Post-COVID Mental Health and Wellness Among Adults in the Indian Population

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ABSTRACT

Background:- The COVID-19 pandemic caused important physical, psychological and social consequences. Anxiety, stress, loneliness, sleep disturbances, fatigue, and difficulty returning to normal activities may persist after recovery from COVID-19. The present study assessed the post COVID mental health and well-being in adult Indian population.

Objectives:- To assess the post-COVID mental health and wellness. To describe demographic characteristics. To identify emotional, physical and lifestyle changes. To determine factors affecting mental wellbeing. To assess wellness activities and sources of support.

Methods:- A descriptive cross-sectional study was performed using a structured questionnaire administered via Google Forms. The questionnaire comprised of items related to demographic characteristics, COVID-19 diagnosis and severity, duration of recovery, mental-health changes, stress and loneliness, emotional and physical changes, factors affecting wellbeing, coping activities, sources of support and ten five-point Likert scale statements. Data of 130 adults were simulated and analyzed using frequency, percentage and mean scores.

Results:- Of the 130 participants, 36.9% were aged 18–24 years and 51.5% were males. 79.2% reported previous COVID-19 diagnosis. Among the participants who were diagnosed, 53.4% had mild illness. In 51.4% mental health was slightly or much worse overall. Anxiety/excessive worry was reported by 52.4% , fatigue by 55.3% and sleep disturbances by 46.6%. The most common source of support was family members (65.0%). The highest rating-scale mean was for emotional support (3.62).

Conclusion:- The recovery from COVID is both psychological and wellness-related. Mental-health screening, social support, healthy coping methods, and proper counseling can aid recovery and long-term wellbeing.

Keywords:- COVID-19; Post COVID; Wellness; Indian Adults; Mental Health

1. Introduction

The COVID-19 pandemic had profound physical, psychological and social impacts on a global scale. Adults in India experienced anxiety, depression, stress, loneliness, sleep disturbances, fear of infection, financial difficulties and disruption of social and occupational activities. These psychological consequences are mentioned in the original study background and their effects may extend beyond the acute phase of COVID-19.

Health problems may persist following the initial COVID-19 infection. The World Health Organization defines post-COVID-19 condition as symptoms that arise or persist following COVID-19 and may impair daily activities. Common symptoms include fatigue, cognitive difficulties, memory or concentration problems, sleep problems, depression and anxiety.

There is also evidence of a large burden of mental health after COVID-19. Anxiety and depression were estimated to have pooled prevalences of around 23% and 25% respectively in a systematic

review and meta-analysis of people with long COVID, tho estimates varied widely between studies. Another meta-analysis of post-COVID syndrome reported depression and anxiety estimates of about 23% each and sleep disorders of about 45%.

Thus, the present study considers mental health and wellness together. You talk about emotional health, psychological functioning, sleep, social wellbeing, coping ability and quality of life as important components of wellbeing post-COVID in your original research document. The questionnaire therefore includes items on emotional changes, physical and lifestyle changes, factors influencing wellbeing, wellbeing activities, sources of support and rating-scale measures.

Objectives:-

1. To assess post-COVID mental health and wellness among adults in the Indian population.
2. To describe the demographic characteristics of participants.
3. To identify common emotional, physical, lifestyle, and social changes after COVID-19.
4. To identify factors affecting mental wellbeing after COVID-19.
5. To assess activities and sources of support that contribute to wellbeing.
6. To assess perceived coping, quality of life, return to usual activities, and overall mental-wellbeing recovery.

2. Methods

A descriptive cross-sectional study design was used to assess the post-COVID mental health and wellness of adults in the Indian population. The convenience sample consisted of 130 adult participants. Participants were subgrouped by age and sex and asked regarding previous COVID-19 diagnosis, severity of infection and time elapsed since recovery. The study aimed to explore the psychological challenges and positive aspects of post-COVID wellness.

The data were collected by a structured questionnaire using Google Forms. The questionnaire was composed of demographic data, COVID-19-related data, mental health related questions, multiple response questions and five-point Likert rating scale. Variables on mental health included perceived change in overall mental health, prolonged stress or worry, social isolation or loneliness, professional help-seeking, and ability to cope with daily stress. The questionnaire also looked at emotional changes such as anxiety, low mood, irritability, mood swings, difficulty concentrating and memory problems.

Physical and lifestyle changes were evaluated including tiredness, sleep problems, decreased physical activity, appetite or weight changes, decreased social interaction and difficulty in returning to normal activities. Participants were also asked about factors affecting their mental wellbeing, including academic/work stress, financial difficulties, social isolation, family-related stress, fear of reinfection, loss of a loved one, and ongoing physical symptoms. Wellness activities and sources of support including family, friends, health professionals, counselling, exercise, meditation/yoga, hobbies and adequate sleep were also recorded.

Participants rated 10 statements in the rating section on a five-point Likert scale from 1 = Strongly Disagree to 5 = Strongly Agree. The statements measured anxiety, sadness, sleep, concentration and memory, emotional exhaustion, quality of life, coping with stress, emotional support, return to usual activities and overall mental-wellbeing recovery. Data were analysed using frequency, percentage and mean scores. The multiple response questions were analysed by each response option separately. The questionnaire also contained information about the

study and consent to participate.

3. Results

A total of **130 participants** were included in the prepared dataset. The findings are presented in three main subsections according to the study objectives.

3.1 Demographic and COVID-19 Characteristics

Demographic characteristics of participants and COVID-19 related information are given in Table 1. The highest percentage of the 130 participants was in the age group of 18–24 years (36.9%), followed by participants aged 25–34 years (27.7%). 51.5% of the participants were male and 46.2% were female.

Regarding COVID-19 history, 79.2% of participants reported a previous diagnosis of COVID-19, 16.9% reported no previous diagnosis, and 3.8% were unsure. Among participants with a diagnosis of COVID-19, the most common illness severity category was mild (53.4%), followed by moderate illness (26.2%). Almost half of all diagnosed participants (48.5%) said that they had recovered more than one year ago.

Table 1. Demographic characteristics and COVID-19-related characteristics of participants (N = 130)

Characteristics	Category	Frequency (n)	Percentage (%)
Age	18–24 years	48	36.9
	25–34 years	36	27.7
	35–44 years	23	17.7
	45–54 years	14	10.8
	≥55 years	9	6.9
Gender	Male	67	51.5
	Female	60	46.2
	Prefer not to say	3	2.3
Diagnosed with COVID-19	Yes	103	79.2
	No	22	16.9

	Not sure	5	3.8
COVID-19 severity*	Asymptomatic	12	11.7
	Mild	55	53.4
	Moderate	27	26.2
	Severe/required hospitalization	9	8.7
Duration since recovery*	<3 months	10	9.7
	3–6 months	18	17.5
	6–12 months	25	24.3
	>1 year	50	48.5

***COVID-19 severity and duration since recovery are among participants who reported previous COVID-19 diagnosis (n = 103).**

3.2 Post-COVID Mental Health, Emotional, Physical and Lifestyle Changes

Findings relating to mental health, emotional changes, physical and lifestyle changes and factors affecting wellbeing are presented in Table 2 . And more than half of people who had COVID-19 said their general mental health has gotten worse since recovering. Specifically, 35.9% reported their mental health was somewhat worse and 15.5% reported it was much worse, for a combined proportion of 51.4%.

Long-term stress or anxiety was also often reported. Anxiety or excessive worry was the most common emotional change (52.4%), followed by feeling depressed or low (41.7%) and mood changes (37.9%). Fatigue or tiredness (55.3%) was the most common finding among physical and lifestyle changes, followed by sleep disturbances (46.6%) and decreased physical activity (37.9%).

The continued physical symptoms (42.7%), academic or work-related stress (40.8%) and social isolation (37.9%) were the most frequently cited factors impacting mental wellbeing.

Table 2. Post-COVID mental-health, emotional, physical and lifestyle characteristics (n = 103)

***COVID-19 severity and duration since recovery are among participants who reported previous COVID-19 diagnosis (n = 103).**

Domain	Finding	Frequency (n)	Percentage (%)
Overall mental health	Slightly worse	37	35.9

	Much worse	16	15.5
Prolonged stress/worry	Sometimes	34	33.0
	Often	25	24.3
	Very often	13	12.6
Social isolation/loneliness	Sometimes	32	31.1
	Often	22	21.4
	Always	10	9.7
Emotional changes*	Anxiety/excessive worry	54	52.4
	Feeling depressed/low	43	41.7
	Mood changes	39	37.9
	Loss of motivation	36	35.0
	Irritability	35	34.0
	Difficulty concentrating	31	30.1
	Memory problems	27	26.2
Physical/lifestyle changes*	Fatigue/tiredness	57	55.3
	Sleep disturbances	48	46.6
	Reduced physical activity	39	37.9
	Reduced social interaction	34	33.0
	Difficulty returning to normal routine	32	31.1
Factors affecting wellbeing*	Ongoing physical symptoms	44	42.7
	Academic/work-related stress	42	40.8
	Social isolation	39	37.9
	Fear of reinfection	35	34.0
	Family-related stress	31	30.1
	Financial difficulties	28	27.2

	Loss of loved one	19	18.4

3.3 Wellness Activities, Sources of Support and Mental-Wellbeing Rating

Table 3 shows activities used to maintain or improve mental wellbeing, sources of support and the mean scores obtained from the five-point mental-wellbeing rating scale.

The most reported wellness activity was spending time with family or friends (60.2%), followed by adequate sleep or rest (54.4%) and exercise or physical activity (45.6%). Family members were also the most frequently reported source of support (65.0%) followed by friends (51.5%).

The rating scale results showed that the mean score for emotional support from family, friends or the community was the highest (3.62). The negative mental health experiences with the highest mean scores were increased anxiety or worry (3.42) and mental or emotional exhaustion (3.37). The mean score for difficulty concentrating or remembering was the lowest (3.06).

Table 3. Wellness activities, sources of support and five-point mental-wellbeing rating scores (n = 103)

Category	Item	Frequency n (%) / Mean
Wellness activities*	Spending time with family/friends	62 (60.2%)
	Adequate sleep/rest	56 (54.4%)
	Exercise/physical activity	47 (45.6%)
	Hobbies/entertainment	45 (43.7%)
	Meditation/yoga	38 (36.9%)
	Religious/spiritual activities	28 (27.2%)
	Professional counselling/therapy	18 (17.5%)
Sources of support*	Family members	67 (65.0%)
	Friends	53 (51.5%)
	Online support/social media	29 (28.2%)
	Healthcare professionals	24 (23.3%)
	Workplace/educational institution	21 (20.4%)

	Community/religious groups	19 (18.4%)
	Mental-health professionals	17 (16.5%)
Rating scale	Increased anxiety/worry	3.42
	Feelings of sadness/low mood	3.18
	Difficulty maintaining regular sleep	3.24
	Difficulty concentrating/remembering	3.06
	Mental/emotional exhaustion	3.37
	Quality of life affected	3.31
	Confidence coping with daily stress	3.08
	Emotional support from family/friends/community	3.62
	Return to usual activities	3.21
	Overall mental wellbeing recovered	3.15

*Multiple responses were permitted. Rating scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Overall Results

Overall, the findings suggest that post-COVID mental health and wellness concerns were prevalent among the prepared-data set participants. The most salient concerns were fatigue, anxiety or excessive worry, sleep disturbances and persistent physical symptoms. At the same time, social and family support were identified as key positive factors. Family members were the most frequently cited source of support, and time spent with family or friends was the most common wellness activity.

The results suggest that post-COVID recovery requires both management of psychological and physical difficulties, and promotion of positive wellbeing. This is in line with the study aim to explore not only mental health problems but also coping, social support, quality of life and recovery.

4. Discussion

The present study assessed post-COVID mental health and wellness in 130 adults. The main results showed that mental and physical problems associated with COVID-19 remained common in the prepared dataset. More than half of the participants who had had COVID-19 said their mental health was somewhat or much worse. Anxiety, fatigue, sleep problems and enduring physical symptoms were especially prevalent.

The prevalence of 52.4% reporting anxiety or excessive worry is broadly in line with the evidence of a substantial mental health burden following Covid-19. A recent systematic review and meta-analysis in long-COVID populations estimated pooled prevalence of anxiety at approximately 23%,

with large variation across studies. The higher percentage obtained in the current dataset can be related to the use of a self-reported questionnaire item instead of a validated diagnostic scale and therefore the 52.4% should not be considered as a clinical prevalence of anxiety disorder.

Similarly 41.7% said they felt depressed or low. Previous South Asian studies found high levels of anxiety and depression during the pandemic, and more recent long-COVID evidence shows that depression and anxiety can persist post-infection. Differences between the results of studies could be related to the characteristics of the population, timing and sampling, measurement instruments, and definitions of post-COVID symptoms.

Fatigue (55.3%) was the most frequently reported physical/lifestyle change followed by sleep disturbances (46.6%). The findings are in line with descriptions of post-COVID condition by the WHO, which include fatigue, cognitive difficulties, and sleep problems among the commonly reported symptoms.

The main reported factor affecting mental wellbeing was ongoing physical symptoms (42.7%). This could help explain the relationship between physical recovery and psychological wellbeing. Controlled cohort studies also provide evidence that post-COVID conditions can be associated with decreased quality of life and functional impairment in follow-up.

One important positive finding was the importance of social support. Family members were a source of support for 65.0% and spending time with family or friends was a helpful wellness activity for 60.2%. This is consistent with the overall emphasis of the study on wellness, not merely psychological symptoms. The original research paper refers to emotional health, social wellbeing, coping, sleep, and quality of life.

The perceived emotional support was relatively strong in the rating results (mean 3.62). At the same time, anxiety/worry (3.42) and emotional exhaustion (3.37) remained important issues. This combination suggests that individuals can have meaningful social support while experiencing post-COVID psychological difficulties.

Clinical Relevance

The findings support the need for mental health assessment as part of post-COVID follow-up. Nurses and other healthcare professionals may screen for anxiety, low mood, sleep disturbance, fatigue, cognitive difficulties, social isolation and problems reintegrating into normal activities. Psychological interventions and appropriate adapted physical activity are recommended by WHO guidance for anxiety and depression linked to post-COVID condition.

Public Health Relevance

Post-COVID services should address both physical and psychological recovery. Health education, early identification of mental health concerns, counselling, social support interventions, sleep and lifestyle education, and accessible community based services may help improve wellbeing.

Research Relevance

Future studies in India should use larger and more representative samples, validated mental-health instruments and longitudinal follow-up. This would allow researchers to distinguish temporary distress from longer-term post-COVID mental health issues, and identify groups that need extra support.

5. Conclusion

The prepared dataset of 130 participants was used to examine post-COVID mental health and well-being among Indian adults in the current study. The results showed 79.2% of the participants had a history of COVID-19 disease. The most common age group was 18-24 years (36.9%) and males constituted 51.5% of the sample. Among those who had contracted COVID-19, the most common severity category was mild infection (53.4%) and 48.5% reported that they had recovered more than one year ago.

The findings suggest that mental health concerns after COVID were fairly common. Overall, 51.4% of participants reported that their mental health was a little or much worse after COVID-19. The most commonly reported emotional change was anxiety or excessive worry (52.4%), followed by feeling depressed or low (41.7%), and mood changes (37.9%). Concerns about physical and lifestyle factors were also prominent, in particular fatigue or tiredness (55.3%), sleep disturbance (46.6%) and decreased physical activity (37.9%). The most frequently reported factors influencing mental wellbeing were persistent physical symptoms (42.7%) and stress related to academics or work (40.8%).

Despite these difficulties, the study identified important positive factors that supported recovery and wellness. The most common wellness activity was spending time with family or friends (60.2%) and the most common source of support was family members (65.0%). Emotional support received the highest mean score on the five-point rating scale at 3.62, followed by anxiety/worry (3.42) and mental/emotional exhaustion (3.37), which were still significant concerns. These findings highlight the need for post COVID care to take into consideration both psychological difficulties and positive wellness.

To conclude, post COVID recovery needs to consider mental health assessment, emotional support, healthy lifestyle practices, counselling and social support, and physical health. Early identification of anxiety, low mood, sleep problems, fatigue and difficulties returning to normal activities can help improve long-term wellbeing. However, these observations are based on simulated data and should be interpreted as illustrative until supported by real participant data.