

The Quality of Life in Patients with Sequelae After COVID-19 Infection

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ABSTRACT

Introduction: COVID-19 is a serious disease that can significantly affect the daily lives of recovered patients and their families in terms of mental health problems such as stress, depression, anxiety and insomnia, as well as the negative impact COVID-19 has on patients' quality of life (QoL). Since the patients are not immune to future infection, it may lead to a more negative impact on patients' QoL. The survey was conducted to assess the quality of life in patients with any sequelae after covid19.

Methodology: 102 confirmed patients of post COVID-19 (by RT-PCR assay on nasopharyngeal swab) were selected by convenience sampling. An observational study was conducted using Google self-designed Questionnaire. Participants were selected according to inclusion criteria which included any one sequela after COVID-19. Quality of life of the participants was taken by SF-12. Questionnaire was circulated in different groups via WhatsApp. The questionnaire took 5-10 minutes to complete. Descriptive analysis was done in Microsoft excel.

Results: The participants mean age was 34.63±11.92 years, with 69 male and 34 female patients were evaluated. In present study physical score is 46.9(PCS) and mental score is 47.9(MCS).

Conclusion: Moderate affection of physically and mentally in patients of who were infected with COVID-19.so, the quality of life affected in patients with sequelae of after COVID-19.

Keywords: COVID- 19, Quality of life, Physical health, Mental health

INTRODUCTION

At the end of 2019, a novel corona virus was identified as the cause of a cluster of pneumonia cases in Wuhan, a city in the Hubei Province of China. It rapidly spread, resulting in an epidemic throughout China, followed by an increasing number of cases in other countries throughout the world. In February 2020, the World Health Organization designated the disease COVID-19, which stands for corona virus disease 2019. The virus that causes COVID19 is designated severe acute respiratory syndrome corona virus 2 (SARS-CoV-2); previously, it was referred to as 2019-nCoV.¹

COVID-19 is a serious disease that can significantly affect the daily lives of recovered patients and their families in terms of mental health problems such as stress, depression, anxiety and insomnia, as well as the negative impact COVID-19 has on patients' quality of life (QoL). Since the patients are not immune to future infection, it may lead to a more negative impact on patients' QoL. Physical symptoms are still observed among COVID-19 patients after discharged from hospital, which may also affect their normal life and lead to poor Health-related quality of life (HRQoL). HRQoL is an important measure that is used for assessing the impact of diseases, disorders, or disabilities on the physical, mental, and social domains of patient health. The assessment of HRQoL helps healthcare providers identify the factors affecting QoL and recognize the aspects of COVID-19

management that needs to be enhanced for improving the QoL of patients.²

SF-12 is a 12 item short form health survey, is an abbreviated version of the 36 item short form health survey. The eight dimensions form has two summary scores; physical and mental sub scores (PCS and MCS).³ An objective of the present study is to study the quality of life in patients with sequelae after COVID -19.

METHODOLOGY

103 confirmed patients of post COVID-19 (by RT-PCR assay on nasopharyngeal swab) were selected by convenient sampling. An observational study was conducted using Google self-designed Questionnaire. Participants were selected according to inclusion criteria which included any one sequela after COVID-19. Quality of life of the participants was taken by SF-12. Questionnaire circulated via online survey. The questionnaire took 5-10 minutes to complete. The study duration was January 2022 to March 2022.

Inclusion and exclusion criteria

Patients of age 18 to 50 years, male and females who had covid -19 (by RT-PCR assay on nasopharyngeal swab), participants who had any one sequela after COVID-19 were included. People who were not covid-19 positive were excluded.

Outcome measure

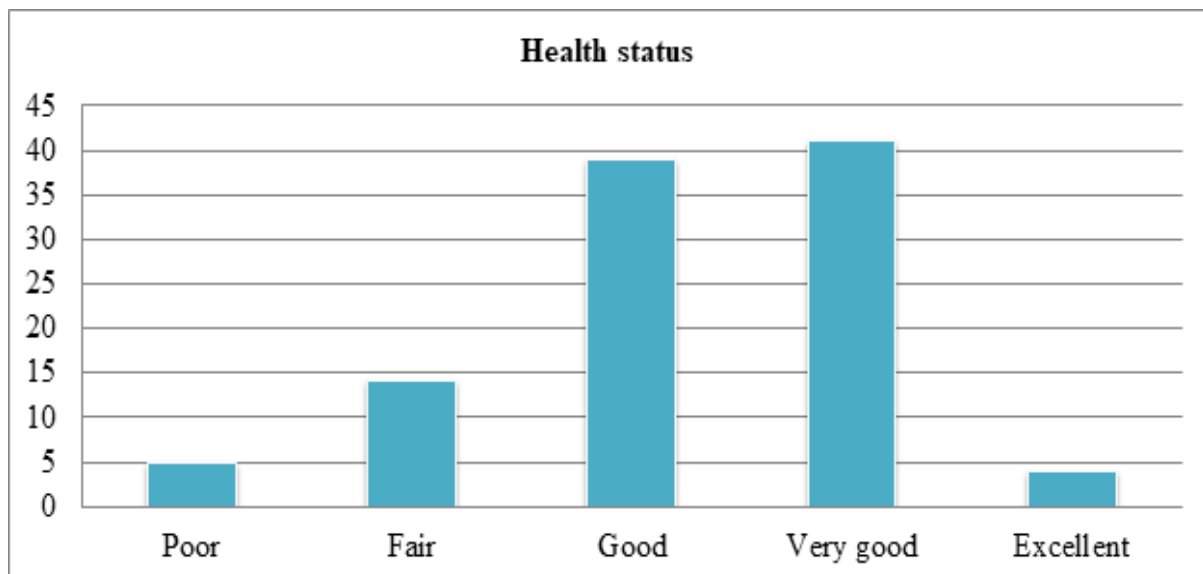
SF-12 is a 12 item short form health survey is an abbreviated version of the 36 item short form health survey. The survey instrument has eight domains: physical functioning, physical role, bodily pain, general health, vitality, social functioning, emotional role, and mental health. The eight dimensions form has two summary score, physical and mental sub scores (PCS and MCS), with a possible total score ranging from 0 to 100 [11]. A higher SF12 score indicates better health.³²

Statistical analysis

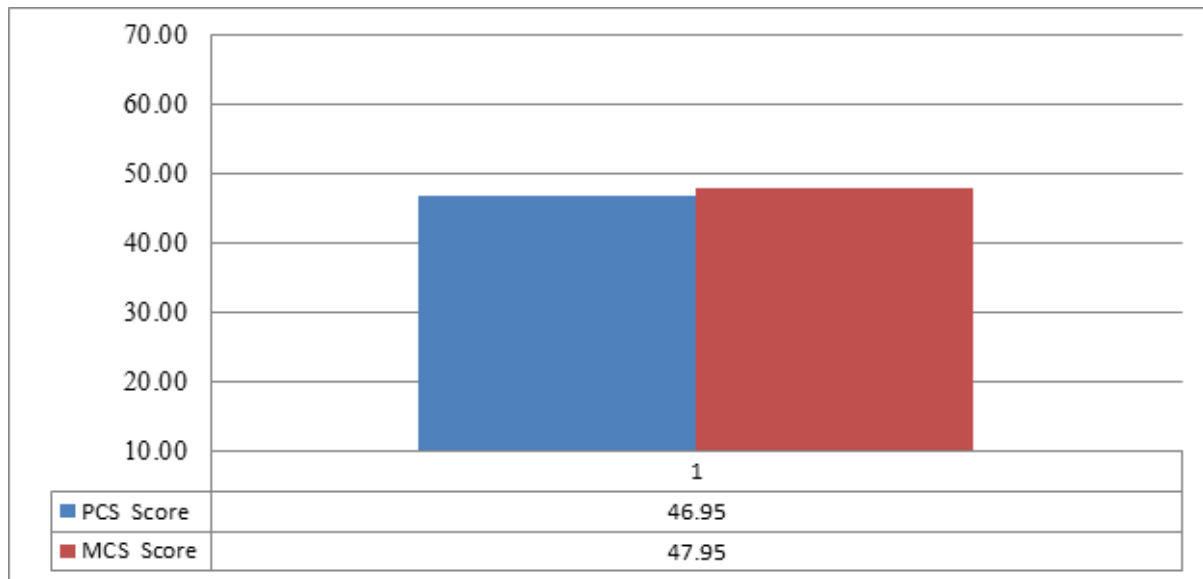
Descriptive analysis was done in Microsoft excel and was represented in form of bars and pie chart.

RESULT

The participants mean age was 34.63 ± 11.92 years, with 69 male and 34 female patients were evaluated. Graph 1 shows in general health status in patients after COVID-19. 43% patients had present symptoms like breathlessness, fatigue, headache, muscular pain, sleep disturbance, loss of smell, lack of concentration etc. after COVID-19. Graph 2 shows PCS score and MCS score in patients after COVID-19.



Graph 1: In general health status after COVID 19



Graph 2: PCS score and MCS score in patients after COVID-19

DISCUSSION

In present study, in general, physical health of the patients with sequelae was found to be good. Majority of the patients didn't have any problem related to regular physical activities. Looking at the emotional status of the patients only few were calm and peaceful. And only few patients have found that their physical health or emotional health interfered in their social activities. Similar study by Arab-Zozani M et al., they found that the mean score for EQ-5D-5L in COVID-19 patients was low in hospital discharged patients.² Qu G et al states health-related quality of life of discharged COVID-19 patients did not come back to normal at third month after discharge and affected by age, sex and the physical symptom after discharge.⁴ A scoping review conclude that Post-COVID-19 patients had slight to moderate declines in HRQOL.⁶

In present study, 43% patients had present symptoms like breathlessness, fatigue, headache, muscular pain, sleep disturbance, loss of smell, lack of concentration etc, after COVID-19. Malik P et al states that post COVID-19 syndrome has been associated with poor quality of life, long-term persistent symptoms including fatigue, dyspnea, anosmia, cough, sleep disturbances, chest pain, arthralgia, and worse overall mental health.⁵

In present study moderate affected physical score after COVID-19. Shanbehzadeh S et al had found that physical activity, mobility, and usual activities were reported to be reduced in 15% to 54% of individuals after their coronavirus infection; also they reported a decline in physical activity especially for usual care and daily activities in individuals admitted to the ICU.⁶ Lebrasseur A et al had found that various impacts on daily functioning such as a decrease in access to healthcare have been noted during the pandemic. Changes in social and lifestyle habits, mood changes and decreased levels of physical activity were also noted. They concluded that the impacts of COVID-19 experienced by people with physical disabilities.⁷

In present study moderate affected mental score after COVID-19 in patients. Shanbehzadeh S et al had found more than half of the patients presented at least one stress-related symptom (anxiety, depression,) or neurocognitive impairment after COVID-19.⁶ Vindegaard N states that COVID-19 patients found a high level of post-traumatic stress symptoms (PTSS) and significantly higher level of depressive symptoms. Patients with pre existing psychiatric disorders reported worsening of psychiatric symptoms. They concluded that lower psychological well-

being and higher scores of anxiety and depression compared to before COVID-19.⁸ Limitations of present study is physical activity level was not assessed according to age. Occupation, education was not included in the study. Sub group for age was needed. In Detail of medical condition was not evaluated.

CONCLUSION

Moderate affection of physical and mental aspect of health in patients with covid -19 was found. Hence, the quality of life in patients with sequelae after covid 19 was affected.

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