Volume 7 Issue 2 2021

ISSN 2454-3055

**INTERNATIONAL
JOURNAL OF
ZOOLOGICAL
INVESTIGATIONS**

***Forum for Biological and
Environmental Sciences***

Published by Saran Publications, India

Impact of Covid-19 on Human Health Post-recovery: A Review

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Received: 20th August, 2021; **Accepted:** 12th September, 2021; **Published online:** 16th September, 2021

<https://doi.org/10.33745/ijzi.2021.v07i02.032>

Abstract: The aim of this review was to survey the impact of COVID-19, post-recovery. A total of 101 COVID recovered patients took part in this survey. Their data were collected and analysed for the problems they were facing after conquering COVID-19. Out of the total 101 patients, 47.53% patients faced cough, 37.62% patients encountered fatigue, 20.79% patients faced stress and anxiety and 12.87% patients faced breathlessness post-recovery. Apart from that, patients also faced other symptoms like itching throat, heart issue, memory and cognitive decline, degrading quality of life etc. Also, 8.9% patients did not observed any of the above mentioned symptoms post recovery. It is concluded that despite recovering from COVID-19 infection, some symptoms persist in the patient's body which affects their body directly or indirectly. It can take over 3 months for some patients to go back to normal. At the same time healthy eating and exercising helped in recovering process.

Keywords: COVID-19, Post-recovery, Human health, Cough, Breathlessness, Fatigue

Citation: Vasukidevi R., Gyanini Deeksha and Choudhary Pranay Kumar: Impact of Covid-19 on human health post-recovery: A Review. Intern. J. Zool. Invest. 7 (2): 542-548, 2021.

<https://doi.org/10.33745/ijzi.2021.v07i02.032>

Introduction

SARS-CoV-2 is a new type of Corona virus that is spreading across the world and began in Hubei province of China in November 2019 (Almaghaslah *et al.*, 2020). This virus has caused an outbreak of viral pneumonia and is known as Corona Virus Disease (COVID-19) (Balachandar *et al.*, 2020). The disease is transmitted by inhalation or contact with infected droplets and its incubation period ranges from 2-14 days (Carfi *et al.*, 2020). The symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise etc. (Demeco *et al.*, 2020). Disease is mild in most people while in some, it may produce pneumonia

like symptoms, Acute Respiratory Distress Syndrome (ARDS) and multi-organ dysfunction (Docherty *et al.*, 2020). Many people are asymptomatic as well. Cases of fatality ranges from 2 to 3%. Diagnosis of this disease can be done by demonstration of virus in respiratory secretion by special molecular tests (Huang *et al.*, 2021).

Surviving COVID-19 has only been a part of triumph for some patients. First few months of pandemic were devoted to preventing transmission and figuring out how to take care of those in hospitals, and not much attention was

paid to after effects. But over one year of the pandemic, these can no longer be ignored (Kumar *et al.*, 2020; Mahalmani *et al.*, 2020). Though SARS-CoV-2 is essentially a virus that hits the lungs, in smaller subset, it also seems to have an impact on lungs, heart and brain having increasing risk of long-term health issue and life-threatening complications (Docherty *et al.*, 2020; Kumar *et al.*, 2020; Huang *et al.*, 2021).

Materials and Methods

Data Collection:

A survey questionnaire was prepared using google forms which included a variety of questions that would help in assessing the post-recovery symptoms in the patients infected with COVID-19.

Participants:

Questionnaire was distributed among people of all age groups and gender who were tested positive for COVID-19 across India. A sum of 101 survey was done. Data were collected, compiled and evaluated.

Results and Discussion

Age and Gender:

Out of 101 participants, the population in the age group 21-25 was the most affected with a total number of 35 individuals (34.65%) (Fig. 1). Among 101 participants, 65 were males (64%) and 36 were females (36%) (Fig. 2).

Fig. 1: Prevalence of COVID-19 among different age groups.

Testing Facilities:

Out of the total 101 participants, 51 individuals (50.5%) opted for Government testing facility, 31 individuals (30.69%) opted for in-home testing while the rest 19 individuals (18.81%) visited private laboratories (Fig. 3).

Per cent of COVID 19 individuals infection among different gender

Fig. 2: Prevalence of COVID-19 among different gender.

Severity of Infection:

Among 101 participants, 65 individuals (64.36%) were having mild symptoms, 26 individuals (25.74%) were having acute symptoms while rest 10 individuals (9.9%) were having severe symptoms (Fig. 4).

Treatment Facility:

Out of 101 participants, 75 individuals (74.26%) opted for recovery at home, 15 individuals (14.85%) required special supervision thus went to hospital while 11 individuals (10.89%) were shifted to quarantine facility during their recovery (Fig. 5).

Category of infection carrier:

Out of 101 participants, 74 individuals (73.27%) were symptomatic while 27 individuals (26.73%) were asymptomatic with mild or no symptoms (Fig. 6).

Blood Group:

The prevalence of COVID-19 infection was higher among patients with B+ blood group (36.63%) in comparison to other blood groups (Fig. 7).

Fig. 3: Per cent of COVID-19 testing facilities used by patients.

Fig. 4: Percentage severity among different individuals.

Symptoms during recovery:

The most common symptoms observed during recovery were fever and chills, dry cough, anosmia while the least expressed symptom was discoloration of finger and toes (Fig. 8).

Recovery time:

Most of the patients recovered from the infection in the duration of 8-14 days while in some cases the recovery duration was as long as 22+ days (Fig. 9).

Medicine prescribed:

Paracetamol, vitamin C, antibiotics and multivitamins were the drug of choice while other drugs like antiviral, antiparasitic and corticosteroids were also prescribed based on the severity of the infection (Fig. 10).

Post-recovery symptoms:

Despite recovering from COVID-19, the patients observed some symptoms which persisted in their body post-recovery. Here are the enlisted post-

Fig. 5: Per cent of COVID-19 treatment facilities used by patients.

Fig. 6: COVID-19 infection carrier categories.

recovery symptoms which were documented by participants viz. cough, itching throat, fatigue, breathlessness, heart issues, stress and anxiety, memory and cognitive decline, weakness, lack of smell, urinal disorders, degrading quality of life, liver damage and acidity. Cough (47.53%), fatigue (37.62%), stress and anxiety (20.79%) and breathlessness (12.87%) were the most common post-recovery symptoms while 9 individuals

(8.91%) did not observe any of the afore mentioned symptoms post recovery (Fig. 11).

From this survey it is summarized that- (i) Youngsters are more vulnerable to the infection; (ii) Males are more prone to infection rather than females; (iii) Individuals with B+ blood group are most prone to infection; (iv) Fever and chills, dry cough, anosmia are the most common symptoms observed; (v) In most cases it took 8-14 days to

Fig. 7: Prevalence of COVID-19 among different blood groups.

Fig. 8: Prevalence of COVID-19 symptoms expressed in patients during recovery.

Fig. 9: Recovery duration among different individuals.

Fig. 10: Drug categories prescribed to the patients.

Fig. 11: Prevalence of COVID-19 symptoms expressed in patients post-recovery.

get recovered; (vi) Paracetamol, Vitamin C, antibiotics and multivitamins are the most prescribed drugs and (vii) 91.09% of participants observed post recovery symptoms while 8.91% did not observe any symptom post recovery.

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