



Post-COVID effects among affected adults in selected colleges of Mangalore.

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ABSTRACT

Background: Covid-19 was identified for the first time in Wuhan in December 2019. Humans that catch this viral disease develop respiratory ailments. According to data, about 175 million people become sick by the end of the year. This was an essential cause for us to investigate this condition further, particularly how the Post COVID impact affects a person.

Objectives: to assess Physiological and Psychological Post COVID effects among affected adults and to find the association between Physiological and Psychological Post COVID effects with selected demographic variables.

Methods: Purposive sampling was utilised to choose 100 adults using a descriptive approach. For data collection, a physiological and psychological five-point likert scale checklist was employed. From 11/08/2022 to 18/08/2022, ten samples were used in the pilot research. The tool's dependability was 0.7, indicating that it was trustworthy. The data was gathered between the 21st and 30th of November 2022 and analysed using descriptive statistics such as mean, frequency, percentage, and standard deviation, as well as inferential statistics such as Karl Pearson's correlation coefficient and the Chi square test in SPSS version 16.

Results: 96% are between the ages of 18 and 23, 3% are between the ages of 24-29, and 1% are between the ages of 30-35. 77% are females, while 23% are men. AHS has 44%, nursing has 37%, BASLP has 15%, and MBBS has 4%. COVID was found in 57% of people in 2021, 29% in 2022, and 14% in 2019. COVID symptoms

were mild in 50%, moderate in 44%, and severe in 6%. According to the study findings, 13% of students had mild, 71% had moderate, and 16% had severe Physiological Post COVID impacts, while 39% had light, moderate, and 22% had severe Psychological Post COVID effects. Except for the length and intensity of COVID symptoms, there was no significant connection between Physiological Post COVID effects and the specified demographic characteristics. There was no statistically significant relationship between psychological Post COVID effects with the selected demographic variables except for severity of COVID symptoms.

Conclusion: In this study, our results dealt with various nursing implications and limitations which was experienced by the investigator in the study. The suggestions and recommendations for the further study was because of the investigator's experience.

KEYWORDS : Post COVID, Physiological effects, Psychological effects, Adults, SARS-CoV-2.

INTRODUCTION

Positive is one of the unfavorable words that made us all feel really nervous. The predominance of the new coronavirus, Sars-CoV-2 (Covid-19), is unprecedented in recent memory. Its global repercussions include a high death rate, a rise in the rate of disease, a lack of salaries, and the continuous isolation of a significant number of individuals.¹ In Wuhan in December 2019, Covid-19 was discovered for the first time, having a significant effect on the respiratory system. Subsequently, it spread gradually to other regions of the world, leading to a worldwide illness outbreak and a health disaster.² The WHO designated the public health situation to be urgent in 2020. Humans who contract the infectious disease corona virus (Covid-19) suffer from respiratory illnesses. These severe corona viruses are what cause acute respiratory syndrome.³ Almost 175 million individuals were infected after the year, according to statistics.⁴ Covid-19 spreads by direct contact with an infected person, and it can also spread through respiratory droplets produced by an infected person's cough or sneeze.³

While Covid-19 has ill effects on all system in the body, it mostly has an impact on the respiratory system. The effects extended beyond an individual's physical health to include their emotional wellbeing. The presence of epidemics brings about a number of pressures, such as dread, unhappiness, boredom, a shortage of resources, a lack of situational awareness, financial difficulties, and embarrassment. After covid-19 recovery, some individuals continued to have certain symptoms that are referred to as Post-COVID problems. It had lit up the entire world with issues like dread, fright, despair, and unhappiness along with concern for post-traumatic stress disorder, grief, and suicide.⁵ The Middle East Respiratory Syndrome (MERS) outbreak in 2012 and the SARS pandemic in 2003 both showed similar patterns of lingering symptoms in the survivors, raising concerns of clinically significant COVID-19 after effects.⁶

Globally, by October 18, 2021 there have been 508,041,253 confirmed cases of covid-19, including 6,224,220 deaths, reported to WHO. When it comes according to age of people, the following statistics of covid-19 affected patients are seen: up to 10 years: 3.36 %, 11-20 years: 8.41%, 21-30 years: 21.8 %, 3-40 years: 21.93%, 41-50 years:17.22%, 51-60 years:14.05%, 61-70: 8.66%, 71-80 years: 3.54%, 81-90 years: 0.92%, above 90 years: 0.12%.⁷

In India, by December 1, 2022 total number of cases affected were 4.47 crore. Deaths occurred were 5.31 lakhs.⁸

In order to identify and effectively treat Post-COVID-19 effects, a core outcome set should be created as soon as feasible.

Therefore, after a brief investigation, the investigators felt that it would be beneficial if a study is conducted on the topic **“POST-COVID EFFECTS AMONG AFFECTED ADULTS IN SELECTED COLLEGES OF MANGALORE.”**

MATERIALS AND METHODS.

In this study, a quantitative approach and descriptive study design has been used. 100 adults from Nursing, AHS, MBBS and BASLP courses who were affected with covid-19 were selected by purposive sampling method. After obtaining ethical clearance and formal permission from authorities of Institution the pilot study was conducted for 10 samples from 11/08/2022 to 18/08/2022. The data was collected from 21st to 30th November 2022. The investigator thanked the participants for their active participation in the study and promised to keep the confidentiality. Descriptive statistics: Mean, frequency, percentage, and Standard deviation, Inferential Statistics: Karl Pearson's correlation of coefficient, Chi square test were used for data analysis by using SPSS version 16. Adults between the age group of 18 to 35 years of various courses, those tested positive for Covid-19 and had Post COVID effects and those who were available during the study were included in the study. Adults who tested positive for any other systemic illnesses after COVID, those who are not willing to participate and who were not affected with post COVID complications were excluded from the study.

Study design

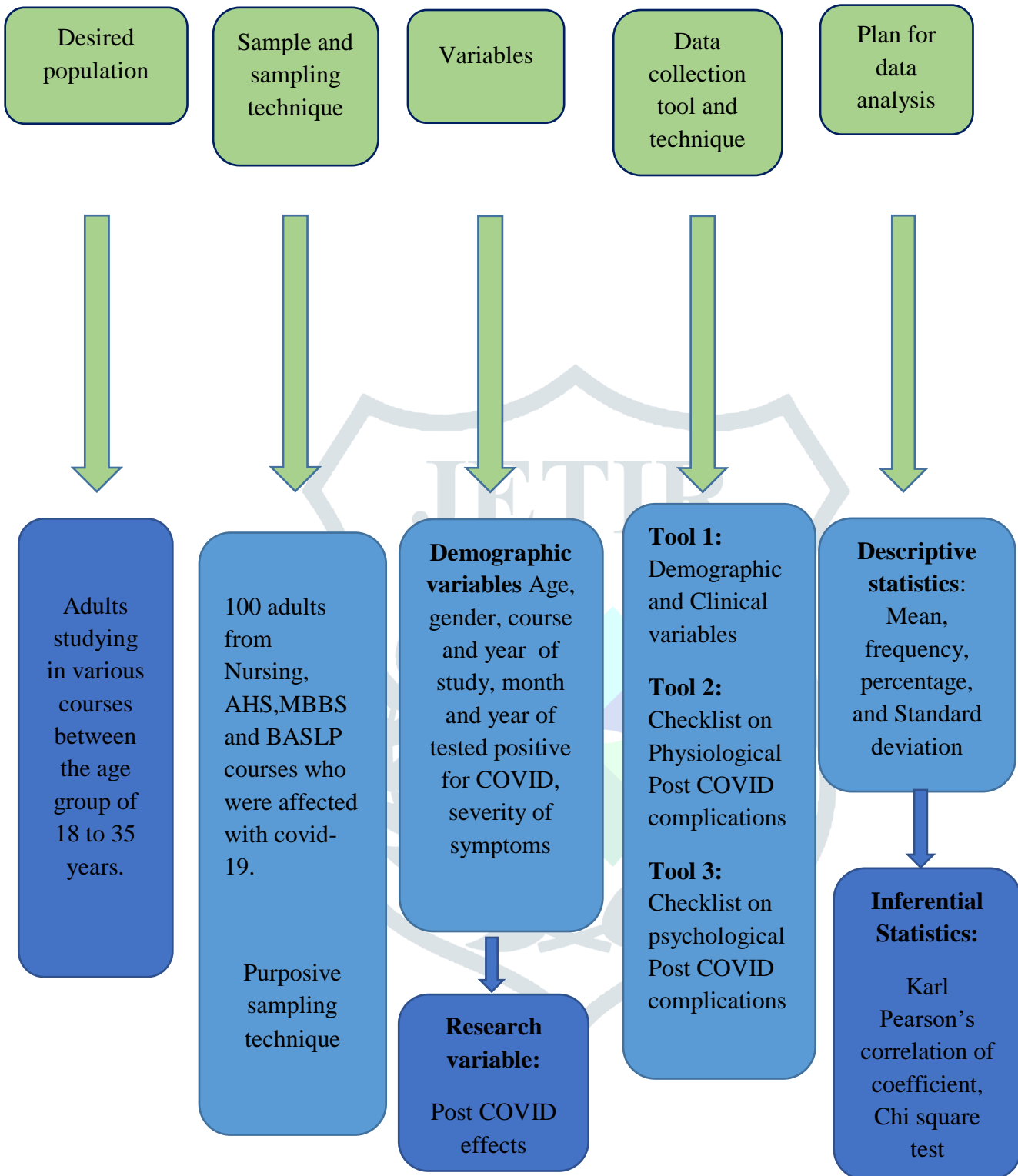


Figure 1: The schematic representation of the study design

RESULTS**Table 1:** Frequency and Percentage distribution of samples according to Demographic proforma

VARIABLES	f	%
Age		
• 18-23	96	96
• 24-29	3	3
• 30-35	1	1
Gender		
• Male	23	23
• Female	77	77
Course		
• Nursing	37	37
• Allied Health Science	44	44
• MBBS	04	04
• BASLP	15	15
Year of tested COVID positive		
• 2020	14	14
• 2021	57	57
• 2022	29	29
Severity of COVID symptoms		
• Mild	50	50
• Moderate	44	44
• Severe	06	06

The study results showed that 13% of students had mild, 71% had moderate and 16% had severe Physiological Post COVID effects.

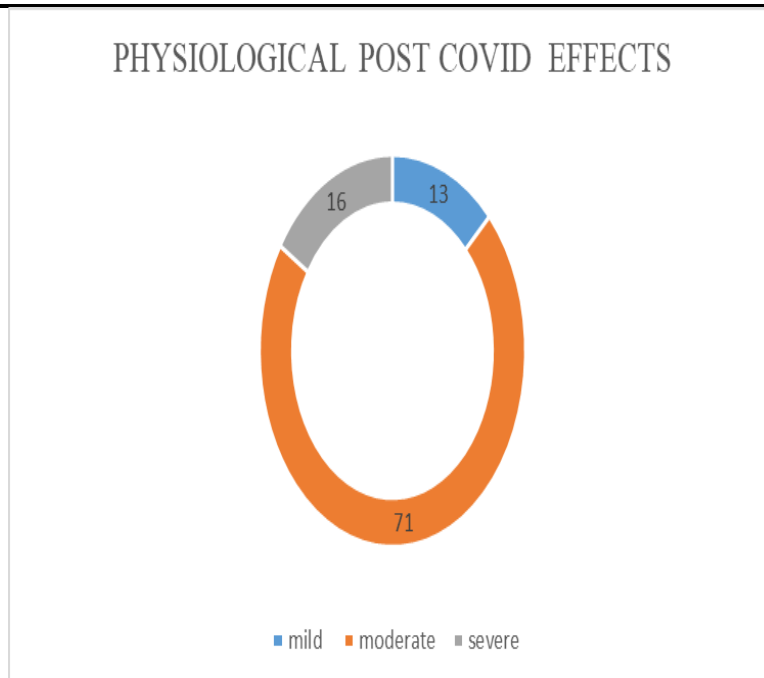


Figure 2: A pie chart showing the distribution of samples based on the severity of Physiological Post COVID effects.

The study results also showed that 39% of students had mild and moderate Psychological Post COVID effects each and 22% had severe Psychological Post COVID effects.

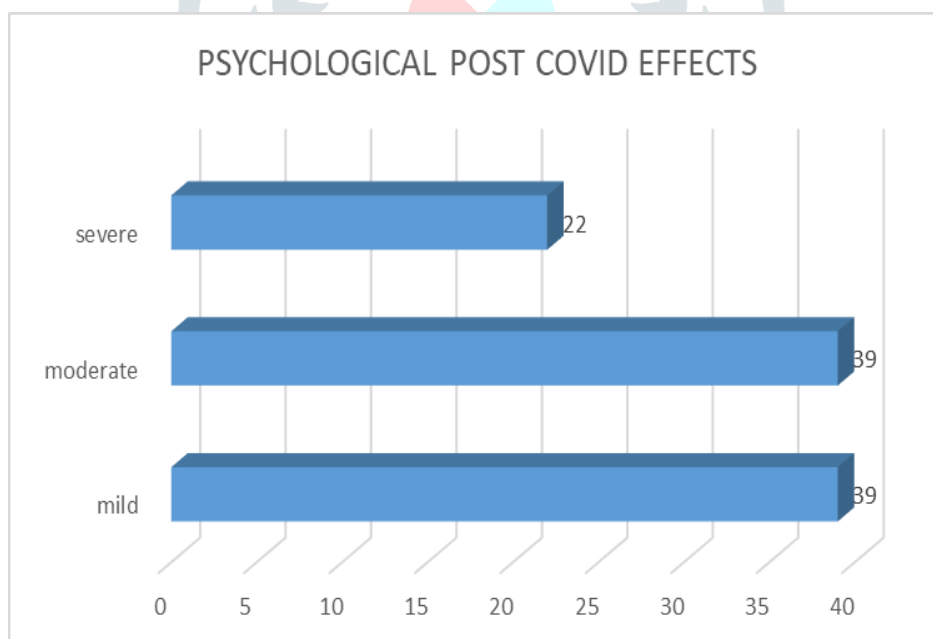


Figure 3: A bar graph showing the distribution of samples based on the severity of Psychological Post COVID effects.

Table 2: Association of Physiological and Psychological Post-COVID effects with demographic variable

Baseline Variables	Physiological Post COVID Effects				Psychological Post COVID Effects			
	Mild effects	Moderate effects	Severe effects	χ^2 value	Mild effects	Moderate effects	Severe effects	χ^2 value

Age								
18-23	13	68	15		37	37	22	
24-29	0	3	0	0.164	2	1	0	0.557
30-35	0	0	1		0	1	0	
Gender								
Male	3	15	5	0.685	10	9	4	0.802
Female	10	56	11		29	30	18	
Course								
Nursing	7	28	2		18	14	5	
AHS	5	27	12	0.017*	15	15	14	0.288
MBBS	0	2	2	*	1	3	0	
BASLP	1	14	0		5	7	3	
Year of tested COVID positive								
2020	1	11	2		3	7	4	
2021	9	38	10	0.839	23	24	10	0.388
2022	3	22	4		13	8	8	
Severity of COVID symptoms								
Mild								
Moderate	11	38	1	0.000*	26	17	7	
Severe	2	30	12	**	13	19	12	0.035*
	0	3	3		0	3	3	

DISCUSSION

The study illustrates that the majority (96 %) of the adults were in the age group of 18-23years, (3%) of them were in the age group of 24-29 years and only (1%) of the student was in the age group of 30-35years. It was observed that the majority (77%) of the adults were females & only (23%) of them were found to be males.

In congruent to present study A research done in Italy in the year 2020 found similar findings regarding age group and gender, with the mean age being 56.5 (SD, 14.6) years (range, 19-84 years), and 53 (37%) being women.⁹

It is observed that the majority of adults (44%) belong to Allied Health Science, (37%) belong to Nursing, (15%) belongs to BASLP and (4%) belongs to MBBS. It was observed that majority (57%) of adults were tested

positive for COVID in the year 2021, (29%) were tested positive for COVID in the year 2022, (14%) were tested positive for COVID in the year 2020. It was also observed that majority (50%) of adults had mild COVID symptoms, (44%) of students had moderate COVID symptoms, only (6%) of students had severe COVID symptoms.

In line with the current study, an online survey revealed higher levels of pain, discomfort, anxiety and depression, poor sleep, and unsatisfactory quality of life in COVID -19 patients than in non-affected people ($p<0.05$).¹⁰

The current study showed that 13% of students had mild, 71% had moderate and 16% had severe Physiological Post COVID effects. The current study showed that 39% of students had mild and moderate Psychological Post COVID effects each and 22% had severe Psychological Post COVID effects.

In congruent to this, a cross-sectional research was carried out in US in the year 2020 in order to assess the psychological impact among university students and it showed that, 45% of the sample had high impact, 40% had moderate impact, 14% had low impact.¹¹

Carf and colleagues recently conducted another research in which 53.1% of participants felt tiredness, 43.4% dyspnea, 27.3% joint discomfort, and 21.7% chest pain.⁹

The current study shows that there is no significant association between Physiological Post COVID effects with the selected demographic variables except for Course and severity of COVID symptoms. There is no significant association between Psychological Post COVID effects with the selected demographic variables except for severity of COVID symptoms.

In congruent to this, the empirical study was conducted in Germany to determine the impact of the pandemic on university students' physical and mental health and learning showed that gender was shown to have a significant influence student's stress levels.¹²

CONCLUSION

To conclude nursing practice, nursing education, nursing management and nursing research, limitations and recommendations are covered in this study. The study's main objective of the study was to assess the Physiological and Psychological effects among affected adults and to find the association between the Physiological and Psychological Post COVID Effects with their selected demographic variables. The researcher addressed several nursing implication of the study and its limitations in this chapter. The investigator's experience during the study assisted in providing recommendations and suggestions for additional research.

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CONFLICT OF INTEREST

Authors declare no conflict of interest.

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