WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

IMPACT OF CORONA VIRUS ON MENTAL HEALTH IN INDIA: REVIEW ARTICLE

[1]Farhat Jahan, [2]Mrs. Sarita Sharma, [3]Dr. Gaurav K Sharma, [4]Dr. Kaushal K Chandrul

[1]Student of B. Pharma 4th year, [2]Counselor, [3]HOD & Guider, [4]Principal
Department of Pharmaceutical Science, Mewar University Gangrar, Chittorgarh Rajasthan 312901
EMAIL ID- farhatjahan7992@gmail.com

ABSTRACT

The Coronavirus Disease 2019 (COVID-19) pandemic has surprised health authorities around the world producing a global health crisis. This research discusses the main psychosocial stressors associated with COVID-19 in the literature, and the responses of global public mental health services to these events. Thus, a consensus and critical review were performed using both primary sources, such as scientific articles and secondary ones, such as bibliographic indexes, web pages, and databases.

The main search engines were PubMed, SciELO, and Google Scholar. The method was a systematic literature review (SLR) of the available literature regarding mental health services during the COVID-19 pandemic to conduct the present narrative review. Different stressors are identified in this pandemic, from psychophysiological, confinement, to social and work. Depending on the level of severity and the country of origin, various interventions have been applied that mark different ways of returning to normality and preparing new interventions.

This new stressor has a direct impact on the mental health of the population, provoking governments, and health services to become more flexible, innovate and adapt to the changing situation. The use of technology and mass media could be an important tool in this aim. Independent of this, preparing the general population for possible future waves of the pandemic is currently the best measure to mitigate more serious effects on the mental health of the population.

Keywords: - COVID-19; pandemic; stress; anxiety; quarantine

INTRODUCTION

Novel corona virus are a family of viruses that can cause a range of illness in human and animal including common cold and sever from like severe acute respiratory syndromes (SARS) and Middle east respiratory syndromes (MERS). Which are a life threating virus, the virus get name “corona” from shape the many crown-like spike on the surface of the virus, it the new virus that impacting the whole world badly. COVID-19 firstly identified during DECEMBER 2019, in Wuhan city to China.

In March 2020 the world health organization (WHO) declared the COVID-19 outbreak a pandemic. Novel coronavirus that is a virus that cannot be seen with open eyes. It is a micro virus that has never been seen before. Now a case of large number of death across the world Till now no proper drug or vaccine has been developed for treatment of the disease. However clinical trial and research is being carried on the development of drug vaccine. The COVID-19 pandemic has disrupted lives the world over for more than 2 year, its death toll will soon reach three millions people. Coronaviruses mostly cause gastrointestinal and respiratory tract infections are inherently categorized into four major types: Gamma coronavirus, Delta coronavirus, beta coronavirus, and Alpha coronavirus.

The first two mainly infect bird, while the last two mostly infect mammals Six type human Coronavirus have been formally recognized. These comprise HCoVHKU1, HCoV-OC43, Middle East respiratory syndromes coronavirus (MERS-Co V), Severe Acute Respiratory syndromes coronavirus (SARS) which the type of the beta coronavirus, COVID-19 is spread by dust particles and fomites while close unsafe touch between the infector and infected individual. Airborne distribution has not known to be a significant.

In India, the first case of 2019-nCoV was reported in Kerala in the last week of January 2020. Since then about 1353 cases have been reported from 27 State and Union territories. The state of Tamil Nadu has reported more than 300 cases and 110 samples were investigation at the time of writing.In Kerala, about 290 people are infected while 120,000 other are under observation. The 2019 n-Co V poses a potential threat to children, family and communities at large. There are direct heath implications of the virus infection itself. Coronavirus are Zoonotic, meaning they are transmitted between animal and people. Detailed investigation found that SARS-Co V was transmitted from civet cats to human and MERS- Co V from dromedary camel to humans. Several known coronavirus are circulating in animal that have not yet infected human.

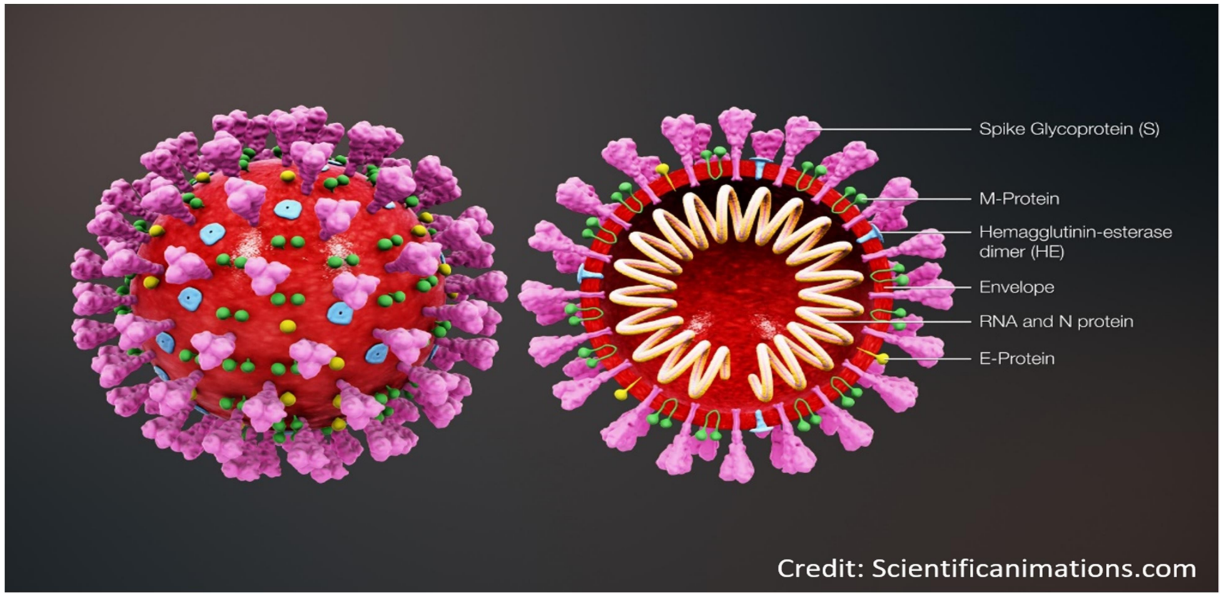
❖ ***HOW DOES CORONAVIRUS LOOK LIKE***

Coronavirus are relatively simple structure and their help us to understand how they work. They are spherical and coated with spikes help the virus bind to and infect healthy cell, however the some spikes are also. What are the immune systems to see bits of the spikes can be used in potential coronavirus vaccine to prompt body to produce antibodies against this virus.

❖ ***HOW DOES THE SPREAD COVID-19***

It is from person to person among these in close contact (with in about 6 feet 2 meter). When the virus travels in respiratory droplet when a infected person cough sneezes talk sings or breath near, this thought to be the main way COVID-19 from close context. Touching shaking hand with and infected person by touching surface that the virus has landed on then touching your eye mouth or nose before washing your hands.

COVID-19 enters your body through mouth nose or eyes (directly from airborne droplet or from transfer of the virus your hand to your face). The virus travels to back of your nasal passages and mucus membrane in the back of your throat. It attaches to cell there begins to multiple and mouse in lungs tissue from there virus can spread to other body tissue.



❖ ***SYMPTOMS***

- Fever
- Shortness of breath
- Coughing
- Trouble breathing
- Fatigue
- Chill, sometime with shaking
- Body aches
- Headache
- Sore throat
- Congestion/runny nose
- Lose of smell or test
- Nausea
- Diarrhoea
- Vomiting

❖ ***CORONOVIRUS RISK FACTORS***

- Chronic kidney disease
- Chronic obstructive pulmonary disease
- A weakened immune system because of an organ transplant
- Obesity
- Serious heart condition such as heart failure or coronary artery disease
- Sickle cell disease
- Type 2 diabetes [7]
- Anyone can get COVID-19 and most infections are mild the older you are the higher you severillness,

CONDITION THAT COULD LEAD TO SEVERE COVID-19 ILLNESSINCLUDE

- Moderate to severe asthma, disease that affect your blood vessels and blood flow to yourbrain.
- High blood pressure.
- A weak immune system
- Liver disease.
- Pregnancy
- Smoking
- Type 1 diabete

METHODS FOR INDICATING ON MENTAL HEALTH

This study is a narrative review designed to collect published literature and articles regarding mental health services during the COVID-19 pandemic.

2.1. Search Methods and Strategies for Identification of Studies

Protocol was based on a literature search using primary sources, such as scientific articles and secondary ones, such as bibliographic indexes, web pages, and databases. Thus, we used PubMed, Scopus, Embase, Science Direct and Web of Science using MeSHcompliant keywords including COVID-19, Psychology, Mental Health, Coronavirus 2019, SARS-CoV-2 and 2019-nCoV.Articles published from 5 February 2020 till January the First 2021 were used.

For inclusion criteria nine review authors screened the titles and abstracts of all retrieved manuscripts, then exclusion criteria were applied if (i) studies used old data (out of the proposed timeline), (ii) had inappropriate topics and were not pertinent to the focused purpose of the study, (iii) were not in English. Extraction of information was performed by the same nine review authors who conducted the study selection. Then, Sustainability 2021, 13, 3221 3 of 21 studies were selected independently, and the results were discussed to make the present narrative review.

2.2. Psychophysiological Stressors in the COVID-19 Pandemic

Psychophysiology is one of the cornerstones of clinical health psychology, and its primary objective is to understand how psychological and social experiences could influence an individual's physiological homeostasis. During the current COVID-19 pandemic, a holistic perspective is needed since isolation measures, fear, uncertainty, economic instability, social disconnection and trust in other people and institutions are becoming new psychophysiological stressors [28].

Fear may be one of the strongest triggers. Fear of contagion, but also fear of the future, of losing their job in professions in which they cannot work from home. Fear of not having enough financial resources to be able to pay their normal bills. Fear of the uncertainty of not being able to see relatives.

Fear of how the virus is transmitted. Maybe the worst fear: will I be infected? Will I be infecting my loved ones without knowing it? Will I be part of the asymptomatic population helping the virus to spread? [29]. This stressful and novel situation would lead to psychological consequences in the medium and long term [30]. Physiologically, acute fear may not have negative health implications but when it is prolonged over time, changes occur in the immune and autonomous nervous systems, endocrine function, and level of hyperarousal, in addition to sleep/wake cycle disruption, eating disorders and dysregulation of the hypothalamus-pituitary-adrenal axis [31]. Recent studies suggest how psychological stress may also increase the production of hypothalamic and amygdala corticotropin-releasing hormone (CRH), which has been recognized as a precursor of cortisol production [32].

CRH has been shown to have an impact on mucosal mast cells, increasing the production of inflammatory cytokines and tumor necrosis factoralpha (TNF- α), which directly affects gut epithelial cells, increasing gut permeability. These physiological conditions do nothing but increase the severity and fatalities associated with the COVID-19 pandemic [33]. Other contextual factors that may increase comorbidities among the population are related to physical inactivity due to an imposed quarantine, which even before the COVID-19 pandemic, was already a major global health problem [34]. Since quarantine is a long-term suppression measure, metabolic syndromes may appear or become aggravated, increasing the risk of insulin resistance, oxidative stress, inflammation, obesity, endothelial dysfunction, and cardiovascular disease [35].

This limitation of movement will lead to more sedentary activities, which authors propose will not only reduce energy expenditure but also increase food intake as these tasks decrease feelings of satiety and fullness, and lead to overconsumption, thus worsening the metabolic effects of sedentary behaviors [36]. In this situation, there is an increased level of pro-inflammatory cytokines and downregulation of hormones such as serotonin and melatonin, which are highly important for maintaining circadian rhythms since night-time melatonin derived from the pineal gland is the primary driver of night-time immune cell dampening which occurs as part of the circadian rhythm [37]. Thus, there should be a particular focus on appropriate behaviors as well as physical and nutritional guidelines adapted to the new situation.

2.3. Social and Work Stressors in the Pandemic In the fight against the COVID-19 pandemic

, until we have achieved herd immunity with an effective and safe vaccine, the behavior of world's population plays a crucial role in stopping the spread of the virus [15]. The current perspective on coping with the pandemic is limited to the impact on physical health and minimizing transmission risks (i.e., masks, social distancing, frequent hand washing). This approach distracts attention from the psychological consequences of social stressors [38].

In this line, authors suggested that most of world's population did not consider confinement to have an impact on general mental health. The inappropriate behaviors of some people (i.e., mass gatherings, coughing without covering their mouths, physical contact . . .) aggravated the Spanish

flu Sustainability 2021, 13, 3221 4 of 21 pandemic that led to more than 50 million deaths [39]. Today, mass media and government communication systems could be an excellent way to improve prevention and increase social confidence [40].

However, fake news (e.g., consumption of hydroxychloroquine, sodium chlorite, antibiotics, conspiracy theories) and political power struggles have controlled social networks and TV programs along with the pandemic and, consequently, have increased distrust and insecurity [41–44]. Furthermore, growing concerns about the socioeconomic impact, possible second waves and market uncertainty are major social stressors, and their long-term effect has not been studied yet. The socioeconomic crisis derived from the COVID-19 pandemic could have a significant impact on world gross domestic product, equal to about 20 trillion dollars, with 3 to 15% decreases depending on the country [8]. In addition, the unpredictable global financial consequences and the local socioeconomic impact will have devastating effect on jobs and the socioeconomic balance of individual households.

Quarantine, a drop in consumption, business closures and restrictions on tourism have affected the most important stock indices [45,46]. Travel restrictions not only affected jobs related to air transport (i.e., loss of between 25 and 30 million jobs and the bankruptcy of dozens of airlines) but also caused general population consumption dynamics to decrease by 25 to 30% [47]. This abrupt drop in consumption has produced massive job loss, which could be permanent in more than 40% cases. Some multinational companies have advised employees to transfer their work to other productive sectors in anticipation of falls of more than 90% in terms of hiring workers [46].

Several publications have suggested that employment losses and changes to the business world have had devastating effects on mental health and suicides [48]. Job loss was especially traumatic among the most vulnerable populations (e.g., people at risk of poverty, experiencing race or gender-based discrimination, with few academic qualifications) and there are compelling proposals for prevention and protection in terms of physical and mental health requirements [49]. Yet, pandemics rarely affect everyone equally, so official interventions must be properly designed and well-adjusted. Differences in gender (e.g., PTSD, hyperactivation of the arousal system and cognitive disturbances affect females 7% more than males), race or social status demand the same level of intervention during and after the COVID-19 pandemic [50]. Gender violence [51], higher stress levels in pregnant women [52], higher risk of infection among ethnic groups [17], different mortality levels per race [53] and suicides among impoverished social groups [54] encourage new political decisions to look for competent and free interventions in terms of general mental health.

Most socially vulnerable people are at risk of considering the COVID-19 pandemic to be a lifetime traumatic experience [55]. Some authors believe that the COVID-19 crisis should be faced from the perspective of trauma, threat, and fear, with special attention paid to young people who are less able to develop positive coping strategies [56]. Additionally, people with fewer academic qualifications, low social status groups, and gender differences must be cared for quickly and adequately to prevent future mental illness [57]. Finally, focusing on the social and working related circumstances of those who are on the front lines dealing with the virus, health workers, they require special attention. Health workers are a high-risk group from a mental health perspective.

Early care programs to reduce work stress could help to control PTSD in hospital settings [58,59]. Positive coping strategies, emotional moods, social support, burnout, and personal wellbeing during the pandemic should be studied in-depth in these workers [60]. All those studies would allow the detection, diagnosis and treatment of insomnia, depression, anxiety, burnout, and PTSD cases, reducing undesirable mental health problems in front-line and intensive care unit workers [29,61]. Improving sleep patterns, rest and moods would help in clinical decision-making during critical times such as when there is an influx of infected people and implementing COVID-19 treatments [26]. Hence, an excellent strategy to find the best intervention for mental health must be designed to reduce long term effects on the most vulnerable populations. The main psychosocial and work stressors during the COVID-19 Sustainability 2021, 13, 3221 5 of 21 pandemic, such as fear, co-workers' deaths, psychological anguish and frustration due to a lack of effective treatments, produced higher PTSD levels in front-line healthcare workers compared to non-clinical personnel [44].

2.4. Contextualization of COVID-19 Numbers and Measures Adopted Worldwide

The first reported case of COVID-19 was in December 2019 in the city of Wuhan, the capital of Hubei (China). From that point on, confirmed cases spread across the world until the World Health Organization declared it a global pandemic on 11 March. To date, 7.6 million people have been infected with COVID-19, with the United States of America being the country with the most confirmed cases worldwide: more than 2 million (2,032,524). Brazil is the second country worldwide where cases are growing exponentially (828.810).

In Europe, at present, there are 2,316,910 confirmed cases: 292,954 in the United Kingdom, 243,209 in Spain, 186,022 in Germany, and 152,067 in France, among others with a high number of cases. Portugal has been included in Table 1 as an individual case since it is next to Spain and has reported less than 37,000 cases [62]. China has reported 84,729 confirmed cases and 4645 deaths. Moreover, while most countries are in the process of easing restrictions, COVID-19 has taken 426,317 lives worldwide, 114,466 in the United States alone, followed by Brazil with 41,828 deaths. In Europe, daily deaths have slowed down but are still considerable. 41,481 in the United Kingdom, 34,233 in Italy, 29,312 France, 27,136 in Spain 8781 in Germany, and 1505 in Portugal [63]. Depending on the socio-economic and cultural circumstances, governments have taken internal actions to tackle the situation and face the "COVID-19 challenge". Without the presence of a vaccinated population, most countries are doing their best to lessen the spread, whether by temporary lockdown, easing restrictions in stages, or carrying out fast and easy-to-take coronavirus tests.

2.5. National Guidelines for Emergency Mental Health Care during the Pandemic

Parallel to the current COVID-19 pandemic is another of psychological origin. To this end, governments are creating documents for national dissemination supporting mental and psychosocial wellbeing in all population groups. The central agencies that generate these guides are the WHO and the Inter-Agency Standing Committee [64], in collaboration with the different governments, making them accessible and relatable to the population.

To date, there are two main guidelines for Mental Health and Psychosocial Support for COVID19, one developed by the states that make up the African Union [65]; and the second, the mental health and psychosocial guide by the WHO including comprehensive clinical and non-clinical information for different population groups .

❖ **PREVENTION**

Right now the best defence to prevent getting COVID-19 is to follow some of the some stapes. Wash your hand for at least 20 seconds especially before eating and preparing food after using the bathroom after wiping your nose and after coming in contact with someone. Wear a mask when physical distancing is not possible.

- Don't touch your eyes nose or mouth.
- Clean your hand often. Use soap and water, or an alcohol or sneezing.
- Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
- Stay home if you feel unwell.
- If you have fever, cough and difficulty breathing, seek medical attention**.**

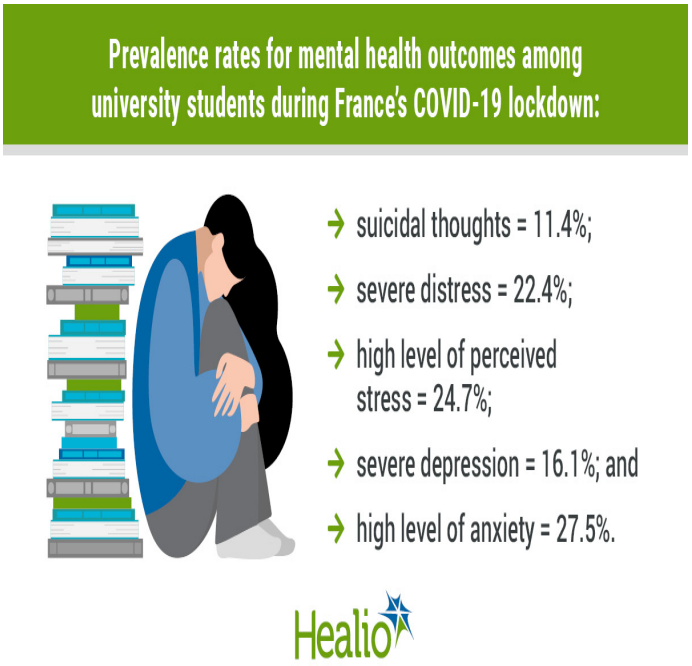
IMPACT ON MENTAL HEALTH DUE TO COVID-19

COVID-19 patients are at an increased risk of being diagnosed with anxiety, depression or insomnia.

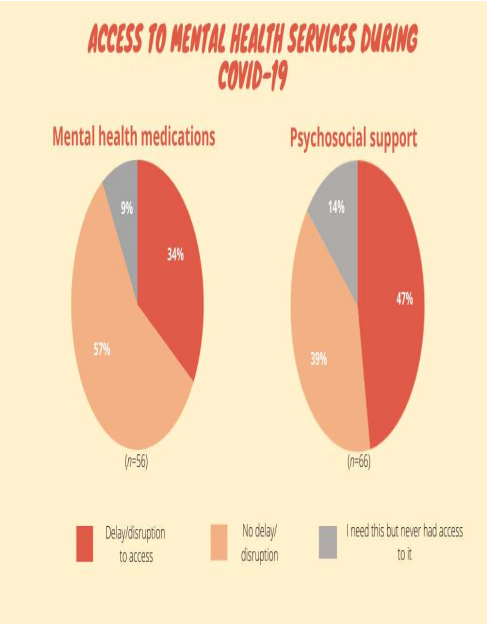
Here's a closer look at how the SARS-CoV-2 virus can impact your mental health.

❖ Recent research has revealed the toll that contracting SARS-CoV-2, the virus that causes COVID-19, can have on your mental health. The study, published in The Lancet Psychiatry, analysed the electronic health records of 69.8 million patients in the United States, which included 62,354 patients diagnosed with COVID-19. Within three months of testing positive, almost 20% of people diagnosed with COVID-19 were then diagnosed with psychiatric disorders, including anxiety, depression or insomnia. One in four of those people had not received a psychiatric diagnosis before. The researchers warned that the results are likely to be underestimates of the actual number of cases.

❖ Researchers from the NIHR Oxford Health Biomedical Research Centre and the University of Oxford Department of Psychiatry, also found that people with a pre-existing psychiatric disorder were 65% more likely to be diagnosed with COVID-19 than those without. The researchers say this finding was unexpected and needs further investigation. In the meantime, they say, having a psychiatric disorder should be added to the list of risk factors for COVID-19.



Sufferers of "long COVID" – who are still experiencing symptoms months after testing positive – also appear to experience mental health issues, which can be triggered by a range of factors including post-traumatic stress disorder (PTSD), lethargy, fatigue and olfactory disorders such as a loss of their sense of smell.



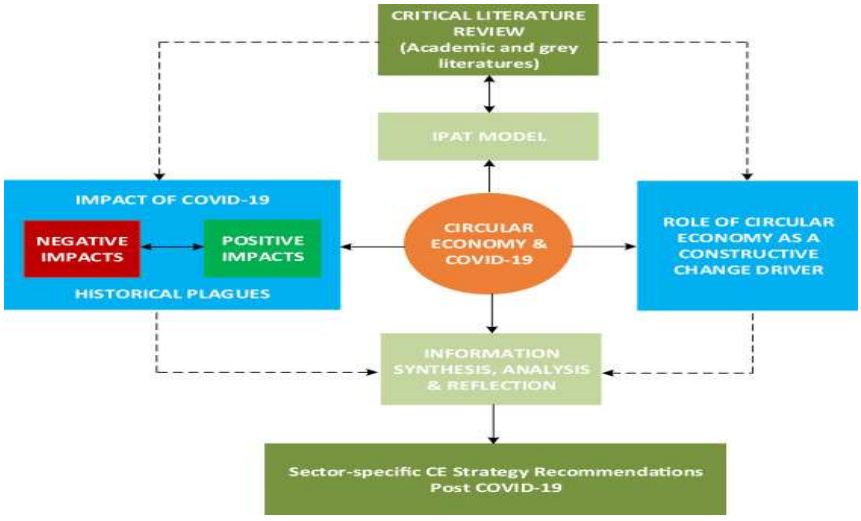
The Devastating Effects of COVID-19 in India

COVID-19 pandemic has had catastrophic effects for many countries around the world, but none more so than India, the world's The second most populated country. In the last few months, the COVID-19 Delta variation of the virus has crippled the entire country creating a second-wave crisis.

Loss of Life - According to The New York Times, the total number of COVID-19 deaths in India is being grossly undercounted. The official numbers shared by the Indian government state that there are only 390,000 confirmed deaths while there are 30 million confirmed cases, with over 300,000 new cases being reported each day. Many media outlets and scientists believe that the death toll is 2-3 times higher than what is being reported and could be somewhere between 600,000 to 1.6 million, based on the number of cases and the infection mortality rate. Whether reported or not, COVID-19 deaths continue to rise in India due to a shortage of nurses, doctors, and other healthcare professionals as well as a poor government response, limited hospital beds, and low supplies of crucial medical supplies like oxygen and ventilators.

Economic Impact - Once one of the fastest-growing economies in the world, COVID-19 has crippled India's economy, with the country's GDP contracting 7.3% since the beginning of the pandemic. This is even more devastating because India's GDP averages 7% per year. India's middle class has also rapidly shrunk because of the economic ravages brought on by the pandemic, resulting in 75 million Indians being pushed into poverty. India now represents 60% of the global increase in poverty since the pandemic began, highlighting the devastation brought on by the effects of COVID-19.

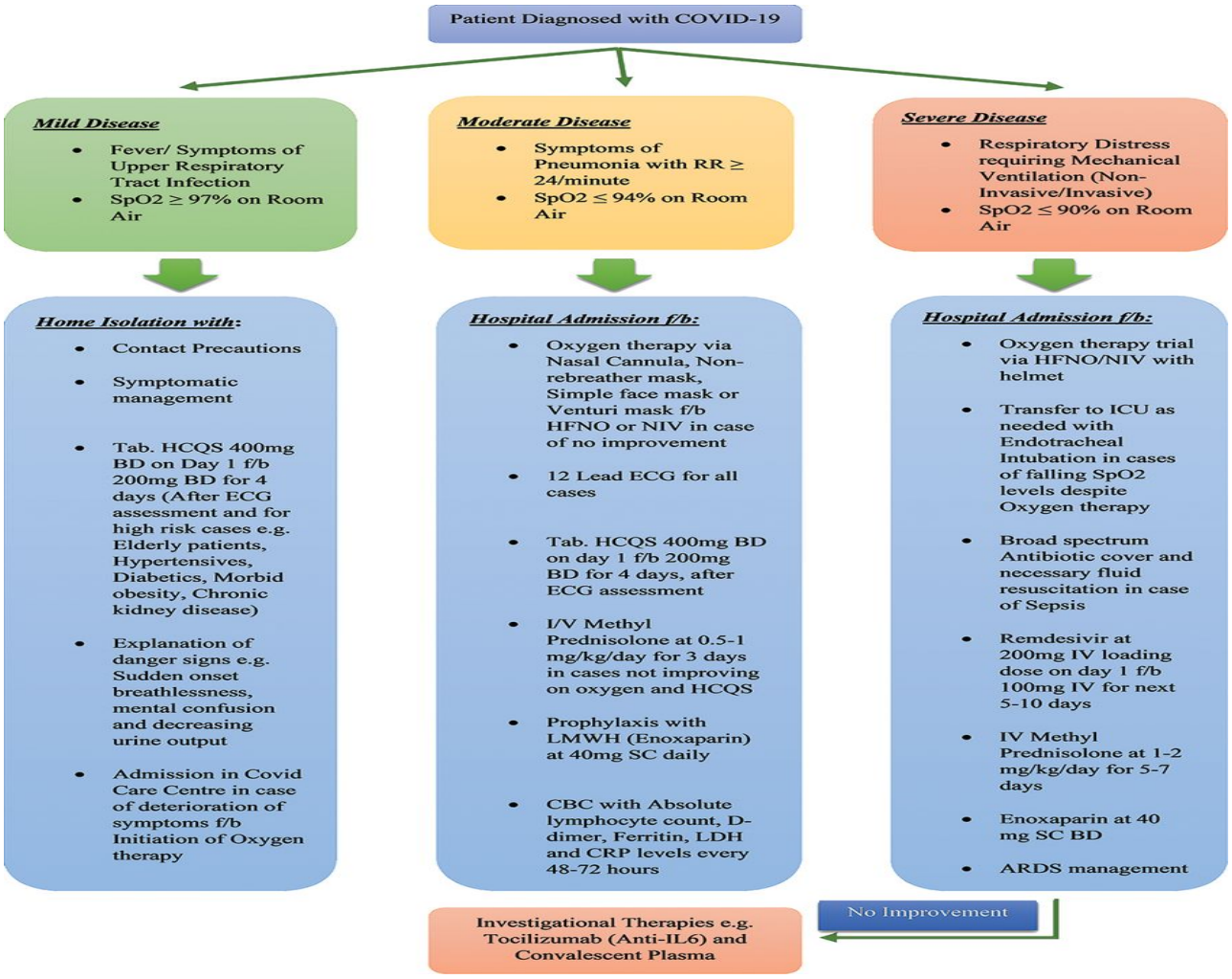
In response to the ongoing COVID-19 crisis in India, Tiyara launched COVID-19 Recovery Scholarships to support financially vulnerable students who have lost their parents during the pandemic. Over 70% of our current students are pursuing health-related education like nursing and radiography to shore up the desperately needed healthcare infrastructure in India. You can help make a difference in the life of a student by putting them through college and, at the same time, help India build its healthcare system by contributing to this cause today!



SYMPTOMATIC TREATMENT OF COVID-19

Therapeutic Management of Nonhospitalized Adults With COVID-19

Several therapeutic options are now available for the treatment of nonhospitalized adults with mild to moderate COVID-19 who are at high risk of disease progression. A number of factors affect the selection of the best treatment option for a specific patient. These factors include the clinical efficacy and availability of the treatment option, the feasibility of administering parenteral medications (i.e., remdesivir), the potential for significant drug-drug interactions (e.g., those associated with the use of ritonavir-boosted nirmatrelvir [Paxlovid]), and the regional prevalence of variants of concern (e.g., the regional prevalence of the Omicron BA.2 subvariant may affect which anti-SARS-CoV-2 monoclonal antibodies [mAbs] can be used for treament).



CONCLUSION:

As detailed in this report, open global trade has had positive effects for African industrialization and development. Efforts must continue to help developing countries and Africa build capacity and to take fuller advantage of the benefits that trade brings. Recently, faced with the impacts of the COVID-19 pandemic, some of these efforts have been challenged and the developmental gains of recent years put in question.

REFRENCES:

1. Wang C, Horby PW, Hayden FG, Gao GF. A Novel coronavirus outbreak of global healthconcern. Lancet. 2020; 395 (10223): 4703
2. Call for global ban on wild animal market amid coronavirus outbreak https://www.theguarden.com/science/2020.jan/24/call-for-global-ban-wild-animal- markets-amid-coronavirus-outbreak
3. IHui Ds, et al. The containing 2019-CoV epidemic threat of novel coronavirus to global

4. health-the latest 2019 coronavirus outbreak in Wuhan, China Inte J Infection Dis.2020;91:264-
5. World Health Organization. Coronavirus disease (COVID-19)
6. Zhu N, Zhang D, Li X, Yang B, Song J, Et AL. A novel coronavirus from patient with pneumonia in China, 2019.N Engl J Med. 2020;382 (8): 727-33
7. Office of the primer. Newsroom: pandemic pay provides support for frontline fightingCOVID-19. 2020
8. Hu Z, Ma X, Qi T, et al. pharmaceutical care for cancer patient receiving antitumor treatment during the outbreak of coronavirus disease 2019. J Cancer Control Treat.2020;33:100-5
9. Woo PC, et al. Discovery of seven novel Mammalian and avian coronavirus in the genus deltacoronavirus as the support bat coronavirus as the gene source of alphacoronavirus and betacoronavirus and avian coronavirus as the source of gammacoronavirus and deltacoronavirus. J Virol.2012;86(7):3995-4008. Doi 10.1128/JVI.06540-11
10. https://www.who.int/campaigns/connecting-the-world-to-combat-coronavirus/health
11. Su D, Ma L, Huang L, et al. Construction of pharmaceutical care system for public health emergencies based on the pharmaceutical administration in wuhan fangcang hospitals. China Pharm. 2020;29:16-8.
12. Austin Z, Martine JC, Gregory PA. Pharmacy practice in times of civil crisis: the experience of SARS and the blackout in Ontario, Canada. Res Soc Adm Pharm.2007;3: 320-335.
13. Read JM, Bridgen JR, Cumming DA, Ho A, Jewell CP (2020) Novel coronavirus 2019- nCoV: early estimation of epidemiological parameters and epidemic prediction. medRxiv
14. http://www.who.int/health-topic/coronavirus#tab
15. Ministry of Health and Family Welfare, Govt. of India- https://www.mohfw.gov.in
16. From the website https://www.directrelief.org/2021/04/indias-covid-19-crisis-data- analysis.
17. World Health Organization COVID-19 – http://www.who.int/emergencies/disease/novel