Online Conference Entitled, "Study on COVID-19"

from 01-15 May 2020

Organized by

Society for Environmental Resources and Biotechnology Development, India

(Registration No. 68075, Under Society Act 1860, Govt of India)

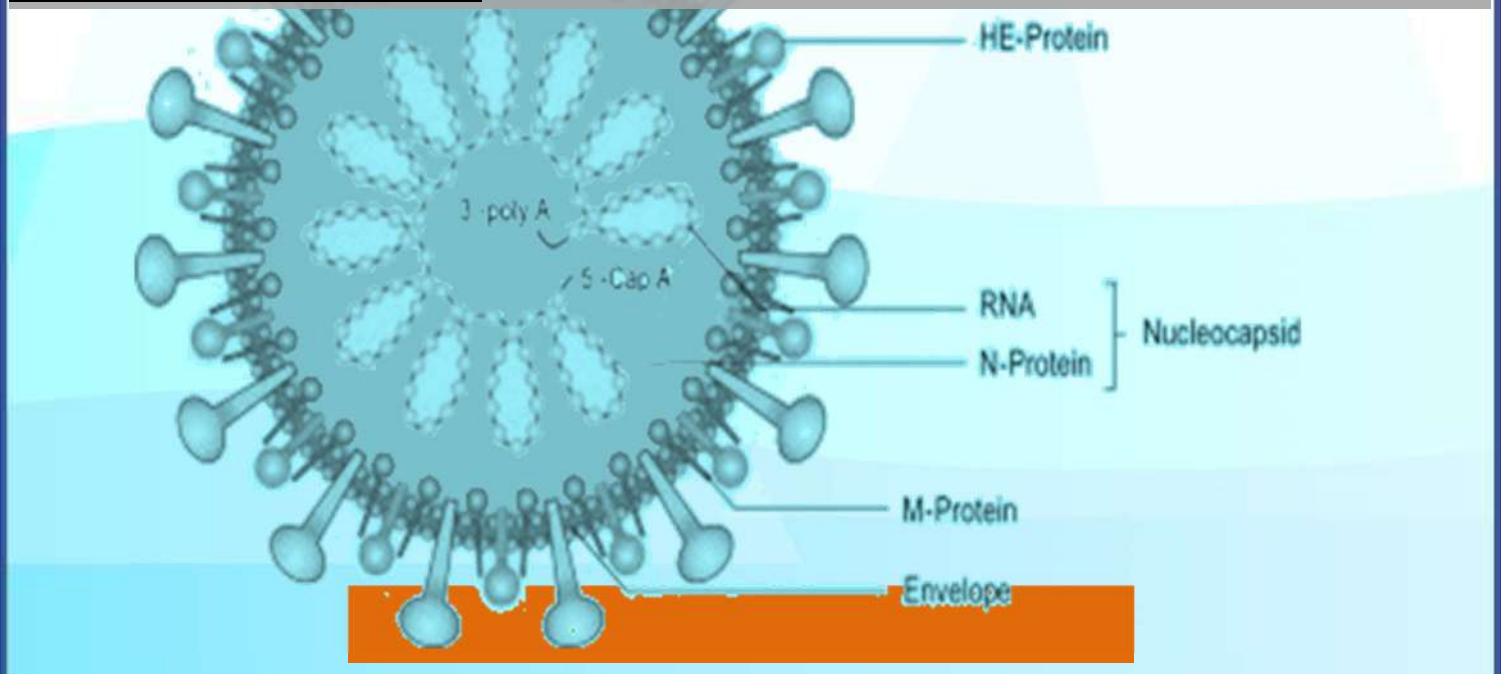
&

Electrohomeopathy Research Foundation, India

(Licentiate by Ministry of Corporate Affairs Under Section VIII of Companies Act 2013)

SOCIETY FOR ENVIRONMENTAL RESOURCES AND BIOTECHNOLOGY DEVELOPMENT (SERBD), INDIA

SUMMARY OF PROCEEDINGS OF "STUDY ON COVID-19"



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Abstract Book

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ABOUT THE BOOK

This book is designed, developed and prepared by Authors with utmost care. All the parts of this book are prepared and compiled by Authors by their own genuine efforts. The Above table of content represent all the research titles presented during the online conference from 01-05-2020 to 15-05-2020. The full-length manuscripts will be prepared and published in research paper book separately. Though all efforts have been made to ensure the accuracy and authenticity of the content of book however, the authors, publisher and printer disclaim all the liabilities. Under no circumstances will the author, Publisher and printer be liable for any type of expense, loss or damage arising from use of data. The book is prepared only for informative purposes and shows the information regarding COVID 19 which is spread all over the internet or new as well as experienced researchers and academicians.

Organisig Team

Online Conference

Study on COVID 19

01-15, May-2020

DEVELOPMENT OF ANTI-VIRAL THERAPEUTIC AGENTS AGAINST COVID-19

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ABSTRACT

COVID-19 pandemic has claimed more than 300,000 lives in less than five months causing an unprecedentedglobal health and economic crises. COVID-19 is a severe acute respiratory disease caused by a highly contagious and deadly virus SARS-Cov-2. The search for an effective vaccine is undergoingaround the globe. Prior experiences with other deadly viral diseases, such as AIDS and Ebola, predict that the development of an effective vaccine, if possible, may take several years. Thus, researchers across the world are also searching for effective therapeutics against this deadly disease. The primary goal to find an effective drug against COVID-19 is to identify the "proof of concept" that anti-viral drug or drugs can cure the disease. This review focuses mainly on the ongoing scientific research aimed at finding the proof of concept of two anti-viral drugs namely hydroxychloroquine and remdesivir to cure COVID-19.

Keywords: *COVID-19; pandemic; coronavirus; SARS-Cov-2; hydroxychloroquine; remdezivir.*

CURRENT STRATEGIES TO FIGHT AGAINST COVID-19 AND NOVEL APPROACH IN THE FIELD OF MICROBIOME AND IMMUNIZATION

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ABSTRACT:

WHO declared the COVID-19 is a global emergency, and this is caused by SARS-CoV-2, which is identified and originated in China. Since the first report, this virus is very challenging for modern science and technology. This paper shows the current main strategies and future research in microbiome and immunization field to control and prevent the SARS -CoV-2.

Keywords: *COVID-19; SARS-CoV-2; Microbiome; Immunization.*

TREATING COVID-19 USING ELECTRO-HOMEOPATHIC /SPAGYRIC REMEDIES

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ABSTRACT

Coronavirus is a serious and a severe form of respiratory disease which is life threating as well if not taken care of. Globally, a large number of people are being affected from this dangerous virus. Scientists are working really hard towards finding a full proof treatment to fight against this virus by finding allopathic medicines. Treatment in other systems of medicine are also being researched up. One of such systems is Electro-homeopathy(spagyric), the remedies available in this have been found out to very effective in treating Corona virus. The remedies that can be used to treat this disease are F1, P4, S5, C13, WE.

Keywords: *Corona Virus, COVID-19, Electrohomeopathy, Spagyric*

A REVIEW OF SARS-COV – 2 AND IN THE ONGOING TREATMENT

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ABSTRACT

The pandemic of coronavirus disease 2019 (COVID-19) caused by the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) presents an unprecedented challenge to identify effective drugs for prevention and treatment. Given the rapid pace of scientific discovery and clinical data generated by the large number of people rapidly infected by SARS-CoV-2, clinicians need accurate evidence regarding effective medical treatments for this infection. The COVID-19 pandemic represents the greatest global public health crisis of this generation and, potentially, since the pandemic influenza outbreak of 1918. The speed and volume of clinical trials launched to investigatepotential therapies for COVID-19 highlight both the need and capability to producehigh-quality evidence even in the middle of a pandemic. No therapies have been showneffective to date

***Keywords**: SARS-CoV-2, Hydroxychloroquine, SARS-CoV-2 clinical trial, Antiviral drugs.*

COMBATING CORONAVIRUS: AN ANALYSIS OF ROBOTICS INNOVATION IN MEDICAL SCIENCE

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ABSTRACT

The novel coronavirus also known as COVID-19 has set off a global health crisis and spread like a wildfire across continents. The World Health Organisation (WHO) has declared a global emergency as more and more cells are getting infected through the respiratory tract; the fatality rate is optimized. Amid the outbreak of COVID-19 Li Wenliang widely regarded as a hero in China for blowing the whistle on the threat was unfortunately infected with coronavirus during his work in the fight against the coronavirus epidemic. This has raised concerns of its severity impact. There is no proven cure yet, the only key is to prevent its pandemic. In the wake of global health contagions, the robots are being deployed at various hospitals across the globe. Robotic medicine may be the weapon the world needs to combat the coronavirus. Among several measures, the automation driven health care technologies can assist in battling the disease. This study gives a concise overview of the role of robotics and artificial intelligence, how they contribute to the long-term sustainability and profitability of health care systems, followed by the representation of the way the procedures are performed. It studies how robotics techniques, the Internet and associated technologies are transforming and reshaping the healthcare management system. This paper will also discuss the implications for the usage of robotics in the future of health care, and robotics can have an impact on medical science.

Keywords: Coronavirus*, Robotics Innovation, Medical Sciences*

A REVIEW: TRANSMISSION & CHARACTERISTICS OF HUMAN CORONAVIRUSES (COVID-19)

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ABSTRACT

The coronavirus disease 19 (COVID-19) is a highly transmittable and pathogenic viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which emerged in Wuhan, China and spread around the world. Genomic analysis revealed that SARS-CoV-2 is phylogenetically related to severe acute respiratory syndrome-like (SARS-like) bat viruses; therefore, bats could be the possible primary reservoir. The intermediate source of origin and transfer to humans is not known, however, the rapid human to human transfer has been confirmed widely. There is no clinically approved antiviral drug or vaccine available to be used against COVID-19. However, few broad-spectrum antiviral drugs have been evaluated against COVID-19 in clinical trials, resulted in clinical recovery. In the current review, we summarize and comparatively analyze the emergence and pathogenicity of COVID-19 infection and previous human coronaviruses severe acute respiratory syndrome coronavirus (SARS-Cover) and Middle East respiratory syndrome coronavirus (MERS-Cover). We also discuss the approaches for developing effective vaccines and therapeutic combinations to cope with this viral outbreak.

Keyword: *Coronavirus, Transmission, Characteristics*

INSIGHT IN TO THE POSSIBLE ASSOCIATION OF COVID-19 WITH HUMAN

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ABSTRACT

A novel coronavirus was identified in December 2019 in Wuhan city, Hubei province, China. This virus represents a new strain that has not been previously identified in humans.. The virus is now known as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the resulting disease is called coronavirus disease 2019 (COVID-19). The high prevalence of COVID-19 is a result of a lack of symptoms at onset. Our study aimed to present an overview of the virus in terms of origin, structure, life cycle, epidemiology its prevention through possible drug. The results of ongoing clinical trials on hydroxychloroquine, azithromycin alone or in combination and a new antiviral agent remdesivir may help to treat some of the infections. A need for effective vaccine is being seen an as good preventive strategy in this pandemic. However the results of clinical trials and incorporation of vaccines in public health programs is a long way to go. The biggest hurdle to understand that COVID-19 might produce new mutations, specifically in glycoproteins, so caution and complete preparation by health authorities is required

Keywords: *Coronaviruse,COVID-19,SARS-CoV-1,SARS-CoV-2,Wuhan*

MEDICAL PHYSICS IN THE DIAGNOSTICS OF COVID-19

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ABSTRACT

COVID-19 has emerged as the major health crisis engulfing the entire world. Without explicit antiviral drug to forestall or treat COVID-19, it is necessary to ascertain the infected cases at the earliest and to make their isolation mandatory. Though initial testing of COVID-19 is linked to the detection of genetic material of the coronavirus but it proves to be a tedious process with poor rate of detection. Therefore, CT scan part of radiological imagining is brought into action. Taking into account the high spatial resolution, CT imaging plays a vital role in screening and diagnosing of this infection. On this inspiration, this review takes into consideration typical imaging patterns of chest CT observed in suspected cases, in order to authenticate CT as an accurate diagnostic tool for COVID-19. Ground glass opacities and small patchy opacities were most common imaging findings. These patterns showed a changing trend in the progression of the disease, indicating that CT can be utilized to access different stages of the infection and even the treatment sequel.

***Keywords**: COVID-19, Acute infection, Radiological imaging, Computer tomography (CT scan).*

IMPACT OF COVID-19 ON HUMAN REPRODUCTION

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ABSTRACT

SARS-CoV-2 belongs to the family Coronaviridae. Coronavirus is reported to have negative impact on male fertility. Putting the conceiving plan on hold is safe if a family is pushed off by COVID-19, as recommended by scientists. Men do not experience any symptoms in case of fertility if they are affected. Whereas pregnant women require caesarean and experience prepartum and postpartum symptoms.

Keywords: *Fertility; pregnant; symptoms; sperm freezing etc.*

IMPACT OF COVID-19 ON CARDIOVASCULAR DISEASE PATIENTS

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ABSTRACT

Coronaviruses are a large family of viruses that causes illness in living beings (only humans or animals).Now, COVID-19 is a pandemic affecting many countries across the world. SARS-CoV-2, a novel coronavirus severe acute respiratory syndrome caused pneumonia.COVID-19 out broke in Wuhan, China on December 2019 and spread all over the world. Patients with cardiovascular risk factors or disease are at increased risk for suffering from worse clinical outcomes with COVID-19.

***Keywords*:** Cardiovascular; COVID-19; Heart Failure; etc.

APPROACHES TO CURBING THE MENACE OF CORONAVIRUS

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ABSTRACT

Human beings are currently in the center of what could be the most profound changes to our lives in generations. Coronaviruses enveloped, positive-sense, single-stranded RNA viruses of about 100 – 160 nm in diameter. Virus treatments are on based on the two basic approaches such as virus based and host based approaches. As on date there were no official treatments to cure the coronavirus. This chapter outlines the various approaches for the treatment for the coronavirus.

Keywords: *Coronavirus, RNA Viruses, Approaches, Treatment*

SEWAGE WATER AS INDICATOR FOR TRANSMISSION OF SARS-COV-2: TRACKING TOOL AND DATA SOURCE

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ABSTRACT

COVID-19 disease, a pandemic condition, is extremely challenging for entire world and human being. The virus, technically named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), also referred to as COVID-19 Virus, is a newly identified virus and the resulting illness is referred to as coronavirus disease 2019 (COVID-19). A large proportion of cases have shed SARS-Coronavirus-2 (SARS-CoV-2) with their fecal matter during the latest COVID-19 pandemic. It became evident that human wastewater might contain the novel coronavirus. The wastewater plumbing system, by its function, is a manifestation of pathogenic microorganisms with the potential under some circumstances to allow airborne transmission of viruses such as SARS-CoV-2, which causes COVID-19. . In the present review, we have underlined role of sewage surveillance to track the spread of SARS-CoV-2 in our populations, which could supplement current clinical surveillance restricted to COVID-19 patients with the most serious symptoms. Although there is little success here, sewage surveillance is nevertheless a continuous field of vigorous research and could be promising in future research.

***Keywords**: SARS-CoV-2, Fecal matter, Sewage water, Plumbing system, Sewage surveillance, COVID-19*

CORONAVIRUS (COVID-19) GENERAL INFORMATION TO SCIENTIFIC STUDY: A REVIEW

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ABSTRACT

An acute respiratory disease, caused by a novel coronavirus (SARS-CoV-2, previously known presently it is 2019-nCoV) disease 2019 (COVID-19) has spread throughout China. On 30 January 2020, WHO officially declared the COVID-19 epidemic as a public health emergency of international concern. The general information about the COVID-19 is given in brief. In the scientific study structure, morphology, life cycle and entry of COVID-19 are explained. The COVID-19 is enveloped, spherical, about 120 nm in diameter having genus Betacoronavirus. In India, the first laboratory-confirmed infection by SARS-CoV-2 was reported on January 30, 2020; but any data about this were unpublished. The virus with an average size of 70-80 nm was observed from TEM study. Rajesh Singh and R. Adhikari developed mathematical model of the spread of the novel coronavirus that takes into account both the age and social contact structure. They estimated the enhancement in the growth of infections of COVID-19 in India. Forecast of the COVID-19 epidemic in India without mitigatory social distancing.

Keywords: *COVID-19; TEM; Mathematical model; Forecast.*

CYTOKINE STORM INTERVENTION IN THE EARLY STAGES OF COVID-19 PNEUMONIA

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ABSTRACT

Introduction*: Coronavirus disease 2019 (COVID-19) is sweeping across the globe. Most patients have mild to moderate symptoms, but a subgroup will become severely ill. Clinical intervention in patients with corona virus disease 2019 (COVID-19) has demonstrated a strong upregulation of cytokine production in patients who are critically ill with SARS-CoV2- induced pneumonia. This constellation of features is reminiscent of a family of syndromes broadly gathered under the umbrella of cytokine storm syndrome, in which hyperinflammation and multi-organ disease arise through excessive cytokine release from uncontrolled immune activation. Guidelines for the diagnosis and treatment of SARS-CoV- 2 infected pneumonia were first published January 30th, 2020; these guidelines recommended for the first time that cytokine monitoring should be applied in severely ill patients to reduce pneumonia related mortality. In view of the severe morbidity and mortality of COVID-19 pneumonia, we review the current understanding of treatment of human coronavirus infections from the perspective of a dysregulated cytokine and immune response.* ***Method****: The online databases, systematically searched keywords like cytokine storm in COVID 19 and reference lists cited in relevant studies were also manually retrieved. In a retrospective study of 41 patients with COVID-19, most patients with SARS-CoV-2 infection developed mild symptoms, whereas some patients later developed aggravated disease symptoms, and eventually passed away because of multiple organ dysfunction syndrome (MODS), as a consequence of a severe cytokine storm.* ***Discussion****: An abnormal and uncontrolled production of cytokines has been observed in critically ill patients with COVID-19 pneumonia and the ensuing uncontrolled cytokine storm in COVID-19 patients is centrally involved in the exacerbation of symptoms and disease development, and represents a major factor contributing to COVID-19 mortality. In short, aberrant release of multiple cytokines appears to trigger a cytokine storm that produces immunopathogenic damage to tissues and organs, even while the immune response seeks to suppress and eradicate the virus. Immunotherapeutic strategies in COVID-19 pneumonia includes Neutralizing antibodies.* ***Conclusion:*** *After COVID-19 infection, some patients develop systemic inflammatory response syndrome (SIRS) and MODS characterized by the uncontrolled release of inflammatory mediators, giving rise to a cytokine storm that contributes to increased mortality in ARDS. In summary, further experimentation is required to understand the changes in the immune response of patients with COVID-19 infection and the mechanisms of abnormal cytokine expression in COVID-19 pneumonia Accurate prediction and targetedintervention during the course of COVID-19 pneumonia will be essential to improve patient survival.*

Keywords*: COVID-19, SARS-CoV-2, MODS, cytokine storm, SIRS, COVID-19 pneumonia*

PROPHYLACTIC AND THERAPEUTIC VACCINE DEVELOPMENTFOR COVID-19: A REVIEW

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ABSTRACT:

The world is going through a strenuous phase due to the epidemic of COVID-19, caused by SARS-CoV-2, a novel coronavirus. Since the outbreak, Research and Development (R&D) facilities all over the globe are endeavoring for the production of an effective vaccine against this pandemic. However, no drugs or vaccines have been licensed yet due to the unknown pathogenesis of the virus. The most considered viral antigen for vaccine formulation is the spike glycoprotein, which is the primary elicitor of neutralizing antibodies. Vaccine technology strategies such as viral vectors, DNA vaccines, mRNA vaccines, and recombinant protein subunits are promising approaches to take quantum leaps in the formulation of COVID-19 vaccination. This review highlights the advances in the development of prophylactic and therapeutic proteins to counter the pathogenic virus as well as various vaccine technologies that can be used to produce the active vaccine candidates.

Keywords: *COVID-19; SARS-CoV-2; S glycoprotein; vaccine technologyetc.*

THE CURRENT SCENARIO AND CHALLENGES IN VACCINE DEVELOPMENT AMID FREQUENT CHANGING BEHAVIOURAL PATTERNS OF SARS-COV-2

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ABSTRACT

To contain this pandemic completely and cure people from COVID19, the final and the appropriate weapon is the vaccine. Due to the changing in the genomic sequence and behavioural patterns it seems a difficult procedures to develop vaccine against SARS COV 2. Apart from many huddles WHO and Government of India (ICMR, DBT and DST) both are trying to support and accelerate innovative research to contain the spread of corona by implementing umbrella schemes. The recent global researches on COVID 19 updated are quite deferent from the previous behaviors of both corona virus and infected patients. Many Biotechnology stations, Pharma companies and research institution are trying to develop vaccine and between them many are on fourth and fifth stage of vaccine production which may be at clinical trials or at human trials level.

Keywords*: COVID-19, Testing, Symptoms, SARS-CoV-2, Vaccines.*

COMPUTATIONAL STRATEGIES TO TESTIFY THE BIOACTIVE STEROIDAL LACTONES FROM WITHANIA SOMNIFERA AGAINST NOVEL COVID-19

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ABSTRACT

Since the early 21st century, Coronavirus (CoV) have triggered a significant outbreak of catastrophic pneumonia in humans. There are currently no reported therapies for the treatment of infections with CoV-2 and due to the timeconsuming method of producing new medications, drug repositioning may be the only remedy to this unexpected infectious pandemic of diseases. Presently, information technology has been a core part of drug development in this age of personalized medicine and cost-effective public health outcomes. For reliable target recognition and validation, chemoinformatic tools are employed along with drug discovery methods to pave the way for an effective computer-aided drug design (CADD). New drug research faces significant obstacles due to a decline in the number of new product approvals combined with exorbitant rising cost. Due to which 'paraherbalism' has become the most important medication in traditional as well as complementary medicine worldwide. Withania somnifera (L.) Dunal (WS), is an important medicinal plant in the Indian Ayurvedic context. The aim of the present study was to evaluate the antiviral potential of WS and its phytoconstituents against the novel COVID-19 target proteins using in silico methods.

Keywords: *Withanolides, antiviral, ACE2, 3CLpro, Nsp10/Nsp16 complex, S protein.*

CONVALESCENT PLASMA THERAPY: A POTENTIAL TREATMENT FOR COVID-19

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ABSTRACT

The pandemic outbreak of coronavirus disease (COVID-19) has rapidly spread across the world, causing thousands of deaths worldwide. Currently, no specific treatments have been proved to be effective for COVID-19. Evidences shows that convalescent plasma therapy (CPT) has been successfully used in the prevention and treatment of several pandemics like SARS (2005), H1NI (2009), Ebola virus outbreak (2014) and MERS (2015). It has been observed that patients recovered from COVID-19 contains huge amount of neutralizing antibodies, capable of eradicating pathogen from pulmonary tissues and blood circulation. In CPT, convalescent plasma is obtained from the COVID-19 recovered patient (donor) by apheresis and transferred to the COVID-19 suffering patient. The donor which has developed active immunity provides passive immunity to the recipient through CPT. Therefore, it can be concluded that CPT could be stopgap measure that could rescue the COVID-19 pandemic, as it is easily accessible and safe option for severe COVID-19.

Keywords: *COVID-19, Convalescent Plasma Therapy (CPT), Treatment*

CORONAVIRUS DISEASE 2019 (COVID 19) INVESTIGATIONAL DRUGS,TREATMENT AND MANAGEMENT

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ABSTRACT

To date there are no specific vaccines or medicines for COVID -19,Treatments are under investigation,and will be tested through clinical trials.Treatment is directed at relieving symptomsand it may include pain relievers.The review focus on various investigational drugs against COVID 19, treatment and management.

Keywords *COVID 19;Antiviral drugs; steroids; Blood plasma; supplemental oxygen; Immune system; Vaccines.*

PHARMACOLOGY ASPECTS OF AVAILABLE DRUGS AND THERAPY APPROPRIATE FOR TREATMENT AGAINST COVID-19.

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ABSTRACT

SARS CoV-2 is known to cause COVID-19. WHO recognized the infection aspandemic. Since, the proliferation pathways and the pathogenesis of the virus are not completely known and is still under study, there is no definite treatment against the virus. So far the treatment includes usage of drugs like hydroxychloroquine which inhibits the ACE2 cellular receptor and several other drugs that terminate the replication and RNA synthesis of the virus. Along with drugs having potential activity against COVID-19 certain immunosuppressant drugs such as Tocilizumab, Sarilumab, Siltuximab etc., are also used. Convalescent plasma therapy is also implied in several places to improve the survival rate of patients. Apart from all the drugs a person's immune system should be stable enough to fight against the disease. Hence, there are ongoing studies to identify the effect of various immunity boosting nutritional supplements against the infection.

Keywords: *SARS CoV-2; COVID-19; drugs; supportive drugs; treatment.*

COVID TOES AMONG KIDS: NEW SYMPTOM OF NOVEL CORONAVIRUS INFECTION

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ABSTRACT

First some dermatologists in Italy found it. Now, it is being reported in the US. There is sudden surge in the cases similar to frostbite or pernio among kids in the areas severely affected by COVID-19. Some doctors have nicknamed it as COVID Toes. Novel coronavirus infection became a pandemic because it ***thrives on asymptomatic patients*** *of COVID-19. Health agencies world over have been firm in dealing with symptomatic COVID-19 patients. But the real challenge has been to identify those COVID-19 patients who don't show symptoms. Now, this has forced affected countries to revise their death toll. rmatologists in Europe and America are discussing a new potential symptom to identify a COVID-19 patient, particularly if the novel coronavirus has infected kids and young adults. In March, some dermatologists in Italy found an inflammation of toes and feet, and discolouration of the organ of those suffering from COVID-19. This condition is much like frostbite or pernio, which is a condition found among people living in harsh winters in polar and sub-polar regions. Here blood vessels in the toes get aggravated inflammation and toes tend to have serious spasm.The condition was nicknamed 'COVID Toes' because dermatologists found it to be most prevalent in areas with a high concentration of COVID-19 patients in Italy.*

Now, the same 'COVID Toes' condition is being reported from areas severely hit by novel coronavirus pandemic in the US, like Boston. Doctors associated with the American Academy of Dermatology are now recommending coronavirus tests for kids visiting them with 'COVID Toes.

Keywords*: COVID 19 – epidemic, novel coronavirus, pandemic, COVID toes, asymptomatic*

PLACENTAL STEM CELLS BASED IMMUNOMODULATORY THERAPY FOR SARS-COV-2.

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ABSTRACT

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the causative agent of the deadly contagious disease of increasing incidence around the world. As the major problem faced in the severe cases of COVID19 was due to the elevated level of cytokines and uncontrollable inflammation that ultimately resulted in multiple organ failure and ARDS .thus the sharp increase in the incidence of this infection and the severe side effects and the disadvantage of broad-spectrum of the present therapeutics made it necessary to search for an alternative and effective therapy to treat COVID 19. Thus we have focused on a wise approach to the combat of COVID-19 effectively with the help of placental expanded cells (PLX), these are placenta-derived, mesenchymal-like adherent stromal cells that facilitates healing of damaged tissue by stimulating the body's own regenerative mechanism by promote inflammation resolution and exhibit strong immunomodulatory properties. Ascontrolling the inflammatory response and inhibiting cytokine storm considered to be a crucial strategy in severe cases of COVID19infection, this placental stem cell therapy could be a potential candidate to reduce the inflammatory damage associated with the disease. Thus we have addressed the current findings and advances in placental stem cell therapy strategies against COVID 19 and other disorders.

Keywords: *Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2);placental expanded cells (PLX);ARDS; Inflammatoryresponse; regenerative mechanism; immunomodulatory properties.*

A REVIEW ON POTENTIAL SALIVARY DIAGNOSIS IN DETECTION OF COVID- 19

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ABSTRACT

A novel coronavirus (COVID-19) is related with human- to-human transmission. The COVID-19 was recently identified in saliva of infected patients. In this viewpoint the article, would like to discuss the potential of transmission via the saliva of this virus. Saliva can have an essential role in the human-to-human transmission, and non-invasive salivary diagnostics may provide a convenient and cost-effective point of care platform for the fast and early detection of COVID-19 infection. The collection of saliva is non-invasive and greatly minimizes the exposure of healthcare workers to COVID-19. Saliva has a high consistency rate of greater than 90% with nasopharyngeal specimens in the detection of respiratory viruses, including coronaviruses. More research is required to analyze the potential diagnostic of COVID-19 in saliva to develop rapid tests for the detection of COVID-19 and it is also essential to improve and develop thriving strategies for prevention, particularly for dentists and healthcare professionals who are engaged in performing aerosol-generating procedures.

***Keywords**: salivary diagnostics; safe; non invasive; cost effective; novel corona virus*

COVID-19 OUTBREAK – AN UPDATE ON ORIGIN, TRANSMISSION AND CLINICAL THERAPIES

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ABSTRACT

COVID-19—the disease caused by SARS-CoV-2—is an enormous global health-care system. The coronavirus is an oily membrane packed with genetic instructions to generate millions of copies. CoV genome contains a variable number of open read frames (ORFs). Human-to-human transmission of SARS-CoV-2 occurs primarily among family members, including relatives and friends who have closely approached patients or carriers of incubations. The common mechanism of virus entry into a host cell by endocytosis mediated by the receptor. The receptor used by the COVID-19 virus to invade and alter the cells in the lungs will most likely be ACE2, a protein located on the surface of the cells in the kidneys, cardiac tissues, arteries and veins, and most notably on the lung alveoli's epithelial cells (AT2). Efficacy for any drug treatment has not been determined. Chloroquine, hydroxychloroquine, lopinavir, ritonavir, remdesivir and favipiravir are the antimicrobials with possible action against SARS-CoV-2. Isolation or quarantine, social distancing, and physical barriers such as masks, are additional ways to delay respiratory virus transmission. This article reviews about an update information of origin, transmission and clinical therapies of COVID-19.

***Keywords**: COVID-19, CoV genome, Transmission, Endocytosis, ACE2, Antimicrobials*

PANDEMIC OF COVID-19: A SYSTEMATIC REVIEW

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ABSTRACT

The whole planet is battling with an outbreak of COVID-19/ Corona virus and there is an urgent need for efficient drug and vaccine. Upon identification it's similar to SARS so it is called SARS-Cov-2. It is likely to be Zoonotic origin but now it is transmitting from person-to-person. The major steps are taken to control the infection rate. There is a need for rigorous surveillance on diagnostic procedures as well as drug and vaccine development.

***Keywords**: COVID-19; SARS-Cov-2; Zoonotic; Vaccine; Diagnostic.*

MODE OF TRANSMISSION AND CLINICAL FEATURES OF COVID-19

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ABSTRACT

COVID-19 is an epidemic disease which is caused due to a special family of viruses namely "coronavirus". The causative agent of COVID-19 is 2019 novel coronavirus. This virus is a new virus strain that has been originated in China. The health care workers, people who are in contact with infected patients are at risk for contracting 2019 novel coronavirus. The average incubation period of 2019 n-CoV is 5-6 days. Coronavirus are zoonotic in nature. WHO encouraged for their preparedness for health emergencies in line with the IHR(2005). This virus has its own specific features regarding its pathogenicity, structure, complications (respiratory illness) etc.

Keywords: *COVID-19, Transmission, Clinical features*

A REVIEW ON STRUCTURE & REPLICATION OF 2019 NOVEL CORONA VIRUS (SARS-COV-2)

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ABSTRACT

The global pandemic COVID-19 caused by SARS-CoV-2, is a highly contagious disease. It has created a global public health emergency situation. Novel corona virus SARS-COV-2 is the +ssRNA virus belongs to corona family. Spikes protein bind to ACE2 receptor of the host cell and through endocytosis viral RNA release in to the cell cytoplasm. Various viral structural and non-structural proteins are incorporated into the virus replication that synthesized from pp1a and pp1ab through translation. Certain host protease and cell components play an important role in assembly, packaging& release of the virus particle to find a new host. The research on SARS-CoV-2 is in the preliminary stage. This article is aimed to review the systematic structure & replication of novel corona virus. It is hoped that current review will help the common man to identify and deal with SARS-CoV-2, and will also provide a reference for future studies.

Keywords:*COVID-19, corona virus, SARS-CoV-2, ACE-2 receptor, non-essential proteins.*

EXPLORING POSSIBILITY OF PLASMA THERAPY IN TREATMENT OF COVID – 19 PATIENTS

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ABSTRACT

Currently, there are no approved specific antiviral agents for novel coronavirus disease 2019 (COVID-19). Here one dose of 200ml of convalescent plasma derived from recently recoverddonars with the neutralizing antibody.Since the effective vaccine and effective antiviral medicines are unavailable, it is urgent need to look for an alternative strategy COVID-19 treatment specially among severe patients.Here we are using the plasma therapy techniques that is very effective for the infected person from contagious disease named coronavirus pandemic . Here we also indicate that who is eligible for the donate the plasma to infected person and how it is used . And at present this is very effective techniques to the coronavirus patient's treatments.

Keywords:*CPT, SARS,MERS,nCOVID – 19.*

THE ROLE AND CHALLENGES OF COMMUNITY PHARMACIST: COVID19

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ABSTRACT

Novel corona virus was first detected in China in the end of December 2019, and in India it was reported on 30 January 2020 in Kerala, declared the outbreak of Novel Corona virus a public health emergency of international concern by the World Health Organization on January 30, 2020. It was found that it can be transmitted as zoonotic, meaning from animals to the humans named as SARS-CoV-2 (standing for severe acute respiratory syndrome corona virus 2). The pharmacist and pharmacy staff, as a healthcare practitioner, can play an important role in minimizing the spread of COVID-19 among community. Few of medical officials or experts in India that the country of, 1.4 billion people could see corona virus cases jump sharply in the coming weeks, during this crisis, the advanced, adoptive and biological practicing will be required across health care professionals. Community pharmacist may manage the critical cases and develop individualized attention to detect community transmission of COVID-19, some limitation have been carried out to minimize the spread of the pandemic, including social distancing and remaining in the home as possible, when in public, properly covering the mouth over your nose and mouth. . 'Stay home stay safe' when you are sick except to get medical care. However, under public health emergencies, such as the outbreak of COVID-19, the work strategies of clinical pharmacists need to be modified according to the rapid spread of the disease, where information and resources are usually lack to guide them.

Keywords: *COVID -19; Coronavirus; Community pharmacist; Pandemic; Health care professionals*

CORONA VIRUS STRUCTURE AND SPREAD MECHANISM

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ABSTRACT:

COVID-19 is a novel coronavirus with an outburst of unusual viral pneumonia in Wuhan, China, taking the form of pandemic. The phylogenetic relationships and genomic structures show that the COVID-19 belongstogenera 'Beta-coronavirus'. Human Beta-coronaviruses (SARS-CoV-2, SARS-CoV, and MERS-CoV) have many similarities, but also have differences in their genomic and phenotypic structure that can influence their pathogenesis. COVID-19contain single-stranded (positive-sense) RNA associated with a nucleoprotein within a capsid comprised of matrix protein. A typical corona virus contains at least 6 ORFs in its genome. All the structural and accessory proteins are translated from the single guide RNAs of CoVs. Four main structural proteins are encoded by ORFs 10, 11 on the one-third of the genome near the 3'-terminus. The genetic and phenotypic structure of COVID-19 in pathogenesis is important. Coronaviruses are enveloped positive-stranded RNA viruses that replicate in the cytoplasm. To deliver their nucleocapsid into the host cell, they rely on the fusion of their envelope with the host cell membrane. The spike glycoprotein (S) mediates virus entry and is a primary determinant of cell tropism and pathogenesis. It is classified as a class I fusion protein and is responsible for binding to the receptor on the host cell as well as mediating the fusion of host and viral membranes—A process driven by major conformational changes of the S protein. This manuscript highlights the most important of these features compared to other Beta-coronavirusesIt also discusses coronavirus entry mechanisms focusing on the different triggers used by coronaviruses to initiate the conformational change of the S protein: receptor binding, low pH exposure and proteolytic activation.

Keywords: *Coronavirus, SARS-COV-2, RNA, Spike Gycoprotein*

RATIONAL USE OF DISINFECTANTS FOR THE PREVENTION AND CONTROL OF COVID-19

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ABSTRACT

As we know that Pandemic COVID-19 spreads through touching, as advised by PM of India to maintain social distancing at least 2m. So, our main focus of this review study is that how disinfectant work to stop spreading corona virus in hospital, home, public area and the pharmaceutical industry. Some disinfectants which are recommended by WHO like surfactants that have amphiphilic property, which disrupts the lipid layer and protein by micelle formation. Where ethyl alcohol (70%) is a powerful germicidal agent, bleach is using on inanimate surface like 1% Sodium hypochlorite (NaOCl) solution shows effective cleansing and disinfectant action; mainly depend upon the concentration of chlorine and pH of solution for breaking the chain of transmission and also for health and safety.

Keywords:-*Social distancing, micelle, surfactant, bleach, alcohol, disinfectant.*

A STUDY ON KNOWLEDGE AND AWARENESS TOWARD COVID-19 AMONG NSS VOLUNTEERS OF DHSK COMMERCE COLLEGE, DIBRUGARH, ASSAM

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ABSTRACT

The Corona virus is an ongoing pandemic of corona virus disease 2019 (COVID-19) caused by severe acute respiratory syndrome corona virus 2 (SARC-coV-2). The present study attempts to assess the extent of knowledge and awareness on various health issue related to COVID-19 among National Service Scheme (NSS) volunteers of DHSK Commerce College, Dibrugarh district, Assam. A total of 60 volunteers were selected through systematic random sampling technique and data was collected using online pre-designed questionnaire. The result of the study reveals that most of the volunteers had adequate information and education regarding the key health aspect like knowledge and awareness on COVID-19.

***Keywords**: Corona, NSS, Social Distance, Pandemic etc.*

COVID-19: AN UPDATE ON RECENT LITERATURE AND MANAGEMENT

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ABSTRACT

In December 2019, the pneumonia caused by novel coronavirus (SARS-CoV-2) in Wuhan, China is a highly contagious disease. Coronavirus (COVID-19) is a complex enveloped RNA virus that is diversely found in humans and nature. Corona virus causes respiratory infections including influenza, vomiting, sneezing and coughing while diarrhea and upper respiratory diseases occur in animals. The corona virus was transmitted by airborne droplets to humans or humans to animals. In human, Corona virus enters in cell by through membrane ACE-2 exopeptidase receptor. The WHO has declared the current epidemic to be a global public health emergency. The research on novel coronavirus is currently still in the primary stage. This study, aiming to help the public understand and deal effectively with the 2019 novel coronavirus, and provide a guide for potential studies.

Keywords: *Coronavirus (COVID-19), History, diagnose, Prevention, Management*

STUDY & IMPACT ON HUMAN HEALTH OF COVID 19 RE-EMERGING IN FUTURE ALL OVER THE WORLD.

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ABSTRACT

COVID-19 (SARS-COV-2) is a pandemic in 21th century. It spread throughout in Wuhan city China and all over the world. In December 2019 a group of pneumonia cases caused by a newly identified β-corona virus in Wuhan city. This corona virus it indicates by name was novel corona virus (2019 n-cov). on 12 Jan 2020 by WHO officially named the COVID-19 and corona study group of international committee suggests new corona virus as SARS-COV-2.On 30 Jan.2020 WHO officially declared the COVID-19 is pandemic and health emergency of international. The emergence of SARS-COV-2, outbreak in 2002-2003. This was severe acute respiratory syndrome while MERS-COV (Middle East respiratory syndrome corona virus) in 2012. COVID-19 (SARS-COV-2) is highly pathogenic and infected in large scale of population.

Keywords: *pandemic, β-corona virus, MERS-COV, SARS-COV-2, WHO, pneumonia & pathogenic.*

PLANT-BASED VACCINE TECHNOLOGY CAN PRODUCE VACCINE AGAINST COVID-19

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ABSTRACT

The coronavirus spike protein is a multi functiona l molecular machine that mediate s coronavirus entry into host cells. It first binds to a receptor on the host cell surface through h its S1 subunit and then fuses viral and host membrane s through its S2 subunit. Two domains in S1 from different coronaviruses recognize a variety of host receptors, leading to viral atachment. The spike protein exists in two structurally distinct conformations, prefusion and postfusion. The transition fro m prefusion to postfusion conformation of the spike protein must be triggered, leading to membrane fusion. This article reviews current knowledge about the structure s and functions of coronavirus spike proteins, illustrating how the two S1 domains recognize different receptors and how the spike protein s are regulated to undergo conformational transitions. If urther discuss the evolution of these two critical functions of coronavirus spike proteins, receptor recognition and membrane fusion, in the context of the corresponding functions from other viruses and host cells.

Keywords: *Plant-based Vaccine, Structure, Function, Covid-19*

SARS-CoV-2: A Global Pandemic

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Abstract

The infection of SARS-CoV-2 is spreading and raising globally. Typical SARS-CoV-2 symptom include dry cough, fever, fatigue, shortness of breath, and muscle aches and pain. This virus is spread via droplet produced by talking, sneezing and coughing. No vaccine and specific treatment are recently available. Therefore, citizens should follow all the preventive measures issued by the government to deal with this virus.

Keywords: *SARS-CoV-2, Fever, Droplet, Cough, Vaccine, Preventive measures*

CORONAVIRUS DISEASE (COVID-19) OUTBREAK –A MINI REVIEW

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ABSTRACT

In December 2019, the first case of coronavirus disease 2019 (COVID-19) was reported in Wuhan, China, during an outbreak of viral pneumonia. An initially regional epidemic has since rapidly expanded to a global pandemic affecting at least 210 countries with significant morbidity and mortality. Special attention and efforts to protect or reduce transmission should be applied in susceptible populations including children, health care providers, and elderly people.

Keywords: *COVID-19 outbreak, Pneumonia, Pandemic*

STRUCTURE BASED DRUGGABILITY ASSESSMENT OF COVID 19 TARGETS

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ABSTRACT

The COVID-19outbreak has resulted in a global pandemic leading tomassive infections and deaths tolls worldwide(Gao et al., 2020).The epidemic spread quickly to more than 212 countries and was declared a global health emergency by WHO(Dai et al., 2020). This endemic invites the challenge of rapidly finding suitable drugs for therapy (Utomo et al., 2020).The drug discovery is strongly reliant on the molecular characteristics of the virus. The therapeutic agents that act against the coronavirus can be divided into several categories based on the mode of action:(1) a few acting on enzymes or functional proteins preventing the viral RNA synthesis and replication; (2) those acting on structural proteins thereby blocking the virus from binding tocell receptors preventing the self-assembly process of the virus; (3) some helping torestore host's innate immunity; (4) and othersinteracting with host's specific receptors or enzymes, preventing the virus fromentering into host's cells(Wu et al., 2020).Assessment of the target is one of the main challenges in drug discovery. Besides aspects such as medical rationale and commercial attractiveness, knowledge about the abilityof a target to bind a drug-like molecule, i.e. called druggability, and is of great significance (Fahrrolfes et al., 2017).

Keywords: *COVID-19, RNA, Synthesis, Replication, Drug therapy*

ANALYSIS OF FAILURE TO SPREAD OF COVID-19 BY TRIANGULAR INTUITIONISTIC FUZZY NUMBER AND SOME OF ITS ARITHMETIC OPERATIONS

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ABSTRACT

Human history is observing a very strange time fighting an invisible enemy; the novel COVID-19 corona virus. It is first observed in the china, specifically Wuhan province. At this time, there are no specific vaccines or treatments for COVID-19. Some obstacles arise to prevent this epidemic are as follows no exact information about vector origin, no exact way how the vector to host transmission done, vector mutation, host immunity, host mobility, host to host transmission etc. In this paper we use triangular intuitionistic fuzzy number to find out the failure of prevention COVID19 on the basis of the above criteria.

Keywords: *COVID-19, Intuitionistic Fuzzy Sets, Triangular intuitionistic fuzzy number, Reliability.*

THE ORIGIN, TRANSMISSION AND TREATMENT OF CORONAVIRUS DISEASE 2019 (COVID-19)-A REVIEW

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ABSTRACT

An acute respiratory disease, caused by a novel coronavirus (COVID-19) has spread throughout China and to whole world. Meanwhile, some autonomous research groups have recognised that SARS-CoV-2 belongs to β-coronavirus, with highly identical genome to bat coronavirus, directing towards bat as the natural host. The novel coronavirus uses the same receptor, angiotensin-converting enzyme 2 (ACE2) as that for SARS-CoV, and mostly spreads through the respiratory tract. Evidence showed human-to-human transmission, along with numerous exported cases across the globe. Symptoms of COVID-19 patients include fever, cough, fatigue and a small population of patients appeared gastrointestinal infection symptoms. The old and people with underlying diseases are vulnerable to infection. Presently, there are limitedprecise antiviral strategies, but some potent candidates of antivirals and repurposed drugs are under investigation. In this review, we summarized the latest research progress of the origin, transmission and some treatmentsof COVID-19.

***Keywords**: Clinical characteristics, Coronavirus disease 2019 (COVID-19), Origin, SARS-CoV-2, Origin, Transmission, Treatment.*

CORONAVIRUS (COVID-19): PANDEMIC IN 2019-2020

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ABSTRACT

Viruses are so minute in size that it cannot be seen with the naked eyes but viruses like Novel Corona Viruses are dangerous for human. COVID-19 is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.'(Centers For Disease Control and Prevention).They are so light that it can travel through micro water droplets in air and can land on human skin and we cannot feel it. CORONA VIRUSES are from large group of viruses (65 - 125nmin diameter 26 – 32Kbs in Length), Consist of a core of Single Stranded RNA as a genetic material surrounded by an envelope of protein spikes.The virions are spherical to pleomorphic enveloped particles (N. Zhong, et al). The envelop is studded with projecting glycoproteins and surrounds a core consisting of matrix proteins enclosed within which is SS(+ve) RNA (Mr 6 X 106) (Perlman S.;et al) associated with nucleoprotein. The envelop glycoprotein are responsible for attachment to host cell and also carry the main antigenic epitopes, particularly the epitopes recognised by neutralising antibodies. This gives the appearance of crown. Crown in Latin is called CORONA that's who these viruses get their name. Coronavirus has created a pandemic situation in the world and because of this many countries have suffered both huge humane and financial losses. Still the researchers are working round the clock to find the vaccine for this virus (Fig.2 and Fig.3).

Keywords: *Viruses, Covid-19, Nucleoprotein*

COVID-19 AS A POTENTIAL PREDICTOR OF OBSESSIVE-COMPULSIVE DISORDER (OCD): A THEORETICAL CONCEPTUALIZATION

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ABSTRACT

COVID-19, a form for a Corona virus, is a debilitating disease which is transmitted by human contact. Its impact has created a havoc in the whole world, it is not just creating physical pressure on people but also a psychological pressure. Government is promoting preventive measures stay safe from this virus and help in decreasing it from spreading more. The preventive measures that are been suggested includes cleaning surroundings regularly, washing, disinfecting, etc. after touching any surface. The initiative has proven to be good in the decrease in the development of virus. This can also become very taxing for some individuals creating anxieties among them. This paper deals with theoretically conceptualising that COVID-19 can be a potential predictor in the development of Obsessive-CompulsiveDisorder (OCD).

Keywords: *COVID-19, Corona virus, Obsessive-Compulsive Disorder (OCD)*

SARS CoV -2: An Overview Of Their Structure, Function, And Antigenicity Of The Spike Glycoprotein

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Abstract

Coronavirus -2 is a new public health crisis threatening the global with the emergence and spreading. This virus is originated from Wuhan, Hubei province, China on December 19. There have been around 2,774,135 human infected and 1,90,871 killed till 25 April 2020. We conducted a literature review through openly accessible information to summarize knowledge concerning pathogen and present epidemic. In this literature review spike glycoprotein of SARS CoV-2, genome, and its binding with ACE-2 receptor and antigenicity are reviewed. We also found that SARS CoV-2 S glycoprotein harbors a furin cleavage site at the borderline of S1 and S2 subunits.

Keywords: *Coronavirus, Epidemic, Pathogen, Genome*

HYDROXYCHLOROQUINE BOON OR MIRAGE FOR COVID-19

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ABSTRACT

Coronavirus virus belonging to the family Coronaviridae. Coronaviruses have enveloped virions (virus particles) that measure approximately 120 nm (1 nm = 10−9 metre) in diameter. Its latest threat to the world is COVID 19. Due to lack of a unique medicine, other medicines are repurposed for COVID 19 treatment e.g. Hydroxychloroquine. Hydroxychloroquine (HCQ) is a medicine originally used to prevent and treat malaria. There is limited evidence to support the use of Hydroxychloroquine for COVID-19. Studies are ongoing with the benefits versus harms of treatment being unclear. A recent study demonstrated that Chloroquine (CQ) has anti-SARS-CoV-2 activity in vitro. Hydroxychloroquine sulfate (HCQ) shares a similar chemical structure and mechanisms of action with CQ but with lower ocular toxicity and has proven efficacious in containing SARS-CoV-2 in vitro. CQ and HCQ exert antiviral function through various mechanisms. CQ has been shown to interfere with the glycosylation process of ACE2 in host cells, thereby inhibiting the efficiency of the binding of S protein with ACE2, in turn disrupting the virus/cell fusion process. CQ can increase the pH of acidic cellular organelles required for virus entry into host cells. In addition to its direct antiviral activity, CQ and HCQ can attenuate major "cytokine storms" (an overreaction of the immune system causing inflammatory "storms") by decreasing cytokine production .Notably, high cytokine concentrations have been observed in seriously ill COVID-19 patients , indicating that over-reactive immune responses exacerbate COVID-19. Therefore, the immune-modulating activity of HCQ might partially account for its efficient control of SARS-CoV-2 infection. CQ and HCQ are therefore promising drugs of choice for large-scale use due to their low cost, wide availability and potential efficacy for treating COVID-19. Although this study is an open-label study using small sample size, the combination of HCQ and azithromycin could be promising candidate for COVID-19 patients. In contrast, a multinational, network and self-controlled case series study demonstrated that short-term HCQ treatment is safe. Chloroquine is a good drug to combat SARS- CoV-2 but the trouble is that it works on a minority of sufferers (random sampling), as there is no real collective data around the world. There should be more studies on chloroquine and the effects on COVID-19. Chloroquine has shown in vitro activity against many different viruses, but no benefit in animal models. Chloroquine has been proposed several times for the treatment of acute viral diseases in humans without success. There is no limited evidence to support the use of Hydroxychloroquine for COVID-19. studies are ongoing treatment unclear. While its use is not approved by the FDA for COVID-19 The FDA has issued a warning against the use of Hydroxychloroquine for treatment of COVID-19 due to singnificant cardiac side effect. A malaria drug widely touted by President Donald Trump for treating the new coronavirus showed no benefit in a large analysis of its use in U.S.

veterans hospitals. There were more deaths among those given hydroxychloroquine versus standard care, researchers reported. Several experimental studies across the world showed that this drug had an effect in delaying and inhibiting the spread of SARS-COV-2, the virus that causes COVID-19. However, the study samples for these studies were quite small. The side effects of this drug include headaches, dizziness, stomach pain, weight loss and mood changes.

Keywords: *Hydroxychloroquine, COVID-19, Benefits, Side-effects*

CORONAVIRUS DISEASE 2019 (COVID-19): PHARMACOLOGICAL TREATMENTS

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ABSTRACT

The 2019-novel coronavirus (nCoV) is a major source of disaster in the 21th century. The global pandemic of novel coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) began in Wuhan, China, in December 2019, and has since spread worldwide.(CO-Corona, Vi-Virus, D-Disease, COVID-19). Dr. Lee is the first man they called, in this type of symptoms still found in the human this is not a small things but Dr.Lee is also infected from the COVID-19 and after some time he also left from the earth.

Keywords: *Coronavirus, Pandemic, Respiratory syndrome*

THERAPEUTIC AVENUES FOR CORONAVIRUS DISEASE-2019

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ABSTRACT

SARS-Cov-2 is the virus which affects a large number of people throughout the world. It consists of a positive sense, single stranded RNA as its genetic material. The first case of COVID-19 was reported in Wuhan, china.The infected patients commonly show the symptoms like dry cough, fever, and difficulty in breathing. There are several drugs has been found to be effective against COVID-19 such as Hydroxychloroquine/Azithromycin, Remdesivir, Lopinavir/Ritonavir, Convalescent plasma, Monoclonal antibody. During the clinical trials several drugs shows adverse side effects in patients like??. But certain therapeutics using Tocilizumab and Convalescent plasma therapy shows High efficiency in the treatment of COVID-19.

***Keywords**: COVID-19, Convalescent plasma, Tocilizumab*

COVID-19 : INTRODUCTION, SYMPTOMS, MODE OF TRANSMISSION, PREVENTION & EPIDEMIOLOGY

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ABSTRACT

In December 2019, COVID-19 was unknown before the outbreak began in Wuhan, China & now a pandemic affecting many countries globally. COVID-19 is infectious disease caused by the most recently discovered coronavirus. It is a large family of viruses which are known to cause respiratory infections ranging from the common cold to severe diseases MERS (Middle East Respiratory Syndrome) & SARS (Severe Acute Respiratory Syndrome). The most common symptoms of COVID-19 are dry cough, fever, tiredness & in some patients may have aches & pains, nasal congestion, sore throat or diarrhoea. Around 1 out of every 5 people who gets COVID-19 becomes seriously ill & develops difficulty breathing & about 80% people recover from the disease. This study is to assess the awareness of COVID-19 disease.

Keywords: *COVID-19, MERS, SARS, Coronavirus*

CORONA VIRUS DISEASE (COVID-19)

A PANDEMIC DISEASE AND PREVENTION OF ITS SPREAD

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ABSTRACT

Novel Corona Virus is the new strain of corona virus and it is a member of very large family which can cause Cold, Fever, Cough like symptoms and also showing Pneumonia like symptoms after some days of infection where patient is facing problem in breathing. There was different other corona virus infections was reported in some past decades i.e. SARS(Severe Acute Respiratory Syndrome) in China year 2002 through Civet Cat and MERS(Middle East Respiratory Syndrome) in Saudi Arabia year 2012 spread through Camel but the novel corona virus was not identified previously and originated from China through Bats. The main aim of this study is to keep people aware about this pandemic condition and don't panic of it.

Keywords- *Pandemic, SARS, MRES, Premorphic, Virion, Incubation, Asymptomatic Patients, Nasal Congestion, Hygiene.*

SCOPING ASSESSMENT OF CORONA VIRUS DISEASE (COVID-19) - A PUBLIC HEALTH EMERGENCY

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ABSTRACT

Corona virus disease 2019 (COVID-19) is a transferable infectious disease caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). It has been known as the cause of an outbreak of respiratory illness in Wuhan, Hubei Province, China started in December 2019. This disease has since spread globally, resulting in the ongoing 2019-20 corona virus pandemic. As of 31 January 2020, this epidemic had spread to 19 countries with 11 791 confirmed cases, including 213 deaths. The World Health Organization (WHO) has declared it a public health disaster of International dread. Common symptoms include fever, cough and shortness of breath. The symptoms were appears typically around five days but may range from two to fourteen days majority of cases were progress to viral pneumonia and multi-organ failure. The virus is mainly spread due to close contact, frequently via small droplets produced by coughing, sneezing. People may also become infected by touching a contaminated surface and then touching their eyes, nose, or mouth. The virus can survive on surfaces for up to 72 hours was most infectious for the duration of the first three days following the onset of symptoms. The standard method of diagnosis is by real-time reverse transcription polymerase chain reaction (RT-PCR) from a nasopharyngeal swab and chest CT imaging. Suggested actions to prevent illness include frequent hand washing, maintaining physical distance from others, covering mouth with mask. At present, there is no vaccine or specific antiviral treatment for COVID-19. Management involves the treatment of symptoms, supportive care, isolation, and experimental measure and a high quality research is needed to provide valid and reliable ways for treating this kind of public wellbeing disaster.

***Keywords*:** *Infectious, COVID-19, Disease, Treatment, Control*

ACE2 RECEPTOR: A POSITIVE MANIFESTATION OF COVID19 ON SMOKERS – A REVIEW

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ABSTRACT

COVID 19 is a respiratory disease which is caused by SARS CoV-2 and started its pandemic effect in Wuhan, China at the end of 2019. The disease condition is generally analyzed with the clinical characteristics of inmate to their prognostic factors. Smoking is destructive to the immune system and it is associated with adverse disease prognosis making smokers more vulnerable to infectious diseases. Previous evidence indicates the risk factor, smokers are twice more likely than non-smokers contract to influenza and had high mortality rate during MERS-CoV outbreak. Angiotensin-converting enzyme-2 (ACE2) receptor which is necessary for SARS CoV-2 host cell entry is found upregulated on smokers than non-smokers. Nicotine increases the activity of ACE2 in the lungs of smokers. ACE2 expressed in the goblet cells in smokers, indicates the high risk towards the infection of 2019-nCOV affecting the bronchial epithelium of current smokers than non-smokers. The significant effect of smoking ACE pulmonary expression shows that an increased risk for viral binding and entry of SARS-CoV & SARS CoV-2 in the lungs of smokers which makes them more prone to nCoV.

***Keywords**: SARS Cov2, Smoking, Nicotine, ACE2*

CORONAVIRUS: AN INTRODUCTION, PREVENTION AND TREATMENT

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ABSTRACT

Human history is observing a very strange time fighting an invisible enemy- the novel COVID 19 Coronavirus. Coronaviruses are a large family of viruses. Many of them infect animals,but some coronaviruses from animals can evolve into a new human coronaviruses that can spread from person-to- person. This is what happened to a newcoronavirus known as SARS-CoV-2, which causes the disease known as COVID-19. 2019-nCoV is a novel beta coronavirus, which belongs to the sarbecovirus subgenus of a coronaviridae family. It has a capsule and the particles are round or oval, often polymorphous with a diameter of 60-140mm. Its genetic characteristics are distinct from SARSr-CoV and MERS-CoV. Recent study has shown that 2019-nCoV is 96% identical to bat coronavirus TG13 at the whole genome level.

Keywords: *COVID-19, Prevention, Treatment*

ISSUES RELATED TO MENTAL HEALTH IN THE TIMES OF 'CORONA-CRISIS'

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ABSTRACT

Multidimensional consequences of the pandemic are possible. It can give rise to many social anomalies. The fear of losing their jobs, property while being held captive for a long time in unusual circumstances can make them mentally sick. Distance from loved ones can lead to mental depression. Fear, frustration and panic can make a large chunk of Indian society mentally unstable for some time, so we all need to motivate them on a regular basis and try to provide all our population basic amenities so that the fear factor can come to a minimum level. The broadcast of Ramayana and Mahabharata on television is a good initiative to keep people engaged with a positive light. We need to keep innovating such ideas to keep them fresh in these adverse times.

Keywords: *- Mental Health, COVID-19, Social Order, Creation*

CORONAVIRUS DISEASE-2019 (COVID-19): ITS DIAGNOSIS, TREATMENT AND PREVENTION

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ABSTRACT

The coronavirus disease (COVID-19) has been defined as the cause of the disorder of the respiratory illness in Wuhan, Hubei Province, China beginning in December 2019. The virus be born in bats and was conveyed to humans through yet an unidentified intermediary animals in Wuhan, Hubei province, China in December 2019. There have been around 30, 92,400 reported cases of coronavirus disease 2020 (COVID-2019) and 2,13,341 reported deaths to date (28/04/2020). In INDIA There have been around 30,200 cases of coronavirus disease and 945 reported deaths to date (22/4/2020). Coronavirus disease is spread by inhalation or contact with infected droplets and its incubation time period ranges from 2 to 14 days.. The symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise among others. The disease is mild in most people; in some (usually the elderly and those with comorbidities), it may progress to pneumonia, acute respiratory distress syndrome (ARDS) and multi organ dysfunction. The virus spreads faster than its two ancestors the SARS-CoV and Middle East respiratory syndrome coronavirus (MERS-CoV), but has lower fatality. In this review article we describe the epidemiology, clinical characteristics, diagnosis, treatment and prevention of knowledge surrounding COVID-19

***Keywords**: COVID-19, SARS-CoV-2; respiratory infection, coronavirus, pneumonia*

BIO ACTIVE POTENTIAL OF INDIGENOUS PLANTS TO COMBAT COVID-19

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ABSTRACT

COVID-19 pandemic has done the world upside down since its outbreak. Scientific fraternity world over are exploring every aspect of the disease from its cause, mechanism of action, treatment, vaccine, diagnostics and prevention. The wait for an effective specific medication looks longer attributing to the COVID-19 statistics. Therefore the need of the hour is to explore preventive measures that can be taken. Plant-derived components have shown immense properties of boosting the immune system. One of the plant derivatives is flavonoids which have been previously reported to be good source for enhancing immune powers. The current review is a comprehensive summation of various plants and their bio active components whose properties have been known to treat common flu like diseases as well as boosting immunity. Thus, these plants can be potentially promising as a bioactive component source that can be explored for prevention of SARS-CoV-2 virus.

Keywods: *COVID-19, Immune system, Plant derivatives, Bio-active components*

COVID-19: A NEW CHALLENGE FOR HUMANITY

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ABSTRACT

In the year 2019 during the month of December, a very big challenge came in front of humanity around the world in the form of a novel coronavirus called SARS-CoV-2. It resulted in the outbreak of a respiratory illness which is known as COVID-19. Since December 2019, just a month before the Chinese Spring Festival, multiple cases of pneumonia of unknown etiology appeared in Wuhan, Hubei Province, China. Later, a novel coronavirus was identified in a bronchoalveolar lavage fluid sample from the Wuhan Seafood Market using metagenomic next-generation sequencing technology. On February 11, 2020, the virus was named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the International Committee on Taxonomy of Viruses (ICTV). SARS-CoV-2 is the seventh member of the coronavirus family that can infect humans after the emergence of severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV). The World Health Organization announced that the novel coronavirus pneumonia epidemic caused by SARS-CoV-2 was classified as a public health emergency of international concern on January 30, 2020. The new coronavirus disease caused by SARS-CoV-2 was named coronavirus disease 2019 (COVID-19). The unprecedented number of COVID-19 cases not only in China but also in many countries has triggered the alarm for public health to respond to emerging and re-emerging diseases. A comprehensive strategy, including surveillance, diagnostics, clinical treatment, research, and development of vaccines and drugs, is urgently needed to win the battle against COVID-19 and other infectious diseases.

Keywords: *Challenge, novel, infectious, SARS, Surveillance etc.*

CURRENT SCENARIO OF CORONAVIRUS (COVID-19) IN INDIA

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ABSTRACT

COVID-19, just few days back, was foreign to us and now spreading its routes well in India. Starting with one case and now with 800+ cases, the virus is trending right now in almost every part of the country. The irony is not much is known about this novel virus, hence mortality and morbidity across the globe is on a peak. The Ministry of Health and Family Welfare, Government of India and ICMR (Indian Council of Medical Research) has formulated guidelines, advisories for social distancing protocol, diagnosis, management, do's and don'ts and other reliable material. This review briefly covers the introduction, possible mode of transmission, definitions, some basic advices, diagnosis, treatment and management protocol being followed right now in India; however subjected to change in due course of time as is the number of cases and mortality. The health care personnel are doing their job perfectly and so is the Government, but what is important for everyone being a citizen of India is to maintain social distancing and follow advisories strictly from time to time so that we can make way for our own lives and lives of our dearones.

Keywords: *COVID-19, coronavirus, India*

BIOLOGY OF NCOVID-19 VIRUS AND THEIR CONSEQUENCES

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ABSTRACT

Here I discuss the basis biology of nCOVID-19 virus, especially, its structure, systematic position, morphology and epidemiology in concern of present scenario. This virus is emerging as a global problem result in solemn outbreak of the corona virus disease. The outbreak started in China in late 2019 and by April 2020 the disease has spread to countries around the world. Morphologically, this virus appears as in form of crown, envelope glycoprotein of their surface. This SARS Cov 2 strain is systematically positioned in BETA CoV genera along with SARS CoV and MERS Cov.

Keywords: *COVID-19 virus, Structure, Morphology, Epidemiology, SARS-Cov, MERS Cov*

ENVIRONMENTAL FACTOR RESPONSIBLE FOR COVID-19 DISEASE

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ABSTRACT

Corona virus can cause a variety of illness in animals, but in human being coronaviruses produce one-third of common colds and sometimes respiratory infections in premature infants. Here, we focus on that theenvironmental factorsare themain reason for causes of thecoronavirus infection and we have given some prevention methods. Also,we have defined that plasma therapy is an effective treatment at present time.

Keywords *-nCOVID, SARS, MERS,Plasma therapy, Prevention method.*

REMDESIVIR-A MINI REVIEW

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ABSTRACT

In December 2019, the first case of coronavirus disease 2019 (COVID-19) was reported in Wuhan, China, during an outbreak of viral pneumonia. An initially regional epidemic has since rapidly expanded to a global pandemic affecting at least 210 countries with significant morbidity and mortality. Special attention and efforts to protect or reduce transmission should be applied in susceptible populations including children, health care providers, and elderly people.Remdesivir is a monophosphoramidate prodrug of an adenosine analogue that has a broad antiviral spectrum including filoviruses, paramyxoviruses, pneumoviruses, and coronaviruses

***Keywords**: salivary diagnostics, safe, non invasive, cost effective, novel corona virus*

PLACENTAL STEM CELLS BASED IMMUNOMODULATORY THERAPY FOR SARS-CoV-2.

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ABSTRACT

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the causative agent of the deadly contagious disease of increasing incidence around the world. As the major problem faced in the severe cases of COVID19 was due to the elevated level of cytokines and uncontrollable inflammation that ultimately resulted in multiple organ failure and ARDS .thus the sharp increase in the incidence of this infection and the severe side effects and the disadvantage of broad-spectrum of the present therapeutics made it necessary to search for an alternative and effective therapy to treat COVID 19. Thus we have focused on a wise approach to the combat of COVID-19 effectively with the help of placental expanded cells (PLX), these are placenta-derived, mesenchymal-like adherent stromal cells that facilitates healing of damaged tissue by stimulating the body's own regenerative mechanism by promote inflammation resolution and exhibit strong immunomodulatory properties. Ascontrolling the inflammatory response and inhibiting cytokine storm considered to be a crucial strategy in severe cases of COVID19infection, this placental stem cell therapy could be a potential candidate to reduce the inflammatory damage associated with the disease. Thus we have addressed the current findings and advances in placental stem cell therapy strategies against COVID 19 and other disorders.

***Keywords**: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), placental expanded cells (PLX), immunomodulatory properties.*

HANDLING EMERGING ISSUES ON INFODEMIC DURING PANDEMIC

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ABSTRACT

Infodemic, more concisely is the flood of misinformation disseminating through social platforms and other media outlets. At one end, the Government authorities are making their all-out efforts in controlling and combating the battle against Corona spread. On the other end misinformation is creating unwanted problems towards public health. News around the COVID-19, the bogus treatments and unscientific claims and fake health advisories has taken misinformation and fake news to unimaginable levels. People wanting to save themselves from this virus are resorting to any measure fuelled by rumors and half-baked fake news on preventive measures and cures. Instant messaging platform WhatsApp, particularly family groups, is increasingly becoming a hotbed of medical misinformation despite recent measures by WhatsApp to stem the flow of misinformation around the COVID-19 pandemic. The paper endeavored to express its view to make attention and resolve the various issue of Infodemic that is going to infiltered the brain of humanbeing.

***Keywords**: Infodemic, misinformation, pandemic and infiltered.*

CORONAVIRUS (COVID-19) PANDEMIC IN INDIA: REVIEW ON SYMPTOMS, TRANSMISSION AND DIAGNOSIS

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ABSTRACT

Coronavirus disease (COVID-19) is recently declared pandemic caused by sars-cov2. It is zoonotic in origin and transmitted to humans via unknown intermediary animals in wuhan, hubei province of china. Several measures (lockdown, quartine, janta curfew, testing and isolation) are being carried out by Indian government to avoid its spread as there are no vaccines available for its treatment. In this review, we highlighted the symptoms, transmission, preventive measures and diagnosis of COVID-19. The purpose of this article is to sketch out the current status of COVID-19 in India with reference to the public health and social measures useful for slowing or stopping the spread of COVID-19 at regional, community, national or global level.

Keywords: *Coronavirus, Symptoms, Transmission, Diagnosis*

A COMPARATIVE STUDY OF COVID-19 WITH OTHER COUNTRIES, THEIR PREVENTION AND MANAGEMENT.

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ABSTRACT

COVID-19 was originated from Wuhan city of China in December 2019. It is a viral disease due to the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) virus. The affected patients show flu-like symptoms with a dry cough, sore throat, high fever, and breathing problems. In the world, about 3.12 million people have been infected with more than 0.21 million deaths have been recorded. The United States of America itself has got more affected patients when compared with other countries globally, which is about 1 million. There is no exact and specific treatment for this disease. However, prevention and management are the best practices to control this infection.

Keywords *: COVID-19, Prevention and management.*

MANAGEMENT OF COVID-19 STRESS

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ABSTRACT

The pandemic declared by World Health Organization,WHO affecting major part of world's population has challenged the enormous human development of Science and Technology. Stress arising from Covid 19 has badly affected the mental health and psychological wellbeing of mankind. Since B.C mankind has faced numerous epidemic situations, human fought bravely and defeated such grim circumstances. We can also defeat this situation by joint efforts and following preventive measures. In this article, we'll find out how a person can manage his stress levels with his own help & can come out of Covid 19 situation positively and confidently.

Keywords: *Pandemic, Covid-19, WHO, Management*

CORONAVIRUS (COVID-19): A REVIEW

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ABSTRACT

Corona virus disease (COVID-19) is single stranded RNA virus caused by SARS-CoV-2 transmitting between animals and people. It was found in Wuhan, china. It causes severe diseases like middle east respiratory syndrome (MERS-COV) and severe acute respiratory syndrome (SARS-COV). It produces symptoms like fever, cough, sore throat and difficulty in breathing. It is transmitted through the droplets of infected person when he sneezes and cough. As per WHO it is an ongoing outbreak to be global public health emergency. So, this review currently focus on the current status of COVID-19 containing clinical symptoms, diagnosis, treatment and prevention.

Keywords:*SARS-CoV-2,COVID-19,Dignosis,Sneezes*

PLASMA THERAPY: A NEW OPTION FOR COVID-19 TREATMENT

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ABSTRACT

The convalescent plasma therapy uses antibodies from the blood of a recovered patient to treat those critically affected. The therapy can also use to immunise those who were at high risk (health workers, families of patients contacts).it was used for severe acute respiratory syndrome (SARS), pandemic 2009 influenza A (H1N1), avian influenza A (H5N1), several haemorrhagic fevers such as Ebola, and other viral infections. COVID 19 is rapidly spreading infection without specific treatment.

Systematically searched keywords like convalescent plasma COVID 19 and obtained about 24 articles and included 5 studies those who have done clinical study with plasma and journal written in English language.

A total of 26 patients receive plasma in various studies in which 11 were females. The patients are of mean age 57.9 (SD±13.9). Majority of them don't have any comorbidity. The patient received Convalescent plasma as therapy along with other antiviral and therapy. In the next day itself the clinical symptoms, SARS-COV2 RNA rate were decreased and the antibody tier was increased also the markers like CRP, Procalictoin WBC count found to be reduced The patient who were in critically ill also become better after the plasma therapy. The ADR (3) found is very less and less severe. In COVID 19 without a better treatment the plasma therapy can be possible. But it should use early as possible because the endogenous IgM & IgG generated in peak levels at 2 -4 weeks after the infection. The amount of convalescent plasma used in the therapy was various all studies, actually it is based on patient factors. Also there is a significant relation with antiviral, steroids and medication along with Plasma therapy. The 26 samples is not enough to finales the result the FDA approved clinical trial for plasma therapy to find out all possible effects and adverse events that van be occurred.

Additional trials and studies, which involves higher sample size is needed to find out the efficacy, safety and methodology of therapy. During this period in absence of the better option plasma therapy van be used which have low adverse effects

Keyword: *Short-medium term, Humoral immunity; Neutralize virus; Preventing replication; Halting ongoing tissue damage; Best in less severe case prophylaxis; Less ADR*

CUMINALDEHYDE, ACTIVE COMPONENT OF CUMINUM CYMINUM: POTENTIAL THERAPEUTIC DRUG FOR NOVEL COVID-19 USING MOLECULAR DOCKING

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ABSTRACT

Background: SARS-CoV2 outbreak represents a pandemic threat to global public health which was identified at the end of December, 2019 in Wuhan, Hubei province, China 2019 (1,2). Corona viruses (CoVs) are highly transmittable and pathogenic virus which belongs to the family of Coronaviridae (order Nidovirales) with a single stranded positive-sense RNA as genetic material approx. 26-32 kb in size (3,4,5). Viral genome is encapsulated within membrane envelope (M) protein, studded with glycoprotein spikes (S) protein. The severity and magnitude of the SARS-CoV2 progression makes it imperative to develop therapeutic drugs, utilizing pharmacological or natural agents. Spices and condiments comprise the most important products used for flavouring foods. Cuminum cyminum (cumin) belonging to family Apiaceae and commonly known as jeera, is a annual herb used as dietary components and have diverse medicinal properties (6). Objective: The aim of this research is to elucidate cuminaldehyde, active component of cumin, as a potential drug against COVID-19 inhibition. Material and Methods: In the present study, the structure of cuminaldehyde and target proteins SARS-CoV2 were downloaded from online available database PubChem and Protein Data Bank (PDB) respectively. After minimizing the energy, both ligand and proteins were subjected to molecular docking using AutoDock Tools (ADT) version 4.2.6. Software and their interaction were analyzed in Accelrys Biovia Discovery Studio version 2017 R2 (7). Bioactivity score prediction and drug likeness following Lipinski's rule of 5 was evaluated using Molinspiration version 2016.10. OSIRIS Property Explorer version 4.5.1.was used to predict the drug toxicity assessment (7). The results were compared with Remdesivir drug. The PDB IDs of the target proteins of COVID-19 were as follows: Spike glycoprotein PDB ID: 6VXX, ACE2 Receptor PDB ID: 1O8A, 3CLPro PDB ID: 6LU7, papain-like protease (PLPro) PDB ID: 6W9C. Results: Cuminaldehyde has a stronger bond and high affinity with the proteins of SARS-CoV2 in decreased order ACE Receptor> Spike protein> PLPro>3CLPro. The ACE2 receptor protein has the lowest binding energy (-5.19kcal/mol) with respected to spike glycoprotein followed (-4.79 kcal/mol). Spike glycoprotein found on the surface of SARS-CoV-2 facilitates the viral entry through Angiotensin converting enzyme (ACE2) receptor on host cell surface. PASS Analysis of cuminaldehyde revealed 0 violations of Lipinski's parameters indicating it ideal potential drug. Toxicity potential evaluation revealed that cuminaldehyde had no toxicity, tumorigenicity or Reproductive effect(s). Conclusion: Finally, with due attention to the high effectiveness function of cuminaldehyde, we can conclude that this compounds may be considered as safe potential drugs against SARS- CoV2 as it binds with ACE receptor, blocking the viral entry.

Keywords: *Cuminaldehyde, COVID-19, Molecular docking*

A STANCE ON COVID-19: SARS-COV-2 TRANSMISSION, SPREAD, AND EMERGENCE

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ABSTRACT

Coronaviruses are common human pathogens, causing generally-mild acute respiratory illnesses known as the common cold. The virus Coronaviruses Coronaviruses (CoVs) are enveloped, positive-sense, single-stranded RNA viruses that belong to the subfamily Coronavirinae,family Coronavirdiae, order Nidovirales(https://www.ncbi.nlm.nih.gov/pubmed/32113704).It is suggested that this is likely the zoonotic origin of COVID-19 based on the large number of infected people that were exposed to the wet animal market in Wuhan City, China. Person-to-person transmission of COVID-19 infection led to the isolation of patients that were subsequently administered a variety of treatments. Extensive measures to reduce person-to-person transmission of COVID-19 have been implemented to control the current outbreak. Special attention and efforts to protect or reduce transmission should be applied in susceptible populations including children, health care providers, and elderly people. Additional collaboration in the areas of antiviral discovery processes and clinical trial performance will enhance patients' access to drug candidates with improved therapeutic potential and ideally reduce the amount of time required to bring these drugs to market. The abundance of publications and the rapid publication rate associated with the SARS-CoV-2 virus-related disease outbreak, as illustrated in this report, are indicative of the intense effort by research institutes and pharmaceutical industries to address both molecular mechanisms and therapeutic routes useful for treating current and future coronavirus outbreaks.

Keywords: *COVID-19, SARS-COV-2, Tansmission, Spread, Emergence*

CONVOLESCENT PLASMA THERAPY FOR COVID-19

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ABSTRACT

In December 2019, the outbreak of SARS-CoV-2 in Wuhan, China created havoc all over the world. As of 3rd May 2020, SARS-CoV-2 had affected more than 3 million people across the globe and caused more than 200 thousand deaths. The research is going on to find a effective treatment for the COVID-19. Till then the treatment for the COVID 19 patients is done with the help of the anti malarial drug Hydroxychloroquine and various life supportive treatments such as oxygen supply in moderate cases and extra corporeal membrane oxygenation in critically ill patients. The type of medication which is given is also under investigation. The convalescent plasma therapy is found as a one of the way for the treatment of the COVID-19 patients. The further research on it is going on but it might be an immediate strategy for the emergency prophylaxis and SARS-CoV-2 therapy.

Keywords: *Convolescent Plasma Therapy, COVID-19, Treatment*

COVID19: EPIDEMIOLOGY, TRANSMISSION, PATHOGENESIS, PREVENTION AND ITS CONTROL

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ABSTRACT

The epidemic of 2019NovelCorona Virus (COVID 19) or SARS CoV 2 started spreading from city of China Wuhan. It has various symptoms of common cold, dyspnoea, heamoptysis, severe pneumonia etc.It can be diagnosed by RNA test, serologic test and imaging techniques. The initial numbers of patients were found from people feeding on sea foods thus it is considered to be spread from animal to human beings. Due to lack of proper medication at present only prevent is best to save yourself from disease. Bearing mask and social distancing is recommended till vaccine preparation. DNA vaccine, Viral vector and virus like particle vaccine are in trial at present.

Keywords: *COVID-19, Transmission, Pathogenesis, Prevention, Control*

COVID-19 IT`S PREVENTION AND MANAGEMENT

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ABSTRACT

COVID-19 is the infectious disease caused by the most recently discovered corona virus. It is Human to human transmission. The incubation period ranges from one to 14 days, though is most commonly five days. The most common symptoms are fever, tiredness, and dry cough. Avoiding close contact with sick individuals prevent the spared of COVID-19. In December 2019 first case found in Wuhan city (China). There are no medicines available to treat COVID-19—yet. Investigational drugs may have to offer in the against COVID-19. COVID-19 Vaccine are under Trials. Many countries are work on this project to prepare the COVID-19 Vaccine.

Keywords: *COVID-19, Prevention, Management*

MOBILE APPLICATION OF COVID-19

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ABSTRACT

It could be difficult for health care professional to recommend a suitable app for COVID-19 education and self-monitoring purposes. In this study, we have systematically evaluated the contents and features of COVID-19 mobile health applications (apps) available in android-based Play Store and iOS-based App Store. Covid 19 apps are Mobile software application designed to aid contact tracing in response to the 2019-20 Coronavirus pandemic i.e the person of identifying person who may have been in contact with an infected individual. Numerous apps were develop by official govt.support in some territories and jurisdiction like India app name Corona kavach Mobile technology has been leveraged in a number of ways to controlthe spread of COVID-19, including to support knowledge translation. Mobile applications are accessible, acceptable, easily adopted , andhave the ability to support social distancing efforts.The following review assesses the mobile applications currently available to address COVID-19 and seeks existing studies in the literature that evaluate such applications. Contact tracing is an important tool in infectious disease control, but as the number of cases rises time constraints make it more challenging to effectively control transmission.Digital contact tracing, especially if widely deployed, may be more effective than traditional methods of contact tracing. In a March 2020 model by the Oxford University Big Data Institute team of Professor Christophe Fraser, a coronavirus outbreak in a city of one million people is halted if 80% of all smartphone users take part in a tracking system.

Keywords: *COVID19, Corona Kavach,Mobile application*

PHARMACOLOGIC TREATMENTS FOR CORONAVIRUS DISEASE 2019 (COVID-19): A REVIEW

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ABSTRACT

Over the past two decades, coronaviruses (CoVs) have been associated with significant disease outbreaks in East Asia and the Middle East. The severe acute respiratory syndrome (SARS) and the Middle East respiratory syndromes (MERS) began to emerge in 2002 and 2012, respectively. Health workers worldwide are currently making efforts to control further disease outbreaks caused by the novel CoV (originally named 2019-nCoV) that was first identified in Wuhan City, Hubei Province, China, on December 12th, 2019. Coronaviruses are members of the subfamily Coronavirinae in the family Coronaviridae and the order Nidovirales. Coronaviruses are a group of enveloped viruses with no segmented, single-stranded, and positive-sense RNA genomes. six coronaviruses have been known to infect human hosts and cause respiratory diseases. Among them, severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV). They can be isolated from different animal species. These include birds, livestock, and mammals such as camels, bats, masked palm civets, mice, dogs, and cats [2]. The widespread distribution and infectivity of COV make it an important pathogen.

Keywords: *Corona, respiratory, viruses, Hcov, host, RNA.*

EFFECT OF ANGIOTENSIN-CONVERTING ENZYME 2 IN SARS-COV-2.

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ABSTRACT

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the infective agent responsible for causing COVID-19. Recently, a receptor has been identified for SARS-CoV-2 named as Angiotensin-converting enzyme (ACE2). ACE2 expresses itself mainly in the lungs, gut, central nervous system, cardiovascular system, kidneys, and adipose tissues. Angiotensin-converting enzyme (ACE2) has three main functions: it act as a negative regulator of the renin-angiotensin system (RAS), facilitates the amino acid transport, and also act as a SARS-CoV and SARS-CoV-2 receptor. The receptor binding domain of SARS-CoV-2 is different from SARS-CoV in a variety of amino acid residues. This allows SARS-CoV-2 to bind with human ACE2 receptor with strong affinity, resulting in greater pathogenicity of SARS-CoV-2. ACE2 also causes acute myocardial injury as well as chronic disability to the cardiovascular system. So, during treatment of COVID-19, specific attention should also be given to cardiovascular protection

Keywords: *Angiotensin-converting Enzyme, SARS-COV-2, Cardiovascular System.*

EPIDEMIOLOGY MORPHOLOGY AND REPRODUCTION OF COVID-19 (A REVIEW)

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ABSTRACT

Coronavirus which is envoleped with particles that has prominent surface projections resembling corona of the sun. They not only infect humans but can also have potent to cause infection to various animal species causing respiratory and gastrointestinal, cardiovascular and neurological disease. This article is about a detailed study of COVID19 the pandemic threat for the earth.

***Key words**: Coronavirus, Cardiovascular, Neurological and Pandemic.*

PULMONARY OEDEMA

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ABSTRACT

The corona virus pandemic is mediated by severe acute respiratory syndrome coronavirus (SARS-CoV) and has been responsible for more than 900,000 and 45,000 deaths worldwide as of April,2020. SARS-CoV infects cells via binding to angiotensin-converting enzyme 2(ACE2). ACE2 plays an important role in renin-angiotensin-aldosterone system (RAAS) where it metabolizes Ang-2 to Ang- (1-7). SARS-CoV spike protein reduces ACE2 expression, which protects lungs from ARDS.

Keywords: *Respiratory Syndrome, SARS-COV, ACE2, Spike potein*

DANGER OF DEATH: A REVIEW ON DEADLY VIRUSES

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ABSTRACT

COVID-19 (coronavirus disease 2019) is considered as an infectious disease, which is caused by severe acute respiratory syndrome coronavirus 2, also named as SARS-CoV-2, previously known as 2019 novel coronavirus 2019-nCoV (a strain of coronavirus). The first infected cases were found in Wuhan, China, in late December 2019 before spreading globally 1,2,3.The World Health Organizationoriginally called this illness "novel coronavirus-infected pneumonia (NCIP)"1.On 11 February 2020, the WHO officially again renamed the clinical condition as COVID-194. But on the same day, the Coronavirus Study Group of the International Committee on Taxonomy of Viruses renamed the virus called as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) 5,6,7. The morphologically Corona virus is spherical/pleomorphic, single stranded, enveloped RNA and covered with club shaped glycoprotein. Corona viruses contain four sub types including alpha, beta, gamma and delta corona virus. Each of sub type has many serotypes8,9,10,11,12. Peoples can get such type of infection through close contact with the diseased person affected with same virus including dry cough, sneezing. Basically, corona virus was spread via airborne zoonotic droplets. Virus was replicated in ciliated epithelium that caused cellular damage and infection at infection site. According to a study published in 2019, An giotensin converting enzyme, a membrane exopeptidase in the receptor used by corona virus in entry to human cells13,14,15 (Table 1).

Keywords: *COVID-19, Morphology, Serotypes, Giotensin*

ELECTROHOMEOPATHY- EFFICIENT MEDICINES FOR COVID-19

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ABSTRACT

Corona virus disease (COVID-19) is caused by SARS-COV 2 and represent like a causative agent of a potentially fatal disease. That is a global public health concern. This is said to have come from seafood and meat market in Wuhan in Chinain December 2019. From where itspreaded to other countries including India. Extensive measures to reduce person to person transmission of COVID-19 have been implemented to control the outbreak. Special efforts and attention to protect transmission should be applied in susceptible population including children healthcare providers and elderly people.

Keywords: *COVID-19, Electohomeopathy, Control*

CORONA VIRUS: AN ECONOMICAL OUT-BREAK FOR INDIA

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ABSTRACT

One Virus has worried the world, the Novel Corona Virus is a global war, wherein humans are facing the same enemy. To ensure that this war can be won, we must consider the life of humans as equal as our nation is considering the economy part. Honorable Prime Minister has addressed the country in one of his speech that the novel corona virus has brought an opportunity for the people of India. We should understand the increasing of Lockdown is taking our economy down at certain levels. The fight with Corona Virus is more of a strategic and leadership skills, the more efficient strategies will be, the sooner nation will gear up. This paper actually helps us to understand how the India Economy is going to be impacted and in which sectors. We should understand how the Indian economy is facing slow down over the last few quarters and now this virus has actually effected the economy. The extent of the shock will depend upon the strategies and importance made at Government level for the people and economy both. No economy can run without humans, so it is equally important to save lives of human to reduce economic impact too. In contrast, this paper will give us the view of economic impact due to SARS CoV-2 in India

Keywords: *Corona Virus, Impact, Indian Economy, Human lives, Lockdown, Opportunities.*

Disclaimer: Opinions expressed in the paper are solely of the author, hence do not represent the views of the company.

HOW DO TESTS FOR CORONA VIRUS WORK?

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ABSTRACT

Invention of polymerase chain reaction (PCR) technology by Kary Mullis in 1984 gave birth to real-time PCR. Real-time PCR — detection and expression analysis of gene(s) in real-time — has revolutionized the 21st century biological science due to its tremendous application in quantitative genotyping, genetic variation of inter and intra organisms, early diagnosis of disease, forensic, to name a few. We comprehensively review various aspects of real-time PCR, including technological refinement and application in all scientific fields ranging from medical to environmental issues. Basically, more focused n the current pandemic COVID – 19.

Keywords: *Real-time PCR, applications, disease, microorganisms, pathogen, detection, quantification.*

A REVIEW OF RESEARCH EVIDENCE ON RECENT TRENDS IN COVID-19

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ABSTRACT

In recent years the field of coronavirology has advanced significantly. The SARS outbreak was a drastic warning that animal coronaviruses are possible threats to the human population, but the precise mechanism of SARS coronavirus species-to-species transmission remains unclear. The novel coronavirus uses the same SARS-CoV receptor, angiotensin-converting enzyme 2 (ACE2), and spreads primarily through the respiratory tract. Importantly, there has been growing reports of ongoing human-to-human transmission along with several cases that have been transmitted across the world. Drugs such as Remdesivir, Favipiravir, Lopinavir / ritonavir, Hydroxychloroquine, Chloroquine, Azithromycin, Sofosbuvir / daclatasvir, and Pirfenidone can be produced cheaply by most currently in clinical trials. Almost all patients approved oxygen therapy, and WHO suggested extracorporeal oxygenation of the membrane (ECMO) in patients with refractory hypoxemia. Thus, the present review helps to aware about COVID-19 and its epidemiology, preventive measures and treatment.

***Keywords**: COVID-19, Transmission, Spreading of SARS-CoV- 2, drugs, Oxygen therapy, Treatment.*

VIRTUAL EDUCATION: IMPACT OF COVID19

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ABSTRACT

Virtual education with the use of internet is a necessity for the continuous teaching and learning activities in the universities due to the COVID19 and lockdown. It is questioned whether professionals and students really have adequate preparation to face this challenge. The situation exposed led to the proposal of the objective: Analyze the theoretical elements related to virtual education with the use of internet in the teaching. The results showed that pedagogical quality and teacher preparation with the use of virtual system improve the teaching and learning process, in addition to favoring innovative programs in the area of education.

Keywords: *Virtual education, COVID19*

ROLE OF 'TULSI' FOR TREATMENT OF NEW NON- NATURAL RISK [SARS-COV-2]

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ABSTRACT

The discovery that a novel coronavirus is the probable cause of the newly recognized severe acute respiratory syndrome (SARS), provides a dramatic example of an emerging coronavirus disease in humans. COVID-19, the disease caused by SARS-CoV-2, is highly contagious disease, arose in a live seafood, poultry and wild animalmarket, but it has now appeared throughout the world, including the United States. Although human coronaviruses cause up to 30 percent of colds, they rarely cause lower respiratory tract disease. In contrast, coronaviruses cause devastating epizootics of respiratory or enteric disease in livestock and poultry. There have been around 26,28,527 worldwide (21,393-India) reported cases of COVID-19 and 1,83,424 worldwide (681-India) reported deaths to date 21/04/2020. So, to get rid of this catastrophe, combating the new virus as its epidemic is a matter of concern. It was reported that traditional remedies take the edge of the symptoms of COVID-19. Medicinal herbs, a class of medicine arise from nature hence causes less side effects because of less use of additives, prespectives and excipients. I use writing a review over the use of 'Tulsi' for the treatment of COVID-19 because of rapid spread of infection availability of less knowledge regarding the treatment and increase concern of public to protect themselves from the effect of viral infection. Tulsi has inter-modal therapeutic effects, I belief that tulsi may be effective in the prevention and management of COVID-19. Though the flourishing literature supports the managements of COVID-19 using tulsi, a lack of standard formulation limits its use. This is the need of time to start with translational researchers to provide scientific evidence for the efficacy and to establish the standard formulation of tulsi in the management of COVID-19. Here the question arises whether COVID-19 is a New Non- Natural Risk? By this study we gain the knowledge about the impact of the traditional plant on pandemic infection as the best way to protect ourselves from coronavirus by the 'Ayureveda's Holistic lifestyle approachin the society. Indians have good governance with social distancing and a good belief for traditional plant.

Keywords*: Medicinal herbs, ayureveda, holistic lifestyle, tulsi, social distancing, pandemic infection.*

IMPACT OF COVID-19 ON LITIGANTS IN INDIA – SEARCH FOR A NEW PATH

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ABSTRACT

Litigation in India is known to be time consuming. With the ongoing pandemic called COVID-19, litigants in India are facing the threat of delay justice which is often termed as denied justice. There being no surety about quick reopening of courts, the dilemma for litigants continue with uncertainty. Justice cannot wait for COVID-19 to end. This paper tries to explore the alternatives available for litigants while understanding the impact of COVID-19 on consumers of justice in India.

Keywords: *COVID-19, Impcat, Litigants, Alternative solutions*

SOCIAL REVERBERATION TOWARDS "PANDEMIC"-"COVID 19"

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ABSTRACT

Coronavirus disease (COVID-19) is an infectious disease.India presents unique concerns in context to its geographical vastness and the diversity complexity of its cultural and religious beliefs, and practices coexisting with poor social indicators. Communication programs can help enhance knowledge, shift attitudes, and change public behaviors. Preventive behaviors such as home quarantine and social distancing must be combined with efforts at dispelling rumors. The Indian Council of Medical Research (ICMR) has maintained that there is still no concrete evidence of community transmission of corona virus in India. Fighting the COVID-19 crisis essentially requires a holistic approach that sufficiently integrates the infrastructural, social, behavioral, psychological aspects to prepare us for any emergency response. India must increase its public health spending to build a robust health care system and deal effectively with overriding religious considerations, social beliefs, and cultural practices to enhance the scientific temper of the people.

Keywords: *Social, Reverberation, COVID19, SHG, SBCC, and ICTS,*

HOW SURFACTANT DESTROY CORONA VIRUS?

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ABSTRACT

The novel coronavirus, can be spread via our hands. Hands act like sticky traps for viruses. We can pick up droplets that contain the virus, and they'll stay on our hands, and perhaps enter our bodies if we touch our hands to our faces. Surfactants is use to decrease the surface and interfacial tension and stabilize the interface.also increase its spreading and wetting properties. Some suractant molecules disrupt the chemical bonds that allow bacteria, viruses and grime to stick to surfaces, lifting them off the skin. Micelles can also form around particles of dirt and fragments of viruses and bacteria, suspending them in floating cages. When you rinse your hands, all the microorganisms that have been damaged, trapped and killed by soap molecules are washed away. Conclusion: Some surfactant, Ammonium Lauryl Sulfate,,Sodium Lauryl Sulfate,,Cetrimonium Bromide,Cetylpyridinium chloride,Benzalkonium chloride,Benzethonium chloride,Phospholipids phosphatidylserine, phosphatidylethanolamine, phosphatidylcholine, Polyethoxylated tallow amine Cocamide monoethanolamine Cocamide diethanolamine Suractant easily solublise the lipid or glycoprotein of Corona virus, which killed easily. Soaps are using frequently for at least 20 secands, the time of contact may more effective Coronavirus.

Keywods: *COVID-19, Surfactants, Glycoprotein*

COVID-19 PANDEMIC IN INDIA: A REVIEW OF EPIDEMIOLOGY AND PATHOGENESIS

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ABSTRACT

Coronavirus disease (COVID-19) is caused by SARS-COV2. Early studies reveal that COVID-19 has been originated in bats and was transmitted to humans through yet unknown intermediary animals in Wuhan, Hubei province of China. Person-to-person transmission of COVID-19 infection led to the isolation of patients that were subsequently administered a variety of treatments. Extensive measures (lock down, contract tracing, testing and isolation) to reduce person-to-person transmission of COVID-19 have been implemented to control the current outbreak. Still, there has been no potential drug to treat COVID-19 patients. In this review, we highlighted the Clinical manifestation, transmission, epidemiology, pathogenesis, phylogenetic analysis, treatment and current status in India.

Keywords: *COVID-19, Pneumonia, SARS-CoV-2, Wuhan.*

ELECTROHOMEOPATHY – EFFICIENT MEDICINES FOR COVID-19

KUMUD SRIVASTAVA

ABSTRACT

"Whenever there exits any disturbance in the nature; nature shows its own rage."

Such as: Year (1720) : Plague, Year (1820): Cholera, Year (1920) : Spanish flu, Year (2020) : CORONA VIRUS,About 100 years ago, COUNT CESARE MATTIE "father of electrohomeopathy" had researched and developed many medicines with no side effects by the use of the extracts from various plants proceeded by spagyric method.,The provision of electro homeopathy may prove a fruitful in this difficult time of COVID-19 outbreak. Working together, we can continue to provide high quality care while minimizing risk to ourselves, our patients and the public at large. Thus, "Center of your heart is the center of the universe. Go to that center and radiate positive vibration for the well-being of the humanity." "STAY HOME STAY SAFE"

EFFECT OF COVID-19 ON INDIVIDUALS OF DIFFERENT TEMPERAMENTS: SANGUINE AND LYMPHATIC

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ABSTRACT

COVID-19 is spreading rapidly among individuals, which has similar kind of effects on the people. Researches have shown the transmission happens rapidly, also have stated that people having low immunity are more prone to be affected by this virus if not taken care of with extra precautions, even more than that of other individuals. People are born with different temperaments which defines the strength of their immune system. Electrohomeopathy describes two types of temperaments: Sanguine and Lymphatic, which have different characteristic features. This paper talks about the effect of COVID-19 on individuals having these different temperaments.

Keywords: *COVID-19, Electrohomeopathy, Temperament, Sanguine, Lymphatic*

A BRIEF UPDATE ON COVID 19

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ABSTRACT

The first human cases of COVID-19, the disease caused by the novel coronavirus causing COVID-19, subsequently named SARS-CoV-2 were first reported by officials in Wuhan City, China, in December 2019. Retrospective investigations by Chinese authorities have identified human cases with onset of symptoms in early December 2019. While some of the earliest known cases had a link to a wholesale food market in Wuhan, some did not. No evidence shows that medicine like oseltamivir and garlic can treat the new coronavirus. WHO is working with experts and doctors around the world for COVID-19 treatment, and observing how effective the anti-virus drugs are to 2019-nCoV. However, this work is still at an early stage and no recommendations can yet be made.

Keywords: *COVID-19, Retrospective studies, China*

PANDEMIC COVID 19- A THEORETICAL UNDERSTANDING OF THE PANDEMIC

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ABSTRACT

COVID19 pandemic has affected the life of millions all over the globe. Governments all around the world are taking several necessary steps and timely decisions to curb the spread of the deadly virus. One of the major steps taken is Lockdown – restricting most of all economic activities. This is a crisis that has badly affected the economy worldwide. Apart from manufacturing, trading and sale of essential supplies, all the other industries are totally shut down. This has adversely affected the economy. Government of India has also taken severe measures and every possible initiative in this crucial time. The entire country is under lockdown since 25th March to contain the spread of the virus. It has announced relief packages to various stakeholders affected by this pandemic. Several steps have been taken relating to Statutory and Regulatory compliance matters. The present paper tries to focus on the reason, causes, symptoms of the virus.

Keywords: *COVID 19, Causes, Indian economy, Pandemic, Precautionary measures.*

HYDROXYCHLOROQUINE AND CHLOROQUINE: A POTENT CANDIDATE AGAINST SARS-COV-2 INFECTION

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ABSTRACT

Characterized by pneumonia like symptoms, COVID-19 has been declared a pandemic by WHO in February 2020. The present scenario of global public health emergency and lack of any safe and effective treatment options has created a pressure and made researchers and scientific communities accountable for finding an effective medicine/vaccine swiftly. Several in-vitro studies on Vero-E6 cell line infected by SARS-CoV-2 and clinical trials on COVID-19 patients have revealed the efficient use of CQ/HCQ drugs in inhibiting viral replication, reducing disease duration and exacerbation of pneumonia, improving radiological response and increasing chances of virus-negative sero-conversion. Therefore,the risk-benefit ratio for the use of CQ/HCQ is quite considerable in the present era of COVID-19 pandemic. However, keeping the track record of the adverse effects of these drugs is quite necessary.

Keywords: *Hydroxychloroquine, Chloroquine, Clinical Trials, COVID-19*

WAY BACK TO OUR OLD INDIAN CULTURE DUE TO COVID-19- A REVIEW

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ABSTRACT

The culture of India refers collectively to the thousands of distinct and unique culture of all religions and communities present in India.People now a days leaving our Mother culture and running behind the western World. Till now I didn't understand Why? This is also one of the reason behind the cause of COVID-19.As we all educated and knowledgeable we should create an awareness of these issues and follow our culture.

Keywords- *COVID-19 , Western Culture, Awareness, Educated, India, Health.*

MANIFESTATION AND IMPACT OF COVID 19 ON DIABETIC PATIENT- A REVIEW

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ABSTRACT

SARS COV2 (Severe Acute Respiratory Syndrome) & MERS(Middle-East Respiratory Syndrome) are the viral pathogen which is appeared from the animal host, But it is not scientifically proven. COVID 19(Coronovirus Disease 2019) is the latest version of SARS COV 2. The genetic makeup of COVID19 was not yet studied clearly. hence it is a single-stranded RNA virus which converts genetic information into mRNA(Messenger RNA) which is incorporated into the host genetic material and started replicating and cause diseases in the human population. The effect of COVID 19 in diabetic patient was increasing rapidly. India had more diabetics patient currently affects more than 62 million Indians, which is more than 7.2% of the adult population. When it comes to the infection, both type 1 & type 2 diabetes can increase the risk of contraction. The dysfunction of the immune response makes diabetics more susceptible to infections (Lisa Marie Basile., 2020).

***Keywords**: SARS, MERS, COVID19, Diabetes*

COVID-19 IMPACT ON INDIA

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ABSTRACT:

In December 2019, the episode of the novel corona virus sickness (COVID-19) in China spread around the world, turning into a crisis of significant global concern. This virus also reaches to the boarders of India and the outbreak has been declared an epidemic in more than a dozen states and union territories. Corona disease causes bunch of serious respiratory ailment like extreme intense respiratory disorder. Its transmission via droplets, from one person to another, contaminated hands or by touching nose and eyes with contaminated hands, with incubation times of 2-14 days. There is no present viable medicine or treatments to prevent the spread of this virus other than Quarantine, Social distancing to minimize contact. Supportive medicines and convalescent plasma transfusion these strategies are using to treat the COVID-19 patients currently. In this review paper we discuss the all available information about transmission, epidemiology in India, isolation and treatment of corona virus disease.

Keywords: *Covid-19; Pandemic; Quarantine*

COVID-19

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ABSTRACT

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Corona virus disease mainly effect to respiratory system and communicate to each other by breathing. It is a take place of pandemic diseases, which is highlighted from Wuhan, Hubei Province, China and had some link to a large seafood and live animal market, suggesting animal to person spread. Later, a growing number of patients reportedly did not have exposure to animal markets, indicating person to person spread. Person to person spread was subsequently reported outside Hubei and in countries outside China, at least 218 countries of the world, including in the U.S.A., Italy, Germany, Spain, France, U.K., Iran etc are suffering. Most international destinations now have ongoing community spread with the virus that causes COVID-19, as does the United States. Community spread means some people have been infected and it is not known how or where they became exposed. Learn more about the spread of this coronavirus that is causing COVID-19. The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person cough, sneezes or exhales. These droplets are too heavy to hang in the air and quickly fall on floors or surface. If a person, can infected by breathing in the virus. So, they are within close proximity of someone, who has COVID-19, or by touching a contaminated surface and then their eyes, nose or mouth. In India, Foreigners as well as JAMATIs are mainly responsible to transmitting virus. COVID-19 is caused by a new coronavirus. Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats and bats. Rarely, animal coronaviruses can infect people and then spread between people such as with MERS-CoV, SARS-CoV, and now with this new virus, named SARS-CoV-2 (Feb-11, 2020). As current, suffering status of India is 19984 and U.P.-1294 (22-04-2020, 11:12AM). The infective situations are increasing ongoing. Preventional remedies are protect yourself and other around you by knowing the facts and tacking appropriate precautions which advices are provided by authentic institutions or bodies like as clean your hands by soap, sanitizers/an alcohol based hand rub, social distancing, don't touch your eyes, nose and mouth, using full face mask, stay home, feeling of fever, cough and difficulty in breathing, seeking medical consult etc. People are managed with supportive care, which may include fluid therapy, oxygen support and supporting other affected vital organs. The CDC recommends that those who suspect they carry the virus wear a simple face mask.

Keywords: *COVID-19, coronavirus, pandemic, community spread, suffering, transmitting, inflammatory, bloodstream, sneezing, unemployment, alcohol-based sanitizers/sprits, social distancing,*

कोविड–19 : महामारी या मानव निर्मित अभिशाप

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ABSTRACT

वैश्विक स्तर पर महामारी का रुप ले चुका नोवल कोरोना वायरस (COVID-19) आज दुनियाँ का सबसे घातक अदृश्य शत्रु बन गया है। इसके अभूतपूर्व प्रसार ने एवं पूरी दुनियाँ को झकझोर कर रख देने की घटना ने सम्पूर्ण मानवजाति को यह याद दिला दिया है कि कोई बीमारी कितनी तेजी से फैल सकती है एवं इसकी घातक शक्ति सम्पूर्ण विश्व को तबाह करने की क्षमता रख सकती है। वर्तमान परिस्थितियों में हम सभी के मन में यह आशंका बलवती हो रही है कि हम इससे मुक्त हो सकेंगे अथवा नहीं। लगभग पूरे विश्व में ऐसी स्थितियाँ उत्पन्न हो गयीं हैं कि हर कोई अपने–अपने घरों में बंधक सा है। लम्बे समय से किसी से न मिल पाने एवं व्यापार/रोजगार ठप हो जाने से लोग व्याकुल हो रहे हैं। कोरोना वायरस जिस तरह से अपने पाँव भारत में पसार रहा है और जो प्रभाव हम पश्चिमी देशों पर देख चुके हैं, उसे दृष्टिगत रखते हुए हमें अतिरिक्त सतर्कता एवं संयम बरतने की आवश्यकता है। जिस प्रकार कोरोना वायरस संक्रमण से मृतकों का आंकड़ा निरन्तर वृद्धिमान है, उसे अनुमान लगाना सहज ही है कि आने वाले दिन अधिक कठिन व परीक्षा लेने वाले होंगे। हमारी लापरवाही पूरे देश को उस स्थिति में लाकर खड़ा कर सकती है जब हम इस महामारी की सभी अवस्थाओं (जहंमे) को पार कर चुके होंगे एवं एक त्रासदी हम सभी के समक्ष होगी।

COVID-19- THE PANDEMIC

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ABSTRACT

This disease is caused by virus which is an enveloped and positive sense Single stranded RNA virus. This disease is caused by a virus known as Severe respiratory syndromecoronavirus-2 (SARS-CoV-2) and originated in Wuhan city, Hubei province, China. This virus is transferred from the bats to humans. These diseases that have been introduced to humans with deadly effects are caused by animals. Many people in china who got infected with this disease were linked to an animal market known as 'wet market.' The main cause of transmission of this disease is when a healthy person comes in contact with the infected person via small respiratory droplets produced during sneezing, coughing or by touching a contaminated surface. The infection is mostly seen in adult male patients with the median age of the patients were between 34 and 58 years. This virus is more likely to infect people suffering from cardiovascular, cerebrovascular diseases or diabetes. The rate of infection in young and healthy people is low. The most common symptoms include fever, sore throat, dry cough, and fatigue. Less common symptoms are shortness of breath, diarrhoea, headache, mucus production and muscle pain. It mainly affects the upper respiratory tract and lower respiratory tract as well. The virus can led to pneumonia or even death. An infected person can show symptoms within 2 to 14 days after infection. There are no antiviral treatments available against this disease but some antibiotic treatments for secondary bacterial infections are recommended. Some preventive measures can help us to stay safe like social distancing, stay home, which aims to reduce contact of infected persons with large groups and using sanitizer or wash hands often, cover your cough, avoid touching eyes, nose and mouth. According to WHO COVID-19 is a pandemic disease and affecting huge population worldwide i.e. confirmed cases 44, 40,989 out of which 15, 87,780 cases have been recovered. Number of death due to this disease is found to be 3, 02,376. Doctors are the front foot heroes who are playing major role to fight against this pandemic. We should follow the preventive measures to stay safe and healthy. Be Supportive; Be Careful; Be Alert; Be Kind.

Keywods: *COVID-19, RNA virus, Transmission, Symptoms, Diseases*

CORONAVIRUS- THE PANDEMIC

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ABSTRACT

Severe Acute Respiratory Syndrome (SARS) caused by different members of Coronavirus family in different organisms such as bat and mouse is now becoming a great threat to mankind. COVID19 stain of Coronavirus is an emerging pathogen to Human beings turning their ecospheres into red zones or death zones creating drastic fearful conditions with around four million confirmed cases, three hundred thousand deaths affecting more than 300 human ecozones. COVID19 is a single stranded, enveloped RNA virus having high mutation rate making it even more dangerous and also a challenge in the field of microbiology and virology. Mutations may be point or frameshift mutations which is a main reason of it's being pandemic as no vaccine is yet prepared due to high changing genome frequency. Coming in affinity or in contact with the infected person can transmit the pathogen. It can enter in human body through eyes, nose and mouth via hands or sneezing droplets of infected person. Pathogenesis of COVID19 have incubation period of around 14 days after which it starts replicating and showing symptoms. Symptoms include difficulty in breathing, constant fever, dry cough, running nose, sometimes sneezing and chest pain. COVID19 was isolated from microvilli and alveoli of respiratory track and lungs. It causes inflammation inthe respiratory track and lungs making it difficult to breath, choking to death. Intensity of problem is different in the people of different age groups, more pronounced in old people than in younger generation may be in order of immunity and efficiency of people of different age groups. This also played an important role in this pandemic as a healthy looking person might be carrier and can transmit the pathogen to person where it can cause life taking effects. SARS can be prevented using mask, hand sanitizer, and social distancing i.e. measures to avoid transmission as the large genomic size of virus make it heavy which is a physical property of virus utilized in avoidance of transmission. To escape pandemic conditions we must rely on test kits formed by techniques such as ELISA as a means to detect infected person or a carrier and making him isolate. Another success can achieved using plasma of recovered person and it is transfer in infected person for it might have antibodies for the virus. The current condition of the world may shows inefficiency of human in controlling certain things but also making people aware and giving time to environment for synchronization with reduced anthropogenic activities.

Keywords: *SARS, COVID-19, Mutation, Infectiong, Spread, Transmission*

COVID-19 THE VIRAL OUTBREAK

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ABSTRACT

Coronavirus disease (COVID 19) it is an infectious disease caused by a virus known as coronavirus. It mainly affects the upper respiratory passage (nose, sinuses and throat) or lower respiratory passage (windpipe and lungs). It's caused by a coronavirus SARS-Cov-2. In December 2019, the virus outbreak occurs in Wuhan, China. The World health Organization recognized SARS-Cov- 2 as a new type of coronavirus. The outbreak rapidly spread all around the world. Coronavirus are a family of viruses that are found to cause diseases in Animals. Seven including the current one have occurred in humans, however four of them are very common in the world and some are more severe than the others. The COVID 19 is now officially a Pandemic. The WHO just upgraded the disease that has swept across 215 countries an total deaths are 2,70,000. The exact way in which the virus is transmitted is still unknown, usually respiratory viruses are transmitted through droplets created when someone sneezes or coughs. Evidence suggests that the virus can be transmitted from a person showing no symptoms. The virus can also survive for many hours on surface. The incubation time for COVID 19 (time it takes for a person to be exposed to the virus and onset of symptom) is suspected to range from 2 to 14 days. Generally the groups at risk are people with underlying health issues e.g. hypertension and chronic respiratory disease, however as we have seen in the previous time that young and healthy can also be the part of severe cases. Bats are considered natural sources of these viruses yet several other animals are also known to be a source. This virus is believed to transfer from bats to humans in WET market of Wuhan. There is currently no vaccine or any medication for the virus is available. there are main preventive measures which we should take and stay away from this deadly disease – do not touch your eyes, maintain social distancing (6 ft distance) , cover your cough and always use mask. We should always follow the prevention measures to stay away from this deadly virus and save our lives and others also.

Keywods: *COVID-19, SARS-COV-2, Pandemic, WHO, Prevention*

INTRODUCTION OF COVID 19 AS VIRUS IN INDIA AND WORLD

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ABSTRACT

Severe Acute Respiratory Syndrome or SARS~COV 2 A novel Coronavirus or nCoV has been identified as a news that has not been previously identified in humans. However, an outbreak of unusual respiratory condition in reported in Wuhan, China, due to the infection causes Severe Pneumonia. Coronaviruses are a family of positive single-stranded RNA classified under Nidovirales order. Coronavirus, now known as COVID-I9 According to CDC, diagnosis should be based on clinical and epidem' factors. The clinical criteria for confirming the diagnosis of the sCoronavirus is broadly categorized into the following types – Mild, - Moderate, -Severe and, - Critical.

Keywords: *COVID-19, SARS-COV-2, Identifiction, Diagnosis, Clinical Criteria*

TOXIC IMPACT OF SANITIZER ON HUMAN BODY

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ABSTRACT

Sanitizer is a chemical in liquid form, in which high concentration of alcohols as ethyl alcohol, isopropanol, n-propanol mix with other ingredients like water, glycerin and fragrance. Other non alcohol based sanitizer can be made through triclosan or triclorocarbon, also mix in soaps and other toiletries. It can use without water. It is used to control microbial infection and treat as a antimicrobial. Most of active ingredients in sanitizer made up by grade A type based alcohol. U.S. Food and Drug Administration and the Centers for Disease Control recommend ethyl alcohol, isopropyl alcohol, or a mix of both in a concentration of 60% to 95%. As this concentration is an effectively killed microbe. A small quantity of hand sanitizer could equal to a shots of liquor. Liquid hand sanitizer is having 62 to 65 percent ethyl alcohol, ethanol, the main ingredient in beer, wine and spirits, making it 120-proof. To compare, a bottle of vodka is 80-proof (Rangan.,C., medical toxicology consultant for Children's Hospital Los Angeles) but in India, the composition of a famous brand sanitizer is alcohol 69.4%,acrylate,propylene glycol, tetrahydroxypropyl ethylenediamine (THPE) etc mix with water. The use of sanitizer is good way to kill the germs and save the water. It is also resolving problems where water is not available. The microbes cannot be visible by naked eyes ,so person very much conscious always and using sanitizer very frequently in this fearful condition to get rid of COVID-19 infection to save their life. People are using sanitizer after closing and opening the doors, TV remote, before eating etc. In the daily life process, due to overuse of sanitizer, person may get serious side effects of this on health. If children may drink eats accidentally then it can cause serious health issue. As per many medical study sanitizers caused serious health issue like THPE caused dermatitis allergic reaction in many persons, slurred speech, unresponsiveness, immune system weak, possibly falling into a coma state. Long-term use could lead to brain, liver and kidney damage and hormone disruption. So it is very much harmful after overuse. It should use in limit to avoid infection. This is one of the good way to use this chemical during corona infection on TV remote, if possible try to keep doors open almost time, do not touch unwanted surface and in sort can apply sanitizer on the nonliving surface to kill germs than direct on the body and safe body from corona as well toxic effects of sanitizer.

Keywords: *Sanitizer, Alcohol, Reactions, COVID-19.*

PREVENTION OF CORONA VIRUS (COVID-19): A REVIEW

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ABSTRACT

Corona virus is a single stranded RNA virus caused by SARS-CoV-2 transmitting between animals and people. It can cause respiratory tract infections like common cold to more severe diseases such as (MERS) and (SARS). This new virus began to spread in Wuhan, China, in December 2019. Symptoms of COVID-19 were dry cough , tiredness, and fever. Few patients have aches and pains, nasal congestion, runny nose, sore throat or diarrhea. These symptoms are usually mild and begin gradually. Old age people, and those suffering from medical problems like high blood pressure, heart problems or diabetes, are more likely to develop serious illness. Spreading of disease from person to other, through small droplets from the nose or mouth which are spread when a person with COVID-19 coughs or exhales. When these droplets land on objects and surfaces around the person. Other people also gets affected by touching these objects or surfaces. Preventive measure by • Regularly and thoroughly cleaning hands with an alcohol based hand rub or wash them with soap and water. • Maintaining distance between yourself and anyone who is coughing or sneezing at least 1 metre (3 feet). • Avoid touching eyes, nose and mouth. The estimate of the incubation period for COVID-19 range from 1-14 days, most commonly around five days. The virus can persist on surfaces of object for a few hours or up to several days. Survival of virus may depend on different conditions Such as temperature and humidity. The person recently visited other countries should be sure to share recent travel history with your health care provider. So, this review currently focus on the transmition and prevention of COVID-19

***Keywords**: COVID-19, SARS-CoV-2, Transmission, Prevention*

EARLY PREDICTING THE COVID-19 BY APPLYING THE DECISION TREE

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ABSTRACT

Corona virus is the largest causes of death in developing and developed countries. The corona prediction model using a data mining technique and decision tree algorithm are applied in medical research. Hence the decision system is analyses the corona virus for the patient. In this paper COVID-19 studied a more number of input attributes and database records based on the patient's clinical data in different age vice.

Keywords: *decision tree, decision tree algorithm, ID3 algorithm, COVID-19.*

THE METHOD OF DETECTION OF COVID-19 VIRUS BY USING REAL TIME RT-PCR

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ABSTRACT

Coronaviruses are large, enveloped, positive-stranded RNA viruses. They have the largest genome among all RNA viruses, typically ranging from 27 to 32 kb. The genome is packed inside a helical capsid formed by the nucleocapsid protein (N) and further surrounded by an envelope. Associated with the viral envelope are at least three structural proteins: The membrane protein (M) and the envelope protein (E) are involved in virus assembly, whereas the spike protein (S) mediates virus entry into host cells. These genes are amplified and detected using real time RT-PCR.

Keywords: *COVID-19, Detection, RT-PCR*

REVIEW ON THE CLINICAL CHARACTERISTICS AND PHYTOPHYSIOLOGY OF CORONA VIRUS DISEASE 2019 (COVID-19)

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ABSTRACT

There is a new public health cries that threatening the world with the coming out and spread of corona virus. This virus is also known as severe acute respiratory syndrome corona virus 2(SARS-CoV-2).The origin of the virus was in bats and transmitted to humans through up till now unknown intermediary animals in Wuhan, Hubei province, China in December 2019.The incubation period ranges from 2 to 14 days and disease is transmitted by inhalation or contact with infected droplets. The symptoms are generally cough, fever, breathlessness, fatigue etc.This disease is mild in most people and it may progress to pneumonia, multi organ dysfunction and acute respiratory distress syndrome (ARDS).Many people are asymptomatic. The mortality rate is estimated to range from 2-3 %.The common laboratory findings include low white cell counts with elevated C-reactive protein(CRP).The virus spreads faster than its two ancestors the SARC CoV and Middle East respiratory syndrome corona virus (MERS-CoV) but it has lower death rate. The global impact of this new epidemic is yet undecided

Keywords *–COVID, pneumonia, protein, disease*

SOME PLANT MOLECULES S AGAINST THE CORONOVIRUS

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ABSTRACT

Due to the reported high ability of virulence of CORONA VIRUS in recent months, several studies have been conducted to discover and introduce CORONA antiviral drugs. The results of several studies have shown that protease inhibitors and prevent viral replication, which make up the major part of plant molecules. Therefore, plant molecules very effective in controlling virus-induced infection.

***Keywords**: Coronavirus, Plant molecules, Mechanisms, Herbs*

THE COVID-19 PANDEMIC: A REVIEW OF THE CURRENT EVIDENCE OF NOVEL 2019 CORONAVIRUS

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ABSTRACT

Coronaviruses (CoVs) represents a major group of viruses mostly affecting human beings through zoonotic transmission. In the past two decades, this is the third instance of the emergence of a novel coronavirus, after severe acute respiratory syndrome (SARS) in 2003 and Middle East respiratory syndrome coronavirus (MERSCoV) in 2012. The repeated emergence and global scale of transmission, significant number of deaths, infection and mortality of care providers and healthcare workers (HCWs), and higher risk of death in vulnerable or susceptible groups, have been the major causes of concern. Integrated early warning and response systems are an effective way to raise a timely alarm about these emerging and re-emerging pathogens, but few tools are available to enable pre-emptive prediction of such diseases. The Global Virome project has been initiated with the objective of creating a global atlas of pathogenic viruses, with the specific objective of identifying spillover events. The project has not been without its critics, and is not yet close to providing evidence which can be translated into preparedness action. This underscores the importance of preparedness of the health system to deal with dangerous pathogens and better control of endemic infections. The process of naming the novel coronavirus (2019-nCoV) which emerged in Wuhan, China, in December 2019, has created some controversies. In this review, the WHO convention of referring to the disease condition as novel coronavirus disease (COVID-19) has been followed. The virus will be referred to as SARS-related CoV-2, or SARS-CoV-28. COVID-19 has been labelled as a public health emergency of international concern (PHEIC) and the epidemic curves are still on the rise. Here, we summarize the clinical and public health aspects of COVID-19 and SARS-CoV-2, and the lessons gleaned from the global responses so far. As more data continue to emerge, the epidemiology of the disease will come into sharper focus.

***Keywords*:** *COVID-19 - epidemic - MERS-CoV - novel coronavirus - pandemic - quarantine - severe acute respiratory syndrome coronavirus 2 - transmission .*

CORONA VIRUSES

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ABSTRACT

Coronaviruses are a large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19. COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic affecting many countries globally.

Keywords: *COVID, MERS, SARS, Pandemic*

SYMPTOMS, SPREAD AND PRECAUTIONS OF COVID-19

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ABSTRACT

COVID-19 has been declared a pandemic by WHO, and is rapidly spreading throughout the world. Coronaviruses are a large family of viruses that are common in animals. Occasionally, people get infected with these viruses which may then spread to other people. In humans, several coronaviruses are knownto cause respiratory infections ranging from the common cold to more severe diseases. The most recently discovered coronavirus causes coronavirus disease- 2019 (COVID-19).The intermediate source of origin and transfer to humans is not known, however, the rapid human to human transfer has been confirmed widely. There is no clinically approved antiviral drug or vaccine available to be used against COVID-19. However, few broad-spectrum antiviral drugs have been evaluated against COVID-19 in clinical trials, resulted in clinical recovery.Self-isolate by staying at home if you begin to feel unwell, even with mild symptoms such as headache, low grade fever and slight runny nose, until you recover. Avoiding contact with others and visits to medical facilities will allow these facilities to operate more effectively and help protect you and others from possible COVID-19 and other viruses.

***Keywords**: COVID-19, Spread, Symptom, Precaution*

SARS-CoV-2 Spike Glycoprotein

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Abstract

Receptor recognition is the first step of viral infection and is a key determinant of host cell and tissue tropism. Enhanced binding affinity between SARS-CoV 2 The striking structural similarity and sequence conservation among the SARS-CoV-2 S and SARS-CoV S glycoproteins emphasize the close relationship between these two viruses that recognize hACE2 to enter target cells. This resemblance is further strengthened by our finding that SARS-CoV S elicited polyclonal Ab responses, potently neutralizing SARS-CoV-2 S-mediated entry into cells. We surmise most of these Abs target the highly conserved S2 subunit (including the fusion peptide region) based on its structural similarity across SARS-CoV-2 and SARS-CoV, the lack of cross-reactivity of several SB-directed Abs (Tian et al., 2020, Wrapp et al., 2020), and previous reports showing that sera from SARS-CoV-infected individuals target this region (Zhang et al., 2004). the SARS-CoV-2 and SARS-CoV SB domains share 75% amino acid sequence identity, future work will be necessary to evaluate whether any of these Abs neutralize the newly emerged coronavirus. These findings also indicate that it might be difficult to distinguish exposure to SARS-CoV-2 from other SARSr-CoVs in serological studies using S ectodomain trimers and that specific assays will need to be designed. Our results provide a structural framework to identify conserved and accessible epitopes across S glycoproteins that will support ongoing vaccine design efforts. Finally, elicitation of diverse, polyclonal Ab responses might prove key in light of the diversity of viruses circulating in animal reservoirs and in preventing the possible emergence of viral neutralization escape mutants.

Keywords: *Receptor Recognition, Structural framework, S glycoproteins*

REVIEWING THE COVID-19 – WILDLIFE RELATION AND THE NATURE-BASED INTERVENTIONS FOR POST-COVID REFORMS

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ABSTRACT

The 21st century started with a great concern for the betterment of the environment and the conservation of the natural resources which resulted in the Agenda 2030. Based on the integration of the five Ps (People, Planet and Prosperity for the peace and partnership), the global community targeted 17 SDGs. Despite of the conflicts on several issues, the global nations were committed to achieve the targets in their own ways. It was the end of the 2019 which gave the rise to the cause of disturbing the solidarity of the community at the global level which was referred as COVID-19. It was declared pandemic in the first quarter of 2020. Furthermore, the wildlife got trapped and claimed to be a cause of this pandemic due to its zero case from the wet market of the Wuhan city of the Peoples Republic of China. The bats were claimed to be the main organism behind the spread of the viruses. The author carried out the review studies and observed following facts. The wildlife acts as the reservoir of the viruses so as the humans. The corona virus was being the one among the millions of the viruses especially in bats. There was no evidence of the direct transmission of infection from the wildlife to humans. There need to be intermediate agent or act to bridge the gap of transmitting the corona virus from wildlife to humans. The virus crosses several stages of the transformation before causing the outbreak. The COVID-19 is the classical example of the infectious disease developed from the earlier outbreaks like SERS and MERS. The present investigation discusses the examples through the cited works and discards the claim of associating wildlife as a cause for COVID-19; and elaborates the other anthropogenic causes. In addition, the pandemic has induced several impacts on the global community especially on the economic activities of the modern world. Amid COVID-19, India too faced the devastating challenges which have ever lasting effects on the development. The positive side of the pandemic seems to review the policies of the modern development practices. The World Economic Forum had already stated it as the warning towards breaking bonding with Nature. All of sudden, the vision of the sustainable development as per the UN SDGs has got the great relevance for the post-COVID development actions. The present investigation briefed the nature-based interventions towards ENVIROPRENEURHIP to mitigate the future challenges. The site-specific globally applicable Socio-Ecological Models were discussed. These models link the conservation practices with the income generation of the target communities. Thus, a solution for the emerging challenges for the reverse migration.

Keywords: *Wildlife relation, Nature, Intervention, Covid-19, Post COVID Reforms*

THE NOVEL CORONA VIRUS (COVID-2019) OUTBREAK: IMPLICATIONS OF SOME AYURVEDIC HERBS FOR PUBLIC HEALTH.

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ABSTRACT

Corona viruses are a large family of viruses that usually cause mild to moderate upper-respiratory tract illnesses, like the common cold, in people. However, three times in the 21st century corona virus outbreaks have emerged from animal reservoirs to cause severe disease and global transmission concerns. Corona viruses constitute the subfamily Orthocoronavirinae, in the family Coronaviridae, order Nidovirales, and realm Riboviria. They are enveloped viruses with a positive-sense single-stranded RNA genome and a nucleocapsid of helical symmetry. The genome size of corona viruses ranges from approximately 27 to 34 kilobases, the largest among known RNA viruses. The name corona virus is derived from the Latin corona, meaning "crown" or "halo", which refers to the characteristic appearance reminiscent of a crown or a solar corona around the virions (virus particles) when viewed under two-dimensional transmission electron microscopy, due to the surface being covered in club-shaped protein spikes.

Keywords: *Coona Virus, Ayuveda, Herbs, Public Health, Genome, RNA*

COVID-19 AWARENESS, METHOD OF PREVENTION & MODE OF ACTION

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ABSTRACT

There is a New Public Health crise threatening the world with the emergence and spread of 2019 novel coronavirus (2019-nCov) or the serve acute respiratory syndrome coronavirus 2 (SARS-CoV-2). COVID-19 is the infectious disease caused by the most recently discovered corona virus. Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases. A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans.The outbreak began in Wuhan, China in December 2019 is highly contagious disease, arose in a live seafood, poultry and wild animals market, but it has now appeared in many other countries, including the United States. The world health organization [WHO] has declared the ongoing outbreak as global public health emergency. The virus originated in bats and was transmitted to humans through yet unknown intermediary animals in Wuhan, China. The symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise among others. At this time, there are no specific vaccines or treatments for COVID-19.Although several clinical trials several clinical trials are now underway to test possible therapies, the worldwide response to the COVID-19 outbreak has been largely limited to monitoring/ containment. The new coronavirus can be spread from person to person. It is diagnosed with a laboratory test.Prevention involves frequent hand-washing, coughing into the bend of your elbow, staying home when you are sick and wearing a cloth face covering if you can't practice social distancing.

Keywords: *COVID-19, Public Health, nCOV, WHO, Symptoms*

GENOMIC STRUCTURE, LIFECYCLE, SYMPTOMS AND TREATMENT OF COVID-19

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ABSTRACT

Coronaviruses are important cause of illness in humans and animals. Most human coronaviruses commonly cause relatively mild respiratory illness. Based on its phylogenetic relationships and genomic structures the COVID-19 belongs to genera Betacoronavirus. COVID-19 is containing single stranded, RNA associated with a nucleoprotein with a capsid comprised of matrix protein. The genetic and phenotypic structure of COVID-19 in pathogenesis is important. Four main structural proteins are encoded by ORFs 10, 11 on the one-third of the genome near the 3'terminus.

Keywords*: structure of COVID-19, Symptoms, treatment*

COVID-19: AN ACCIDENT OR A BIO-WEAPON

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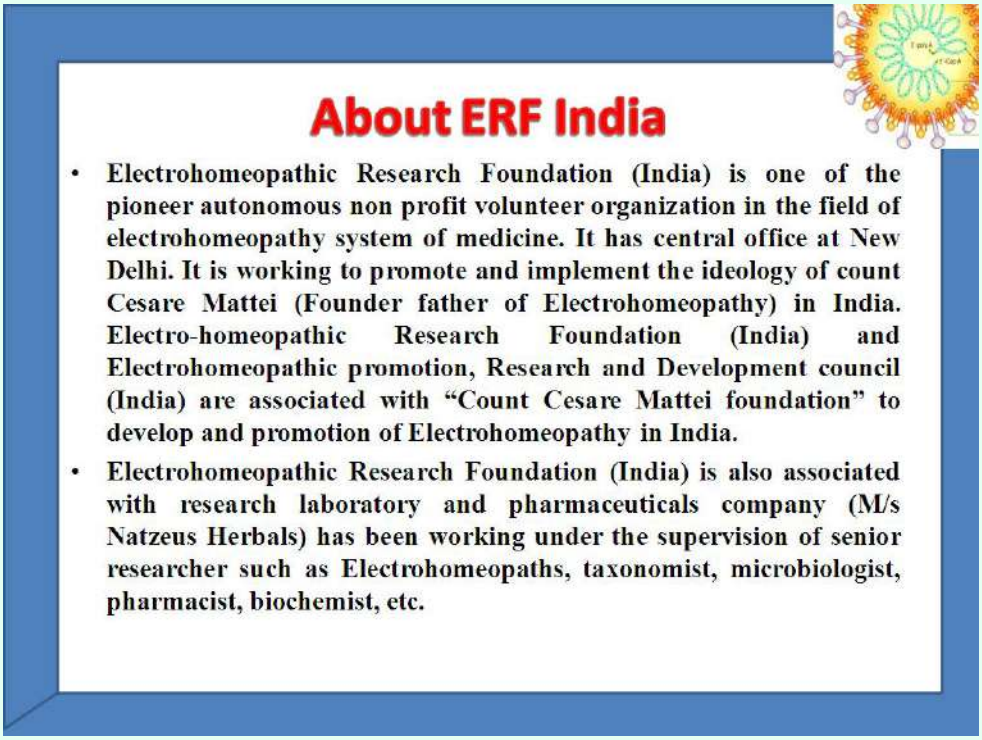
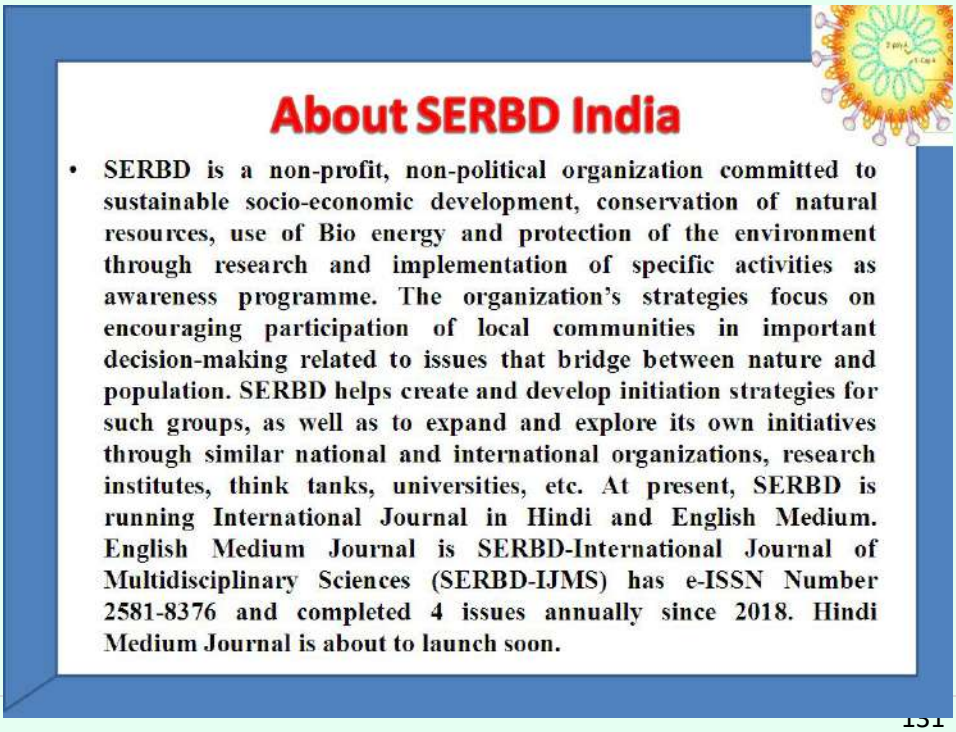
ABSTRACT

Well, there are many Gossips about the spread of the Corona Virus in the vicinity, some stories says that virus was spread from persons who ate bats or some other sea animals, while other stories mentioned it as an accidental spread from a laboratory in China. Some people presumed economic and financial angle and sniff a planned spread of virus under a conspiracy of testing it as a BIO-WEAPON. However, COVID-19 is considered a reason behind millions of deaths world-wide, including a severe downfall of world economy. Lockdowns are been taking place in to stop the spread of corona virus, People are also dying of hunger as they are unable to get the daily food.

Keywords: *Corona Vius, China, Bio-weapon, Conspiracy, Lockdown*


About ERF India
• Electrohomeopathic Research Foundation (India) is one of the pioneer autonomous non profit volunteer organization in the field of electrohomeopathy system of medicine. It has central office at New Delhi. It is working to promote and implement the ideology of count Cesare Mattei (Founder father of Electrohomeopathy) in India. Electro-homeopathic Research Foundation (India) and Electrohomeopathic promotion, Research and Development council (India) are associated with "Count Cesare Mattei foundation" to develop and promotion of Electrohomeopathy in India.
• Electrohomeopathic Research Foundation (India) is also associated with research laboratory and pharmaceuticals company (M/s Natzeus Herbals) has been working under the supervision of senior researcher such as Electrohomeopaths, taxonomist, microbiologist, pharmacist, biochemist, etc.


About SERBD India
• SERBD is a non-profit, non-political organization committed to sustainable socio-economic development, conservation of natural resources, use of Bio energy and protection of the environment through research and implementation of specific activities as awareness programme. The organization's strategies focus on encouraging participation of local communities in important decision-making related to issues that bridge between nature and population. SERBD helps create and develop initiation strategies for such groups, as well as to expand and explore its own initiatives through similar national and international organizations, research institutes, think tanks, universities, etc. At present, SERBD is running International Journal in Hindi and English Medium. English Medium Journal is SERBD-International Journal of Multidisciplinary Sciences (SERBD-IJMS) has e-ISSN Number 2581-8376 and completed 4 issues annually since 2018. Hindi Medium Journal is about to launch soon.

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