



Over View of Severe Acute Respiratory Syndrome Covid-19 and its Impacts

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Abstract

Bronchitis and severe illness is caused by Severe Acute Respiratory Syndrome. COVID 19 is very big example of SARS which we facing globally. The COVID 19 was first noticed in Wuhan, China in the year 2019 in Sea food market, later spread of virus to other countries. WHO considered it as pandemic and named it as COVID 19 in the year 2020 of February. SARS is contagious disease where everyone prone to infection. Symptoms of it are like headache, fever, throat pain, sinus problems like cold, cough and breathing problem. SARS transmitted through different routes it may be direct or indirect. The main aim of this review article is to focus on present findings regarding COVID 19 and highlights of COVID 19 like diagnosis methods, prevention, control, improving mental health, nutritional importance before and after COVID 19, vaccination and long term effects of COVID 19, new strains in second wave, impact of second wave of COVID 19 on different sectors like Education Institutions, Anganwadis, PHC, Health Care Workers, Agriculture and Other.

Keywords: Covid-19; Plasma therapy; Symptoms; Vaccination; Nutrition; Second wave impact

Introduction

Corona is the word derived from Latin word which means CROWN. This belongs to coronaviridae family and order of nidovirales. The order of nidovirales composed of different families like coronaviridae, arteriviridae, mesoviridae and roniviridae. The characteristics of nidovirales are like it contains very large genomes of RNA viruses, highly replicative due to conserved genome organisation, shows unique enzymatic activities, ribosomal frame shifting of non-structural genes. Based on genomic structure it is divided 4 groups like alpha, beta, gamma and delta. It causes human respiratory tract infection varies from mild cold to severe respiratory distress syndrome, so present novel covid-19 is called severe acute respiratory syndrome which is a beta CoV, emerging global health trends. It is zoonotic source and spread through contact and droplet transmission [1]. Infected person present non-specific features require molecular technique for detection of virology and confirmation. First case was reported in Wuhan in 2019 and later spread throughout the world and progress has pandemic. Covid-19 is a group of virus divided into alphacoronavirus and betacoronavirus often causing cold and other mild upper respiratory tract infections in the human body. Analysis of clinical specimens revealed the presence of SARS-CoV-2 RNA in various bodily fluids from infectious patients, not only respiratory secretions, typically nasopharyngeal or oropharyngeal specimens, but also faecal material and often in multiple sites, even from asymptomatic patients, and sometimes for a long time, so causing super spreading events. COVID-19 is characterised by fever, cough, fatigue, shortness of breath, pneumonia, and other respiratory tract symptoms [2-4] and in many cases progresses to death. In elderly the disease effect is more and mortality is up to 10%. Corona virus has also been found to cause lower respiratory tract disease, mostly in the elderly, infants, and individuals with chronic underlying immune conditions. Among all human Corona viruses, covid-19 is best because of its biochemical and molecular characteristics, which shows a tremendous growth in primary and continuous cell lines and it also characterized as young or aged animal body of human diseases. The genome of Corona virus is about 30kb in size and generally it contains three broad protein virions classes' ranges from 90 to 120nm in diameter. There will be a lipid bilateral surrounded by a helical nucleoplasmid which provides a core

protection to genome. Based on the unique characteristics of Covid virus it is different from all other viruses. The functions of proteins involved in viruses are simple, influence viral pathogenesis, disease outcome, regulate virus host interaction and promote development of virus growth. The foremost broad category of Corona virus protein which encodes replication is called non-structural proteins. The virus proteins are encoded in two-third of corona virus, which are essential for processing of poly protein, replicate complex formation and efficient replication of virus. Moreover in recent times it was clear that replicase protein encode critical virulence determinant, regulate virus growth efficiency but it directly engage host proteins to directly potentiate pathogen mechanisms and also lead to disease severity. Now-a- days in most of the laboratories for testing covid-19 they are using RT-PCR test kit. It is required for all close contacts at the beginning of isolation and discharge depends on condition of negative report. For all confirmed cases each and every aspects are recorded like signs and symptoms, clinical severity and exposure [5,6].

Causes

In 2003 the covid was infected to human by bats in Guangdong province, China. Later in 2019 COVID-19 is similar to SARS, also caused by a coronavirus (CoV) that occurred in the seafood and wet animal wholesale market in Wuhan, Hubei Province, China. Intermediate host reservoir species were also seen in goats, sheep and cows in china [7].

Pathophysiology

Every virus contains distinctive spikes in the same way this Covid

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virus also contain spikes, the diameter which ranges from 60 to 140nm or else 9 to 12nm. The visions present in this virus gives solar appearance. It can infect new host by several recommendations and variations of gene. Several studies showed that bats acts as reservoirs for covid-19, but humans are infected by an intermediate host like pangolin. It contains largest viral genome ranges from 8.4- 12kDa in size and virus was enveloped with positive single stranded RNA [8,9].

Every viral genome is made up of different terminals. As of know these virus is also contain 2 types of terminals like 5' and 3'. 5' terminal constitutes a major genome which responsible of replication by encoding protein. 3' terminal protein contains five different proteins like spike protein which acts as fusion and attachment between virus and host cell membrane and between infected and uninfected cells. They have neutralizing antibody capacity. Membrane protein describes the nature of envelope shape of virus and it is abundant structure of protein among all. Nucleocapsid protein form virus transcription and aids for transcription and assembly. Envelope protein is smallest among all five proteins which show enigmatic action and it is highly expressed during viral replication within the host infected cells. Haemagglutinin esterase protein is responsible for receptor binding and for host specificity [10-13].

We all are familiar with covid which occurred in the year 2003. This virus was widespread among birds and mammals where bat act as reservoirs which forms an evolutionary reservoir and also lead to ecological diversity.

Transmission

Covid may lead to different variety of diseases in different animals (pig, dog, hen, cat and cow) like gastroenteritis virus, porcine epidemic diarrhoea, porcine hemagglutinating encephalomyelitis, murine hepatitis and other. As of now covid virus is of two types which occurs in humans like alpha and beta covid which may lead to severe acute respiratory syndrome. First the cases were reported in Wuhan, end of 2019 [14,15]. The spread of infection in china started from whole sale market in Huanan where they sale poultry, snake, and other animals. This virus may cause respiratory infection through different transmissions methods namely they are droplet transmission, airborne transmission, object transmission. In droplet transmission its spread through droplets diameter may range from > 5-10µm and above this diameter they are called droplet nuclei. This may occurs when healthy person come in close contact with person suffering from respiratory symptoms and there may be chance when sense organs (eyes, mouth and teeth) exposed to droplets. Transmission may readily occur through droplets when an infected person cough or sneeze with in short distance. Transmission may occur through in animate objects present immediate to infected persons. Transmission may occur in direct mode when we interact with infected persons or indirect mode when we touch or use the objects which are already used by infected persons. Airborne transmission is nothing but droplet nuclei which contain microbes in it considered as particles. Some studies shown that virus may cause intestinal infection and also present in faeces. There were no evidence that virus is spread through faecal and oral transmission. This virus shows both symptomatic and asymptomatic features. So there was rapid increase in asymptomatic carrier cases. By some studies we came to know that the average incubation period is about 5days and quarantine period is about 14days from day of exposure, but in 2003 the incubation period was around 4-6days and quarantine is above 27days from day of exposure. By comparing this two incubation and quarantine period we can guess how pandemic the present situation will be. The persons suffering from covid unload

virus through respiration and faeces and later it start deterioration after second week of illness. Some studies shown that after collecting air samples from patients through RT-PCR kit and analysis, confirmed that virus can transmit in air nearly up to 4m away from patients.

Diagnosis

Standard detection of covid-19 virus is from respiratory samples which contain reverse transcription polymerase chain reaction and easy way to diagnosis. We can also detect virus from different samples like swab, sputum, pharyngeal swabs and also in faeces but we cannot detect in urine of human being. Saliva may be an alternative source of detection of virus which requires less protection but further validation is needed for confirmation. RT-PCR kit is the best method for detection of Covid virus in the samples. The alternative best method for detection of virus is computed tomography, which gives complete information about Covid infected patients like peripheral lung distribution and other [16].

Treatment

For developing symptoms it take 5days and approximately it may also take 11.5days of infection. Some common diseases noticed in infected people who are hospitalized like diabetes (17-34%), hypertension (48-57%), cardiovascular disease (21-28%), Chronic pulmonary, liver and kidney diseases (4-10%, 3-13%). It may stop or slow down the function of heart, brain, lungs, liver, kidney and it may also lead to some instability of body functions. Due to severity and hypoxemic respiratory failure most of the patients are treated in ICU. In hospitalized patients the respiratory failure may lead to liver, bleeding and coagulation abnormalities, kidney injury and shock. Fluid management and vitamin-C is recommended for covid patients for systematic inflammation and for vascular injury and to reduce pulmonary oedema. Moreover nearly 75% hospitalized patients require oxygen therapy for recovery. The patients who are not responding for oxygen therapy are treated with further treatments like heated high flow nasal canula oxygen and broad spectrum antibiotics. The antiviral drug used for treating patients is not particularly developed for covid-19 they are developed for diseases like HIV, Ebola, influenza and other [17]. Use of protein inhibitor like lopinavir- ritonavir which disrupts the replication of virus but does not show any benefit to the patient suffering from covid-19. Monoclonal antibodies are used which acts against inflammatory mediators which cause infection and the goal of preventing organ damage are also fulfilled. Tyrosine kinase inhibitors which are used to prevent pulmonary vascular leakage in the persons who are suffering from covid-19 infection. For hospitalized patients low molecular weight heparin is recommended for preventing blood clots in the patients. Studies are going on to assess the benefits of therapeutic anticoagulation. To achieve immune homeostasis the immunomodulatory agents like corticosteroids are used. High dosage treatment steroid is given for hospitalized covid patients in 2003. ribavirin is used for suppressing the replication of virus, treating hepatitis C, severe respiratory infections and other but it does not reduce the mortality rate, it is toxic may cause haemolytic anaemia and electrolyte disturbances in body. Protein inhibitor which is used for HIV patients are now it is used for treating SARS patients. Glycyrrhizin which inhibits virus absorption and penetration during period it's effective against SARS COV. To treat nonspecific features broad spectrum antibiotics are used like fluoroquinolone and macrolide. Ganciclovir regimen, remdesivir and chloroquine regimen are also used for treating covid patients. Investigation is going for antiviral drug identification. At initial stages covid-19 was treated with ventilation, antiviral and antibacterial drugs. Mostly patients received

antibiotics of low molecular weight like heparin. Special therapy was given to patients as directed by physician [18].

Protection on healthcare workers

Health workers were advised to take PPE kit, mask, face shield to prevent droplet and contact transmission from the infected patients. International journal of infectious diseases are mutually monitoring the infection control while wearing and removing PPE kit and mask, but there may be chance of infection. It is advised to wear mask for confirmed patients while transferring to prevent transmission. Daily self-monitoring of workers is required for early detection and prevention of virus spread. High risk areas such as ICU and isolation wards are ventilated with negative pressure to prevent infection among the health workers.

Community prevention

We all know that from forth night of March central government declared lock down like to close schools, colleges, resorts, public places, restaurant, shopping malls and others. Due to high risk government announced to maintain social distance, wear mask and warn the people not to come out until it's an urgent requirement. Government also announced to postpone all functions, gatherings to avoid community spread of infection. Strategy used for the population to frequently wash hands with disinfectant soaps, use hand sanitizers for every 30min and avoid direct contact and clumsy population in contaminated environment.

Effect of blood group

After so many studies scientist conclude that blood type plays an important role in covid-19 infection risk. There was increase in infection risk in other than O blood group people. Intubation risk is more in AB and B type, less in A type blood group people compare to O blood group, but the death cases mostly noticed in AB type blood group people and less in A and B type blood group people.

C-RP marker effects

Some of the blood markers plays an important role in covid-19 by altering them their may be cause degree of severity and mortality. CRP which means C-reactive protein, it is a marker we can notice changes in severe covid-19 patients. C-protein is synthesized in liver which acts as marker and helps in early identification of infection and inflammation. The concentration level of CRP in blood is around 10mg/L, which may rise in 6-8 hours. At the time of disease condition there will be increase in the level with in 48hours. The concentration decreases when the person is recovering from disease and it short period around 19hours. The level of C-RP will increase in covid-19 patients up to 20-50mg/L and in severe patients we can see increase up to 86%. In non-severe patients it acts as anticipating marker with minimal threshold value around 26.9mg/L observed by scientist. There will be fluctuations in C-RP level based on oxygen levels in Covid patients. If C-RP is high there will be high production of cytokines in severe Covid patients. The patients with high C-RP level there will be need of keen observation.

Plasma therapy

Plasma consists of organic compounds, water and inorganic salt. It contains 1000 proteins like albumin, immuno globulins, and coagulation and antithrombotic factors and shows some beneficial factors like replenishing coagulation and other. It also maintains osmotic body fluid in the body. After severe increasing infection of corona virus cases, doctors started trails on covalent plasma therapy. It

is a non- pharmaceutical treatment. It is gaining importance in treating Covid patients and also seen a very fast recovery. It's not a new type of treatment, it is used for several viral and bacterial like treatment in past like Ebola, Covid, influenza and other.

We can notice less mortality rate in patients who received plasma therapy with in 14days of infection. We can notice increase in IgM and IgG antibodies within 11-15days. For plasma therapy plasma was collected from patients who recovered from confirmed covid-19 and positive IgG antibodies against to covid-19. For conformation specimens were collected from nasopharyngeal swab of donors for testing against IgG antibodies. They also notice some results given by laboratory like neutrophil count, lymphocyte counts, CRP, D-dimer, LDH and oxygen saturation for every one hour. By some studies we came to know that the lymphocyte count increases after 1day transfusion of plasma when compare to control patient. Clinically this virus is very broad, ranges from pneumonia, death and heart failure. So till now there is no medication for covid-19, so doctors preferred this historical choice of plasma treatment. Using plasma globally from the success of other virus from past which is used to neutralize the pathogens, provide anti immuno modulatory properties and also inflammatory properties to patients. This plasma remains unclear in patients.

Different organizations like WHO, FDA issued the guide lines for use of plasma therapy for treatment by collecting plasma from standard donor for emergency purpose. The eligibility of plasma donors is they should have moderate or severe covid-19, according to WHO guidelines and treatment by physician. The persons suffering from multi organ failure, severe intravascular diseases and other are not eligible for plasma donation. By different studies we came to know that there are different doses given to covid patient like 200, 200-240ml in one dose, and 200-250, 250ml, 500ml given in two doses. By use of these doses we came to know that there will be expulsion of virus from body. This plasma therapy is very effective and preferably specific for covid-19 patients without any adverse effects. Plasma containing high level of Abs against covid-19 in starting phase reduces the severity of infection and mortality rate. It is a simple technique which offers passive immunity and protection against virus. It's very better option for patients who are at early stage of Covid and less prone to severe diseases and infection. This therapy is tolerated by all patients but in some patients it may show some adverse effects. Adverse effects like mild fever, allergic reaction, acute lung injury, cardiovascular disorder, and renal impairment. Sometimes there may be fluctuations in body temperature (5-15°C) during transfusion and within 2hrs of transfusion. During transfusion there may be chance of transmission infectious agents like hepatitis C& B virus, covid-19 and other.

Screening is necessary to avoid transmission of obligatory infectious agents. It may cause infection like jaundice, red spot on skin and other in some patients. This donor should have neutralizing antibodies in their plasma; we can say that this plasma will not be present in all Covid recovered patients, only 30% have low titre value of antibodies in their plasma. The neutralizing antibodies will be their only for few months or weeks.

Some studies shown that there is no particular dose for Covid treatment, but some studies show 200-2400ml for treatment it depends up on patients. Eligibility of donor should meet the standard blood donation, should test negative and free from covid-19 symptoms. Plasma of donor should be compatible with A-B-O blood group of recipients'. Due to transmission of plasma there will be improvement in C-reactive protein, lymphocytes, immunoglobulin M&G.

Impact

From ancient times we all know that agriculture is the backbone of Indian economy. Agriculture which serves as food to the population, top agriculture export and provide work, but due to covid it has some declination. In India agriculture contributes 17% in its GDP. The sectors like hospitality, tourism and other sectors suffered a lot during this pandemic. The lock down severely affected the retailers and wholesalers because of consumption of essentials were reduced. Here we can see decrease in income level of daily wages due to less economic activities in so many sectors like construction, schools, real-estate, transport, shopping malls, cinema halls and other. Transportation sector is severely affected because of lockdown like closing of schools, restricting transport facilities from state to state and interstate transportation and other software companies mostly preferred work from home. Resorts, hostels, hotels, restaurants are closed due to mostly people are avoiding trips, closing of schools, colleges and other important meetings. The raw material problem was faced by some manufacturing industries like automobiles, electronics, pharmaceutical and other. There was also decrease in investment in businesses of various sectors due to Covid.

The education sector is also affected very badly due to this covid-19 pandemic. By April 2020 decided to close the educational institution to save the lives of students, teachers, staff and their families. It may lead to increase in the learning poverty up to 63% and there is no chance for coping it up. Due to close of approximately anganwadis, schools, universities, pre-primary schools, colleges which cause the deficit in learning and it may cause loss in economic aspects of approximately USD 400 million. To avoid this closing of schools total education sectors turn towards online classes by using digital resources. The important access for online classes was internet. In government institutions there is improper availability of infrastructure facility, so it's difficult to conduct online classes. Due to close of educational institutions UNESCO has estimated the learning loss on an average around two-third all over the world. A child of younger age forgotten what they learnt in earlier classes and now they are not ready to face class performances of foundation skills. Countries like India are very low in learning aspects, so this pandemic may lead to very widespread loss. The closing of schools may indirectly affect the nutrition profile of children. Schools play an important role in maintaining nutrition and physical health of children. India is the one of the largest country which runs successfully the mid-day-meal Programme and it was beneficiary to about 120million children's across the country. The anganwadis centers are also providing free meal for children every day of about 1.37millions across the country. Due to this pandemic approximately estimated 115million children's will face severe malnutrition disorder. Due this malnutrition disorder the government of India decided to increase the quantity of ration giving compare to regular one in the early stage of pandemic through scheme so called Take Home Ration (THR). Due to lack of implementation of these schemes in different geographical area, the different states came out with different strategic schemes.

The motivation levels in children's decreases because of closure of school, not meeting their friends and avoiding them to play out door games and it also affected the physical health. The lockdown affected the livelihood of approximately 40million children's due to migration and street children's in rural and urban areas. Due to this pandemic most of children's are leaving their homes, kidnappings, some are forced to do hazardous work. During this lockdown there was more demand for child labour. In all people there is important question raising towards school opening like transmission, exposure of covid-19

to teachers, staff, children's and their family members.

Long term effects

Covid people experiences mild and moderates symptoms or illness. In some cases there will be 10-15% severe diseases, 5% with critical illness. We can see long term adverse effect but it may be very less. Covid-19 affects different organs of human body like cardiovascular inflammation, respiratory lung infections, neurological loss of flavor, aroma and sleep fluctuations, depression, anxiety and mood swings.

Nutrition

Nutrition and hydration plays an important role in people who take an balanced diet which boosts immune system, avoid risk of chronic and infectious diseases. To maintain balanced diet we should take fresh, unprocessed and processed food regularly to get enough vitamins, minerals, protein, carbohydrates, antioxidants and other. Drink enough amount of water for keeping body hydrate. We all know that people who are suffering from obesity, diabetes, cancer and other are at high risk of infection of covid-19 so in that case try to avoid sugar, fat, and salt consumption.

Daily recommendation

Fruits: 2cups

Vegetables: 2.5cups Grains-180g

Meat and beans: 160g

Red meat is preferred to consume 1-2 times in a week and poultry 2-3 times a week.

Mostly prefer raw vegetables, fresh fruits and sprouts rather than foods which are rich in sugar, fat and salt. Don't overcook vegetables and fruits because there may be chance of leaching of nutrients from food. Now-a-days due to rush life people are preferring canned foods , in case of canned foods try to prefer salt and sugar free foods.

As we all know that our body contains 70-80% water which plays a crucial role in transportation of nutrients, compounds in blood, which maintain body temperature and other. Try to drink 8-10 cups (5litres) of water every day. Consume the fruits and vegetables which are rich in water content, but don't consume high caffeine drinks and other carbonated drinks high in sugar content. Intake of unsaturated fats is very essential when compare to saturated fats. Try to consume white meat, fish because rich in unsaturated fats and avoid to eat processed meat, junk foods, fried foods, pizzas, bakery products, spreads and other because they are rich in trans-fat, salt and other spices. Consume less fat or skim milk dairy products to reduce the intake of fat. Try to consume fewer amounts of salt 5g per day and reduce, less soft drinks and flavoured products. Consume butter milk which is left for 8-12hours after keeping aside without disturbing because it contain lactic acid bacteria which acts as against coronavirus.

Second wave

Here the second wave of covid-19 is nothing but mutation of covid-19 gene of 1st virus gene. This gene of replication or mutation was identified first in south Africa which they named as 501.V2 variant and later it spread throughout the country. The identical feature of this mutant is to directly attack the human antibodies, target the vaccines and therapy of antibodies. Another mutant of the second wave is namely N501Y this occurs in genome sequence when spike proteins attached o human receptor. This strain was identified and spread in countries like Australia and Britain. Another variant identified by

WHO Organisation and UK medical researchers which is B.1.1.7. It was detected in countries like Netherlands, Australia and Denmark. These B.1.1.7 strain is 70% more chance of early transmission compare to other two strains in this phase. Variants in other countries not yet identified because it takes a lot of time for identification.

Impact of second wave of Covid-19

In the second wave Covid is severely affecting India. The cases are increasing week by week in states of Maharashtra, tamilnadu, Chattisgarh, Punjab, Kerala, Karnataka, madhyapradesh and other. The death rate also increasing day by day from 1st week of February to till now. We can notice difference in first wave and second wave like more asymptomatic cases, less symptomatic cases, mortality and hospitalization is also low in second wave. The overall case fatality ratio is more in first wave it is 1.3% and in the start of second wave is rate is around 0.87%. The penetration of corona virus in the second wave is more compare to first wave. We can see less number of districts around 20-40 in the second wave with severe pandemic. With increase in pandemic state and central government both are struggling for fulfillment of resources like ICU, non-ICU, beds, oxygen cylinders and other to the patients. It is very important to break the chain of transmission of covid-19 but instead of that the cases are increasing day by day and there may be chance of increasing cases approximately around 2320 till September. So immunisation is mandatory, government should spend or sanction more amounts for testing and health care of population. Another way for break the chain of virus transmission is vaccination. The government has fixed up the target of approximately 5million doses o give for people per day above the age group of 45years. As of April month the vaccination percentage is about 29.6%. Government should spread awareness among the urban and rural people about vaccination. The adults like below 45years age group they will have several diseases (obesity, cancer, HIV, heart, renal, kidney failure and other) the severity of infection will be more, so according to the requirement the adults should be vaccinated. As of now in India the two types of vaccines are available like covaxin and covishield and government permitted for other 3types of vaccines namely sputnik, Janssen, novavax for overcoming the obligations of previous two vaccines. There are so many reasons for permitting the vaccines like we can produce the vaccine with in the country, proven as safe and other. We all know that India contains plenty of vaccine and government should provide guidelines, specific alert, severity and nature of medicine. Government should provide training for healthcare workers to recognise the adverse effects of vaccine and inform to the advisories. After vaccine they should observe people for 30-40min prior to that basic screening of health is necessary. Even after receiving vaccination also it's mandatory to wear mask and o be safe. Potentially reduce the risk of covid-19 transmission by avoiding gathering, meetings and other for next 2months. In community spread contact tracing, testing and isolation is important in both state and national level. For isolating patients in dense areas, state and national level can take help of community care centers and national task force. Government recommended immediate registration of patients to know whether they received either the doses or one. On the other hand we can know the spread of infection after vaccination. In point of travelling, if persons are arriving from international states 7days of quarantine is mandatory, after that RT-PCR test is performed and later again one week of quarantine is necessary (even though its negative). In case of domestic travel there will be no such restrictions, it depends on state protocols. Regarding educational institutions it's recommended that every staff should be vaccinated. In higher risk of infection states it's impossible to reopen educational institutions immediately which

are surrounded by hostels. Some recommendations are approved by government for opening schools for next academic year, and some problems were faced during learning and it's very difficult to pay incentives for low class families. For strengthening the healthy system, first we should train them how to vaccinate people. Health workers are responsible for vaccination drive, storage and supply chain, facilitate proper infrastructure and transportation for patients. Initiate fresh training program and train the persons, provide physical, mental, emotional support for health workers. Try to restrict surgeries, OPD and other. They can treat patients virtually. In last year of 2020 due to lockdown poor people faced lot of difficulties. Instead of lock down try to ban the meetings and other social gathering but don't affect the life of middle age groups, informal workers, daily wages. The decision about curfew and lockdown should be leaven to the people in the society, they should think in depth about all situations like business, and about workers while taking decision. Strong decision should be taken to break chains of covid-19 and hope to prevent the spread of further waves of pandemic.

Conclusion

Covid-19 it's self-became a severe world pandemic within a short span of time. It is increasing the death rate and infection rates. Covid-19 is a mystery disease till now no one knows exact details of this disease and it is frequently posing a question and giving challenges to researchers. Several researches are going on regarding the vaccine to stop this. Based on several clinical studies we should take immediate precautions like wearing mask and other. As we all know there is no treatment of Corona virus so Personal hygiene is important to break the chain of spreading Corona virus. From several reviews came to know that plasma therapy is one of the best known and beneficial method for treating against virus and it contains some limitations. In Plasma therapy the conditions are applied which are mentioned in this article. One of my sincere request or advice is to donate plasma for recovery of other patients who are recovered from covid-19. Some companies have developed vaccine for this virus but it only provide antibodies or boost immune system. It does not prevent the infection of virus. We can notice so many cases like the persons after taking vaccination are also affecting with covid-19 but severity may be less.

Finally I want conclude that there is no particular treatment for this disease so please be careful and follow all the precautions given by government. Nowadays we are noticing the fast replication of gene and severity of virus. Government should bring awareness among the people regarding of this pandemic. Government should provide enough essential for treating patients. We can appreciate the government that it brings out new schemes for people who are suffering due to this pandemic. The nutrition plays an important role in this pandemic, so please try to take a healthy diet. In future they may be chance of replication and generation of more variants so be safe and protect yourself, please make your surroundings clean. People are panic when they tested positive so don't be panic try to take treatment at home. Now a day's several private hospitals are playing with the life of people. Sincere request to Covid infected patients don't take oxygen unnecessarily.

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