - 19 patients.
- There is no significant association between Impact of event and coping style among recovered COVID - 19 patients.
- There is no significant difference between mode of quarantine and quality of life among recovered COVID - 19 patients.

2.3 Questionnaire

A total of four online questionnaire were sent to the 41 participants who consented to the study, post screening of psychiatric illness. A basic demographic detail was obtained at the first section of the study and the rest of the section contained the four questionnaire. Impact of Event scale - revised is a 22 item self report measure used to assess the subjective distress by a traumatic event. The scale contains a three factor structure - intrusion, arousal and hyperarousal which assess the symptomatology of PTSD. It is a 4 point likert scale with the mean response of the scale scores range from 0 - 4. The total score range of the scale is from 0 - 88, and score above 24 can yield a meaningful clinical concern.

Patient Health Questionnaire (PHQ - 9) is a 9 item self report measure use to determine the level of depression. It consists of 9 item questions, which is scored between 0 -3. The scores range from 0 - 27 severity score. Scores of 5, 10, 15, and 20 represent cut points for mild, moderate, moderately severe and severe depression, respectively.

BRIEF Resilience Scale is a 6 item scale used to measure the ability to bounce back from the stressful event. BRIEF COPE is a 28 item self report questionnaire designed to measure the effective and ineffective ways to cope with a stressful event. The 6 item questionnaire has a 5 point likert scale, and scores ranging from 6- 30. The average of the score measures the severity such as low, normal and high resilience.

WHO QOL - BREF is an assessment of individual quality of life in 4 domains such as - Physical, Psychological, Social and Environmental. The scale has a 5 point likert scale and mean score for each item is calculated and the mean score per domain range between 4 and 20. The higher scores indicate higher quality of life.

2.4 Statistical analysis

The study employed SPSS for Mac for data analysis. The demographic details are presented with the descriptive statistics and Pearson correlation was used to understand the relation between resilience and quality of life, chi square test was used to understand the association among variables, t test was used to see the mean difference among home quarantine and hospital hospital patients on Quality of life.

3. Results

Among the sample of 41 participants, 24 participants were men (60%). 14 participants belonged to the age group of 25-30, and 12 participants were above 45 years of age. The majority of the population (53.7%) were working. Among the sample 20 participants were treated for the illness via home quarantine. The prevalence of symptoms of PTSD among the sample from IES - R was 32% and 39% had some symptoms of depression. On the chi-square test of independence to investigate the relation between PHQ (Depression) and Coping style (Approach and avoidance). The chi square value was 0.57 with the associated probability level was 0.81. It was found that there was no significant relationship between depression and the style of coping. Thus we accept the null hypothesis, "there is no significant difference between mental health challenges and coping style among recovered COVID - 19 patients" (table 1).

Table 1 Represents the association between PHQ and coping style among COVID - 19 recovered patients

Variable	Group	X2 Value	df	Significance (p)
PHQ	Approach	0.57	1	0.812
	Avoidance			

To test the hypothesis, "there is no significant difference between impact of events (presence of PTSD symptoms) and coping style among recovered COVID - 19 patients", (table 2) chi-square test of independence was employed. The chi square value was 7.82 with the associated probability level was 0.05. It was found that there was a significant relationship between impact of events (presence of PTSD symptoms) and the style of coping. The Cramer's value indicates 0.43 amount of variance which can be explained with the variance in the coping style, we rejected the null hypothesis.

Table 2 Represents the association between IES -R and coping style among COVID - 19 recovered patients

Variable	Group	X2 Value	df	Significance (p)
IERS	Approach	7.82	1	0.005
	Avoidance			

A correlation co-efficient was employed (See table 3) to understand the relationship between Physical quality of life and resilience, social quality of life and psychological quality of life, social and environmental quality of life. There is a relationship between Physical quality of life and resilience, social quality of life and psychological quality of life, social and environmental quality of life. However, there is no relationship between resilience and psychological, social and environmental quality of life. We also understand that, there is no difference between mode of quarantine and quality of life domains - Environmental, social, psychological and physical quality of life among COVID - 19 recovered patients. (Table 4)

Table 3 Represents the correlation coefficient between Resilience and QOL domains among COVID - 19 recovered patients

Variables	Resilience	Physical QOL	Psychological QOL	Social QOL	Environment QOL
Resilience	1				
Physical QOL	0.316*	1			
Psychological QOL	0.162	-0.91	1		
Social QOL	0.361	0.040	0.64*	1	
Environment QOL	0.225	0.11	0.59**	0.725 **	1

Table 4 Represents the difference in QOL domains between Home quarantine and Hospital admitted patients

Variables	Groups	Mean	SD	t - value	P - Value
Environment	Home quarantine	65.65	21.17	1.281	1.67
	Hospital quarantine	58.14	16.11		
Social	Home quarantine	59.95	22.65	0.93	0.26
	Hospital quarantine	53.52	21.38		
Psychological	Home quarantine	52.55	21.71	0.40	0.52
	Hospital quarantine	50.05	18.27		
Physical	Home quarantine	49.15	22.92	-0.35	1.12
	Hospital quarantine	49.38	18.91		

DISCUSSION

The results of the study are important, as the study took place during the period of an infectious disease that distressed the physical, social, and mental health aspect and led to economic crisis in the world. Although this study has an uneven distribution of gender (60% were men) and the mental health challenges that they undergo differ, it was noted that around 39% of the participants experienced some form of mental health challenges post COVID - 19 and 32% of the participants show significant symptoms of PTSD during the recovery stage. The study found that there was no the association between Depression (PHQ) and coping style, which is not in line with the existing literature where, that coping behaviours were associated with the levels of depression (Guo J, 2020). The lack of significance can be attributed to the low sample size, and the unique nature of the pandemic. People had to stay home, they were more dependant on the friends and family, and actively engaged themselves in the recovery process, hence there could be a different style of coping that people engaged in rather than approach and avoidance. The style of coping during pandemic needs further investigation. Although the depression levels were 39%, the lack of significance may also be attributed to low sample size and needs further evaluation for individual coping employed. There was significant association between Impact of event (PTSD symptoms) and coping style, which may be due to the witnessing of illness impacting the others during the illness, the social isolation, the experience of quarantine post recovery, physical illness, fear of survival, loss of livelihood and the stigma faced by the person with illness could have significantly contributed (Tuker P, 2021). There was also significant relationship between the physical quality of life and resilience, which could be an important result in the study. The physical space gave high resilience in the individuals. The presence of a safe physical space could directly contribute to the resilience in the individual which enabled them to cope better. There also needs to be an investigation of resilience in the absence of physical quality of life, that may have hampered many lives during the pandemic. It is also important to note that the two different groups - hospital and home quarantine did not differ in their quality of life.

4. Limitation

The study however has various limitation factors. The study was conducted only to literate population belonging to a particular region, hence the results of the study could not be replicated. The sample of the study in terms of age, gender was also unevenly distributed. Further studies need to employ a large sample size, and geographical location. The study also did not investigate on the individual coping and resilience factors that played a role. The future investigation can also focus on the interdependence of the variables on the mental health.

5. CONCLUSION

In conclusion, there was significant levels of mental health challenges and symptoms of PTSD that is prevalent among people recovering with COVID - 19. The various factors such as resilience, coping, and Quality of life are to be considered. Symptoms of PTSD was associated with the coping style and physical quality of life has been correlated with resilience. Further investigation aims to understand the individual coping style employed and various other factors that contribute to the mental health challenges on patients recovering from COVID-19.

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