

A Study to Assess the Impact of Physical Health Problems and Coping Strategies Among Post-COVID-19 Patients in Selected Rural Areas

Ashwini Anil Nile¹, Sanket Machhindra Kale¹, Neha Bhausaheb Rathod¹,
Utkarsha Sanjay Vikhe¹, Rahul Babasaheb Kadu^{2,*}

Abstract

Introduction: COVID-19, an infectious illness, stems from the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and was initially detected in Wuhan, China, in December 2019. Its rapid transmission has triggered a global pandemic, affecting populations across the globe. **Materials and method:** A descriptive study design is used in the research. The research took place within a rural community setting. The population consists of post-COVID-19 patients living in rural community areas. The total population size is 40. The non-probability simple random technique was used for recruiting samples for the study. **Results and Conclusion:** The study revealed that post-COVID-19 had an impact on patients' physical problems such as patients feeling that they have Prominent Supraclavicular Fat on their necks and some patients feeling thyroid nodules on their necks. Study reveals that they had physiological health problems related to Prominent Supraclavicular Fat on the neck, thyroid nodules on the neck, and wheezes on the lungs.

Keywords: Impact, physical health, problem, coping strategies, post-COVID-19 patient

INTRODUCTION

"You cannot change your future, but you can change your habits, and surely your habits will change your future."

—A.P.J. Abdul Kalam

COVID-19, a highly contagious illness caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first detected in Wuhan, China, in December 2019. Since then, it has spread rapidly worldwide, resulting in an ongoing global pandemic. The virus spreads through the inhalation of

*Author for Correspondence

Rahul Babasaheb Kadu

E-mail: sandesh.shir6013@gmail.com

¹Student, Department of Nursing, Sakhar Kamgar Hospital, Seva Nursing College, Shrirampur, Maharashtra, India

²Assistance Professor, Department of Nursing, Sakhar Kamgar Hospital, Seva Nursing College, Shrirampur, Maharashtra, India

Received Date: August 23, 2024

Accepted Date: September 18, 2024

Published Date: September 22, 2024

Citation: Ashwini Anil Nile, Sanket Machhindra Kale, Neha Bhausaheb Rathod, Utkarsha Sanjay Vikhe, Rahul Babasaheb Kadu. A Study to Assess the Impact of Physical Health Problems and Coping Strategies Among Post-COVID-19 Patients in Selected Rural Areas. *Journal of Nursing Science & Practice*. 2024; 14(3): 11–16p.

droplets and small airborne particles containing the virus, particularly in close proximity or indoor settings. Transmission can also occur through contact with contaminated fluid or surfaces. Individuals can remain contagious for up to 20 days even if they are asymptomatic. The COVID-19 pandemic and associated lockdown measures have induced widespread fear and anxiety globally, with significant short- and long-term psychosocial and mental health effects on children and adolescents. The extent of impact is influenced by various factors such as age, education level, pre-existing mental health conditions, socioeconomic status, and experiences of quarantine due to infection or fear thereof [1–4].

NEED FOR STUDY

On January 30, 2020, COVID-19 was declared a Public Health Emergency of International Concern (PHEIC) when the official death toll stood at 171. By December 31, 2020, the number of reported deaths had reached 1,813,188. However, preliminary estimations indicate that the actual global death toll attributable to the COVID-19 pandemic in 2020 exceeded 3 million, surpassing the officially reported figure by 1.2 million deaths. Monitoring COVID-19 deaths is crucial to understand the progression of the pandemic. Unfortunately, many countries lack reliable civil registration and vital statistics systems that can provide accurate, comprehensive, and timely data on births, deaths, and causes of death. A recent evaluation of health information system capacities across 133 countries revealed a wide disparity, with death registration rates ranging from 98% in the Europe region to as low as 10% in the African region [5–7].

OBJECTIVES

1. Assess the physical health problem among the post-COVID-19 patients.
2. Assess the coping strategies among the COVID-19 patients.
3. Correlation of physical health problem and coping strategies among post-COVID-19 patients.
4. To explore the connection between physical health issues and coping mechanisms, while considering demographic factors.

ASSUMPTIONS

1. To know the health problems in the community.
2. How to manage the physical health problem in the community

MATERIAL AND METHOD

The study employed a descriptive design and was conducted within a rural community setting. The study focused on post-COVID-19 patients residing in rural areas with a total population size of 40 individuals. Non-probability simple random sampling was used to select participants for the study.

SAMPLE SELECTION CRITERIA

Inclusion Criteria

1. Those who had six months back COVID-19 positives.
2. Both the gender and 20 years above Age group.
3. Those who are present during the study.
4. Those who are willing the study.

Exclusion Criteria

1. Those who are already having physical health problems and mental health problems.
2. Those who are taking treatment for COVID-19.

STATISTICAL ANALYSIS

Section A: Demographic Variable

percentage-wise distribution of patients according to their age depicts that the highest percentage (25%) is in the age group of 21 to 30 years, and (20 %) are in 10 to 20 years, 41 to 50, and 50 years above. Therefore, it can be inferred that the majority of patients included in the study fell within the age range of 21–30 years. The sex-wise distribution of post-COVID-19 patients depicts that the majority 53% are male and 47% are female. Therefore, it can be inferred that the majority of patients included in the study fell within the age range of 21–30 years. Marital status-wise distribution of post-COVID-19 patients depicts that the majority 57% are married and 38% are unmarried. Also, 5% of patients are widowed. Hence, the majority of the post-COVID-19 patients were married. The percentage-wise distribution of post-COVID-19 patients according to their type of family depicts that the highest percentage (57%) belong to the nuclear family and (42%) belong to the joint family. Occupational

status-wise distribution of post-COVID-19 patients depicts that the majority (40%) belong to other occupational sources and 17% belong to Government Employees Also 15% of patients belong to Workers and Self Employed. The percentage-wise distribution of post-COVID-19 patients according to their residual status indicates that the 100% of patients belonging to the village area no one can belong to the city area. The percentage-wise distribution of post-COVID-19 patients according to their religion showed that the highest percentage 52% of patients belonged to the Hindu religion and (27%) of patients belonged to the Muslim religion, and 13% of patients belonged to Chrest. The percentage-wise distribution of post-COVID-19 patients according to their income shows that the highest percentage 37% of patients have an income from 20001 to 40000/month, and (33%) have an income of 10000 to 20000/month [8].

Section B: Assessment of Quality of Life Among Schizophrenia Patients

Table 1 shows the assessment of quality of life among patients with schizophrenia.

Section C: Assessment of the Coping Strategy of COVID-19 Patients

Table 2 provides an assessment of the coping strategies of the COVID-19 patients.

Table 1. Assessment of the physical health problem of COVID-19 patients.

S.N.	Physical health problems	Yes (1)		No (0)		Total
		F	P	F	P	
1.	<i>Head</i>					
	Moon	13	32.50%	27	67.50%	100
	Face	17	42.50%	23	57.50%	100
	Fat on face					
2.	<i>Skin</i>					
	Hirsutism	17	42.50%	23	57.50%	100
	Acne	23	57.50%	17	42.50%	100
	Rash	27	67.50%	13	32.50%	100
	Acanthosis nigricans	27	65%	14	35%	100
3.	<i>Neck</i>					
	Enlarged thyroid	26	65%	14	35%	100
	Prominent supraclavicular fat	33	82.50%	7	17.50%	100
	Carotoid bruit	24	60%	8	20%	100
	Prominent dorsocervical fat	30	75%	10	25%	100
	Submandibular nodes	25	62.50%	15	37.50%	100
	Jugulodiagastric area	24	60%	16	40%	100
4.	<i>Lung</i>					
	Wheezes	29	72.00%	11	27.50%	100
	Crackles or rales	24	60%	16	40%	100
5.	<i>Heart</i>					
	Tachycardia	28	70%	12	30%	100
	Murmur	25	62.00%	15	37.50%	100
6.	<i>Abdomen</i>					
	Striae	26	65%	14	35%	100
	Distension	24	60%	16	40%	100
	Hepatomegaly	27	67.50%	13	32.50%	100
7.	<i>Extremities</i>					
	Edema	23	57.50%	17	42.50%	100
8.	<i>Nervous system</i>					
	Tremor	27	67.50%	13	32.50%	100

Table 2. Assessment of the coping strategy of COVID-19 patients like physically focused coping, emotion-focused coping, social-focused coping, and religion-focused coping.

S.N.	Questions	Yes (0)		No (1)		Total
		Frequency	Percentage	Frequency	Percentage	
<i>Physical focused coping</i>						
1.	Did you get any other Illnesses due to COVID-19?	13	32.50%	27	67.50%	100
2.	Have you used a vaccine to prevent COVID-19?	8	20%	32	80%	100
3.	Have you had any treatment other than the vaccine to prevent COVID-19?	9	22.50%	31	77.50%	100
4.	Were you using a mask to protect yourself from COVID-19?	2	5%	38	95%	100
5.	Did you keep yourself clean to avoid COVID-19?	12	30%	28	70%	100
<i>Emotion focused coping</i>						
6.	Has isolation affected your mind after COVID-19?	6	15%	34	85%	100
7.	Are you scared due to COVID-19?	3	7.50%	37	92.50%	100
8.	Were you depressed due to COVID-19?	6	15%	34	85%	100
9.	Has COVID made you more stressed?	6	15%	34	85%	100
10.	After COVID-19 did you get negative responses from people?	6	15%	34	85%	100
<i>Social focused coping</i>						
11.	Were you put in isolation due to COVID-19?	2	5%	38	95%	100
12.	Were you following social distancing after COVID-19?	0	0%	40	100%	100
13.	Did you get support from family and friends after COVID-19?	2	5%%	38	95%	100
14.	Did you get the benefit of social schemes after COVID-19?	4	10%	36	90%	100
15.	Has society affected you after COVID-19?	23	57.50%	17	42.5%	100
<i>Religion focused coping</i>						
16.	Have religious things affected you after COVID-19?	16	40%	24	60%	100
17.	Did you indulge in any superstitions after COVID-19?	18	45%	22	55%	100
18.	Did you believe in God after COVID-19?	8	20%	32	80%	100
19.	Did religious things affect your diet after COVID-19?	10	25%	30	75%	100
20.	Did religious things affect your mind after COVID-19?	29	72.50%	11	27.50%	100

Section D: The Association Between Physical Health Problems and Coping Strategies with Their Demographic Variables

Table 3 shows an association between physical health problems and coping strategies with their demographic variables.

Section E: Correlation of Physical Health Problems and Coping Strategies Among Post-COVID-19 Patient

Table 4 shows the association between physical health problems and coping strategies among post-COVID-19 patients.

Table 3. Correlation of quality of life and persistent problem among schizophrenia patients ($n = 40$).

S.N.	Demographical variables	Physical health problem		Coping strategies	
		X^2 value	Level of significance	X^2 value	Level of significance
1.	Age	0.51	Not significant	4.58	Significant
2.	Gender	0.6	Not significant	7.77	Significant
3.	Marital status	2.98	Not significant	20.21	Significant
4.	Type of family	0.68	Not significant	9.48	Significant
5.	Occupation	2.28	Not significant	5.18	Significant
6.	Residential area	1	Not significant	1	Not significant
7.	Religion	0.8	Not significant	27.9	Significant
8.	Income	4.22	Significant	16.08	Significant

Table 4. Correlation of physical health problem and coping strategies among post-COVID-19 patients.

Item	Physical health problem	Coping strategies
Physical health problem	X	0.326159
Coping strategies	0.326159	X

DISCUSSION

This article deals with the present study used a descriptive research approach to assess the impact of physical health problems and coping strategies on COVID-19 patients. The objectives of this study were as follows:

1. Assess the physical health problems among the post-COVID-19 patients.
2. Assess the coping strategies among the COVID-19 patients.
3. Correlation of physical health problems and coping strategies among post-COVID-19 patients.
4. This study aimed to investigate the correlations between physical health issues, coping strategies, and demographic variables.

The research framework was structured according to Roy's adaptation model to establish connections between the conceptual framework and study variables. Data collection involved the assessment of various demographic factors, including age, gender, family structure, marital status, occupation, residence, religion, and income, among a sample size of 40 COVID-19 patients. The gathered data were then processed and analyzed using both descriptive and inferential statistical methods. A questionnaire divided into two sections was used for data collection [9, 10]:

- *Section A:* Focused on gathering socio-demographic information from the patients.
- *Section B:* Concentrated on evaluating the physical health problems experienced by COVID-19 patients.
- *Section C:* Assessment of coping strategy among COVID-19 patients.
- *Section D:* Association between physical health problems and coping strategies and demographic variables.
- *Section E:* Correlation between physical health problems and coping strategies among post-COVID-19 patients.

CONCLUSION

The study revealed that post-COVID-19 there had an impact on patients' physical problems, such as patients feeling that they had Prominent Supraclavicular Fat on their necks, and some patients felt thyroid nodules on their necks. A study revealed that the participants had physiological health problems related to prominent supraclavicular fat on the neck, thyroid nodules, and wheezing in the lungs.

REFERENCES

1. Wikipedia. Wikimedia Foundation. (2023). COVID-19. [online]. Available from: <https://en.m.wikipedia.org/wiki/COVID-19>
2. Alfawaz H, Amer OE, Aljumah AA, Aldisi DA, Enani MA, Aljohani NJ, et al. Effects of home quarantine during COVID-19 lockdown on physical activity and dietary habits of adults in Saudi Arabia. *Sci Rep.* 2021;11:5904. DOI: 10.1038/s41598-021-85330-2.
3. Miller LMS, Gee PM, Katz RA. The importance of understanding COVID-19: The role of knowledge in promoting adherence to protective behaviors. *Front Public Health.* 2021;9:581497. DOI: 10.3389/fpubh.2021.581497.
4. Pearlstein T, Howard M, Salisbury A, Zlotnick C. Postpartum depression. *Am J Obstet Gynecol.* 2009;200:357-64. DOI: 10.1016/j.ajog.2008.11.033.
5. Tackman JRN, BSN. Community health nursing. *Home Healthc Nurse.* 1991;9:5. DOI: 10.1097/00004045-199107000-00004.
6. Dirubbo NE. Community health nursing: Issues and topics. *Nurse Pract.* 1991;16:43. DOI: 10.1097/00006205-199102000-00020.
7. Seigel H. Community health nursing. *J Contin Educ Nurs.* 1991;22:43. DOI: 10.3928/0022-0124-19910101-17.
8. Ekpanyaskul C, Padungtod C. Occupational health problems and lifestyle changes among novice working-from-home workers amid the COVID-19 pandemic. *Saf Health Work.* 2021;12:384-9. DOI: 10.1016/j.shaw.2021.01.010.
9. Suresh S. *Nursing research and statistics.* 1st ed. India: Reed Elsevier; 2011.
10. Burns N, Grove SK. *Understanding nursing research: Building evidence-based practice.* 4th ed. New Delhi: Elsevier; 2007.