



“YOUR POSITIVE ACTION COMBINED WITH POSITIVE THINKING RESULTS IN SUCCESS.”

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ABSTRACT

“Success belongs to those who believe in the power of their ideas.” (Michael Irwin)

Problem Statement “A cross sectional study to assess post term effect of COVID-19 among vaccinated and non-vaccinated people diagnosed with COVID-19”.

Objectives

1. To assess the knowledge regarding post term effect of COVID-19 among vaccinated people.
2. To assess the knowledge regarding post term effect of COVID-19 among non-vaccinated people.
3. To find correlation between post term effect of COVID-19 among vaccinated and non-vaccinated people.
4. To find the association between post term effect of COVID-19 among vaccinated and non-vaccinated people.

Hypothesis

All the hypothesis were tested at the level of

H1- There would be significant correlation between the post term effect of COVID-19 among vaccinated and non- vaccinated people.

H2- There would be significant association between post term effect of COVID-19 among vaccinated and selected base line variables.

H3- There would be significant association between post term effect of COVID-19 among non-vaccinated people and selected base line variables.

Assumptions

1. Sample are the true representative of the population
2. The study participants will give true response
3. Non vaccinated peoples may have different level of self-efficacy about patients condition, prognosis and caregiving.

Operational Definition

KEYWORDS :

INTRODUCTION

COVID-19, caused by SARS CoV-2, is one the longest viral pandemics in the history of mankind, which have caused millions of death globally and induced severe deformities in the survivals. For instance, fibrosis and cavities in the infected lungs of COVID-19 are some of the complications observed in infected patients post COVID-19 recovery. These health abnormalities, including is multiple organ failure – the most striking pathological features of COVID-19 have been linked with diverse distribution ACE2 receptor.¹

Coronavirus are large family of viruses that are known to cause illness ranging from the common cold to more severe disease such as middle East to Respiratory Syndrome (MERS) and SEVERE Aute Respiratory Syndrome (SARS).³ A novel coronavirus (COVID-19) was identified in 2019 in Wuhan, China. This is a new coronavirus that has not been previously identified in humans. according to WHO.²

Coronavirus mostly cause gastrointestinal and respiratory tract infection and are inherently categorized into 4 major types: Gammacoronavirus, Delta coronavirus, Beta coronavirus and Alpha coronavirus. The first two types mainly infect birds, while the last two mostly infect mammals. Six types of human CoVs have been formally recognized. These comprise HCoV HKU1, HCoV OC43, Middle East Respiratory Syndrome, coronavirus (MERS-CoV), Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) which is the type of the Betacoronavirus, HCoV 229E and HCoV-NL63, which are the member of the Alphacoronavirus. Coronavirus did not draw global concern until the 2003 SARS pandemic, preceded by the 2012 MERS and most recently by the COVID-19 outbreaks.⁵ SARS-CoV and MERS-CoV are known to be extremely pathogenic and spread from bats to palm civets or dromedary camels and eventually to humans.⁵

COVID-19 is spread by dust particles and fomites while close contact between the infector and the infected individual. Airborne distribution has not been recorded for COVID-19 and is not known to be significant transmission engine based on empirical evidence; although it can be imagined if such aerosol – generating practices are carried out in medical facilities. Fecal spreading has been seen in certain patients, and the active virus has been reported in a small number of clinical studies. Furthermore, the faecal-oral route does not seem to be a COVID-19 transmission engine; its function and relevance for COVID-19 need to be identified.⁶

pandemics in the history of mankind, which have caused millions of death globally and induced severe deformities in the survivals. For instance, fibrosis and cavities in the infected lungs of COVID-19 are some of the complications observed in infected patients post COVID-19 recovery. These health abnormalities, including is multiple organ failure – the most striking pathological features of COVID-19 have been linked with diverse distribution ACE2 receptor.⁷

Global healthcare system was severely alarmed by the rate of Coronavirus-19 infection, on 1st May 2022, the global number of the novel Coronavirus -19 (nCOVID-19) infected patients stands at 513,348,944 with number of deaths at 6,260,762. The highest number of COVID-19 cases are in USA with 83,066,907 and also maximum number of COVID-19 induced deaths, i.e., 1,030,833.8 Figure shows the cumulative cases and deaths for top 10 countries globally. United States of America has maximum number reported both in number of cases and number deaths. The pandemic spread in multiple waves is lethal for numerous people and rendering others with deformities. The severity of COVID-19 enhance with the presence of co-morbidity factor such as diabetes, hypertension, immunocompromised conditions.⁸

Health workers at a higher risk of infection in addition, they can transmit the infection to susceptible patients at high risk of severe COVID-19. The WHO SAGE roadmap for prioritizing uses of COVID-19 vaccines in the context of limited vaccine supply includes Health Worker as a priority group for vaccination.⁹

Evaluating the real world COVID-19 vaccine performance is critical for understanding the risk and benefits of vaccination programs. Many factors impact real world vaccine effectiveness, including vaccine transportation and storage and how patients are vaccinated. In addition, the people who get the vaccines, relative effectiveness of one dose vs. two doses, and effectiveness of the vaccine against new strains of SARS-CoV-2.¹⁰

Real world vaccine studies can also answer questions about effectiveness by age-group and risk factor, duration of vaccine protection, protection against transmission, relative effectiveness of different vaccines, relative effectiveness of one dose vs. two doses, and effectiveness of the vaccine against new strains of SARS-CoV-2.¹¹

Need Of The Study

The COVID-19 pandemic has infected millions of people worldwide and many countries have been suffering from a large number of

COVID-19, caused by SARS CoV-2, is one the longest viral

deaths. Acknowledging the ability of SARS-Co-2 to mutate into distinct strains as an RNA virus and investigation its potential to causes reinfection is important for future health policy guidelines. It was thought that individuals who recovered from COVID-19 generate a robust immune response and develop protective immunity, however, since the first case of documented reinfection of COVID-19 in August 2020. There have been a number of cases with reinfection, many cases are lacking genomic data of the two infections, and it remains unclear whether they were caused by different strains, in the present study, we undertook a rapid systematic review to identify cases infected with different genetic strains of SARS-CoV-2 confirmed by PCR and viral genome sequencing. A total of 17 cases of genetically confirmed COVID-19 reinfection were found. One immunocompromised patient had mild symptoms with the first infection but developed severe symptoms resulting in death with the second infection. Overall, 68.8% (11/16) had similar severity; 18.8% (3/16) had worse symptoms; and 12.5% (2/16) had milder symptoms with the second episode. Our case series shows that reinfection with different strains is possible, and some cases may experience more severe infection with the second episode, the findings also suggest that COVID-19 may continue to circulate even after achieving herd immunity through natural infection or vaccination, suggesting the need for longer-term transmission mitigation efforts.

Investigation of the occurrence of reinfection is imperative with the spread of newer variants (including the Delta variant), and ongoing vaccination programs. Limited information is available on the impact of different vaccines on new infections among previously diagnosed cases, and no previous study estimating the effectiveness of BBV152 on reinfection has been conducted. We report reinfection rates against backdrop of the recent second wave and vaccination program from March 3, 2020, to June 18, 2021, among a cohort of HCWs employed at a large tertiary care institution from North India who were previously infected with SARS-CoV-2. We also describe symptoms, symptom severity, and risk factors associated with reinfection episodes.

Depending on the criteria used, rates of reinfection with SARS-CoV-2 can vary widely, for example, using the criteria of 2 positive SARS-CoV-2 PCR results separated by at least 28 days with clinical recovery after the first and at least 1 negative SARS-CoV-2 PCR result after the first test, 6 cases of reinfection were reported from a single medical center. The centers for disease control and prevention uses the following criteria to define reinfection with SARS-CoV-2 RNA. Reinfection with seasonal coronaviruses has been reported based on repeated rises in antibody titers. Using this criterion, the mean time to reinfection with the 4 seasonal coronaviruses was 30 months, ranging from 30-35 months, depending on the virus. Using RT-PCR from nasal swabs, 14% (12 of 86) of persons had multiple reinfections with the same seasonal coronavirus. There was no association between repeated infections and the severity of symptoms. Reinfections have not been reported with SARS-CoV-1 or MERS.

Most people who get coronavirus disease in 2019 (COVID-19) recover in a few weeks. But some people – even those who had mild versions of the disease – might have symptoms that last a long time afterward. These ongoing health problems are sometimes called post-COVID-19 syndrome, post-COVID conditions, long-COVID-19, long-haul COVID-19, and post-acute sequelae of SARS-CoV-2 infection (PASC). Post-COVID-19 syndrome involves a variety of new, returning or ongoing symptoms that people experience more than four weeks after getting COVID-19. In some people, post-COVID-19 syndrome lasts months or years and causes disability.

Research suggests that between one month and one year after getting COVID-19, one in five people aged 18 to 64 has at least one medical condition that might be due to COVID-19. Among people aged 65 and older, 1 in 4 has at least one medical condition that might be due to COVID-19.

Review Of Literature

A literature review is an encapsulation of the previous research and knowledge generated on a similar topic as a researcher is interested in. Researchers believe that there must be some previous knowledge that exists, as the research cannot be done in a vacuum, previous studies work as a foundation to plan and conduct good research. This knowledge base can only be required through a literature review from several sources like books, journals, unpublished theses, magazines, newspapers, research reports, current popular electronic information sources.

The review of the literature was divided under the following headings:-

1. Studies related to a patient with COVID-19 and their needs.
2. Studies related to issues and problems faced by COVID-19
3. Studies related to knowledge regarding post-term effect of COVID-19 among vaccinated people
4. Studies related to knowledge regarding post-term effect of COVID-19 among non-vaccinated people.

Studies Related To Patient With Covid-19

Problem Statement

A cross-sectional study to assess the post-term effect of COVID-19 among vaccinated and non-vaccinated people diagnosed with COVID-19 at selected area of Dehradun.

Purpose

The purpose of the investigation is to assess the post-term effect of COVID-19 among vaccinated and non-vaccinated people who were diagnosed with COVID-19 at selected area of Dehradun.

OBJECTIVES

1. To assess the pre-interventional post-term effect of COVID-19 among vaccinated people.
2. To assess the pre-interventional post-term effect of COVID-19 among non-vaccinated people.
3. To assess the severity, different clinical symptoms, and morbidity of COVID-19 among vaccinated and non-vaccinated people.
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