GMRD COLLEGE, MOHANPUR (SAMASTIPUR)

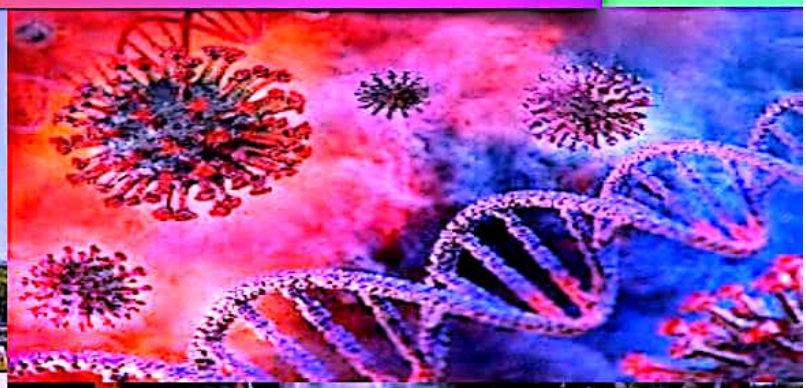
LNMU DARBHANGA

NATIONAL WEBINAR

ON

SOCIO-BIOLOGICAL IMPACT OF COVID-19 ON THE ENVIRONMENT

SOUVENIR CUM ABSTRACTS

Organised by

Department of Zoology

30th May 2020

Dr. Pryuttma
Co-Ordinator

Dr. Ghanshyam Roy
PRINCIPAL

ORGANISING COMMITTEE

Chief Patron
Prof. Rajesh Singh, VC LNMU Darbhanga
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Principal Cum Chairman
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Central Co-Ordinator
Prof. K K Sahu, LNMU Darbhanga
Co-Ordinator
Dr. Pryuttma, Asst.Prof.(Guest); Dept. of Zoology

Members

Prof. Ramagar Prasad	Dr. Anil Kr Karan
Dr. Santosh Kumar	Dr. Uaday Kumar
Dr. Laxman Yadav	Dr. Afshan Bano
Prof. Dinesh Prasad	Swati Rai
Dr. Surya Pratap	
Dr. Sanjit Lal	

Chief Speakers:-

Prof. P Nath, Ex HOD Univ. Dept. of Zoology Patna University
Prof. Dr. M C Verma, Ex HOD Univ. Dept. of Zoology TMBU Bhagalpur
Prof. N K Agrawal HOD, Univ. Dept. of Mathematics LNMU Darbhanga
Prof. Dr. Parimal Kr Khan, Univ. Dept. of Zoology Patna University
Prof. Dr. Ashok Thakur, HOD Univ. Dept. of ZoologyTMBU Bhagalpur
Prof. Dr. Arun Kumar, HOD Univ. Dept. of Zoology BNMU Madhepura
Prof. Dr. Omkar, Univ. Dept. of Zoology Lucknow University
Prof. Dr. Veena B Kushwaha, DDU Gorakhpur University
Prof. Dr. D N Choudhary, TMBU Bhagalpur
Dr. GB Chand, Asso.Prof.;Univ. Dept. of Zoology Patna University
Dr. Pranay Punj Pankaj, Asst. Prof.; Central University Nagaland
Dr. Rashmi, Asst. Prof.; Central University Nagaland
Dr. Raghbendra Pratap, Asst.Prof.; GB College, Naugachia TMBU

NATIONAL WEBINAR SCHEDULE

Saturday, 30th May 2020 (From 11.30 am)

PARTICULARS	TIMINGS
Registration	11.30 - 12.00
Inaugural Session	12.00 - 13.00
Tea Break	13.00 - 13.30
Plenary Session	13.30 - 14.00
Key Note/Technical Session	14.00 - 15.30
Lunch	15.30 - 16.00
Discussion and Q/A Session	16.00 - 16.30
Valedictory Session	16.30 - 17.00
National Anthem	17.00 (5pm)

Venue
GOOGLE MEET APP
URL: https://meet.google.com/dek-xxio-fys

convenor
Dr. Ghanshyam Roy
PRINCIPAL
GMRD College, Mohanpur
Mobile No. 9473378269
Email: drgsroy03@gmail.com

Abstract & full Paper submission last Date:-
29th May 2020 (Till 9.00 am)
Email:- pryuttma@gmail.com

Theme:-
Implications of Corona Virus on Human beings & its effect on Social Changes in livelihood.

NATIONAL WEBINAR
ON
SOCIO-BIOLOGICAL IMPACT OF COVID-19 ON THE ENVIRONMENT
Saturday, 30th May 2020 (From 11.30am)

Organised By
Department of Zoology
GMRD College,
Mohanpur, Samastipur - 848506
LNMU DARBHANGA

ORGANISING COMITTEE

Chief Patron

Prof. Rajesh Singh, VC LNMU Darbhanga

Patron

Colonel Nishith Kumar Rai, Registrar; LNMU Darbhanga

Principal Cum Chairman

Dr. Ghanshyam Roy, PRINCIPAL; GMRD College, Mohanpur (Samastipur)

Central Co-Ordinator

Prof. K. K. Sahu, LNMU Darbhanga

Co-Ordinator

Dr. Pryuttma, Asst.Prof. (Guest); Department of Zoology, GMRD College

Members

Prof. Ramagar Prasad, Associate Prof.; Department of Sanskrit, GMRD College
Dr. Santosh Kumar, Associate Prof.; Department of Economics, GMRD College
Dr. Laxman Yadav, Asst.Prof.; Department of English, GMRD College
Dinesh Prasad, Asst.Prof.; Department of Philosophy, GMRD College
Dr. Surya Pratap, Asst.Prof.; Department of Hindi, GMRD College
Dr. Sanjit Lal, Asst.Prof.; Department of History, GMRD College
Dr. Anil Kr Karan, Asst.Prof. (Guest); Department of Chemistry, GMRD College
Dr. Uaday Kumar, Asst.Prof. (Guest); Department of Mathematics, GMRD College
Dr. Afshan Bano, Asst.Prof. (Guest); Department of Urdu, GMRD College
Swati Rai, Asst.Prof. (Guest); Department of History, GMRD College

National Webinar

Agenda

Saturday, 30th May 2020

TIME	SESSION
11:30 to 12:00	**Registrations**
12:00 to 12:30	**Inaugural Session** Introductory Speech by **Dr. Pryuttma,** Co-Ordinator Welcome Speech by **Dr. Ghanshyam Roy,** PRINCIPAL **Colonel Nishith Kumar Rai,** Registrar LNMU Darbhanga **Prof. Dr. K.K. Sahu,** IT Co-Ordinator, LNMU Darbhanga
12:30 to 12:45	**Tea Break**
12:45 to 14:50	**Plenary Session** 12:45 to 13:00 **Prof. P Nath,** Ex HOD Univ. Dept. of Zoology, Patna University 13:00 to 13:10 **Prof. Dr. Ashok Thakur,** HOD Univ. Dept. of Zoology, TMBU Bhagalpur 13:10 to 13:20 **Prof. Dr. Parimal Kr Khan,** Univ. Dept. of Zoology, Patna University 13:20 to 13:30 **Prof. N K Agrawal** HOD, Univ. Dept. of Mathematics, LNMU Darbhanga 13:30 to 13:40 **Prof. Dr. Arun Kumar,** HOD Univ. Dept. of Zoology, BNMU Madhepura 13:40 to 13:50 **Prof. Dr. Omkar,** Univ. Dept. of Zoology, Lucknow University 13:50 to 14:00 **Prof. Dr. Md. Rauf ,** HOD Univ. Dept. of Zoology, Purnea University 14:00 to 14:10 **Prof. Dr. Veena B Kushwaha,** DDU, Gorakhpur University 14:10 to 14:20 **Prof. Dr. D N Choudhary,** TMBU Bhagalpur 14:20 to 14:30 **Dr. Pranay Punj Pankaj, Asst. Prof.;** Central University Nagaland 14:30 to 14:40 **Dr. Gajendra Kumar Azad, Asst. Prof.;** Patna University 14:40 to 14:50 **Dr. Raghbendra Pratap,** Asst. Prof.; GB College, Naugachia TMBU
14:50 to 15:30	**Lunch**
15:30 to 16:40	**Technical Session** Dr Gajendra Kumar Azad Dr Asif Equbal Dr Pryuttma Dr Kiran Kumari Dr Pushpa Kumari Dr Rakhshan Anjali Rina
16:40 to 16:50	**Prize Distribution by COUNCIL**
16:50 to 17:00	**Valedictory Session** Dr Surya Pratap
17:00 (5pm)	**National Anthem**

PREFACE

G. M. R. D. College, Mohanpur (Samastipu) under Lalit Narayan Mithila University Darbhanga was established in June 1960 by Mahanth Rameshwar Das. It got affiliation in 1968 from Bihar University, Muzaffarpur and become Constituent in 1980. The College got registered under UGC Act 2F&12(B) in 1982. The College is situated on the confluence of the Ganga river and well connected to NH, SH, Railway from Hazipur - Mahnar - Mohiuddinagar - Dalsingsarai - Barauni route. The College has 14 departments including Arts and Science. The College has accredited by NAAC twice.

Estd. 1960 Mob. : 9473378269, 9570844366

GARHI MAHANTH RAMESHWAR DAS COLLEGE, MOHANPUR

(G.M.R.D. COLLEGE, MOHANPUR)

Via-Baghra, Dist.-Samastipur (Bihar), Pin Code - 848506

Web :- gmrdcollege.org, Email :- gmrdcollegemohanpur@gmail.com

NACC RE ACCREDITED, A CONSTITUENT UNIT OF L.N.M.U., K.NAGAR, DARBHANGA

Dr. Ghanshyam Roy
Prof.-In-Charge

Letter No. .....

Date 28.05.2020

Message From Principal,G.M.R.D.College,Mohanpur,Samastipur

"Covid-19 Pandemic is also teaching us how to use individual choices to tackle a global disaster "

At the very outset ,I on behalf of G.M.R.D.College ,Mohanpur,Samastipur family, extend my heartiest welcome to all participants in this National Webinar On "SOCIO-BIOLOGICAL IMPACT OF COVID-19 ON THE ENVIRONMENT " Organised by Department of Zoology On 30th May 2020.

G.M.R.D.College,Mohanpur was established in June 1960 by Mahanth Rameshwar Das and got affiliated by the Bihar University ,Muzaffarpur in year 1968 upto degree standarad .Then the college become a Constituent Unit under Lalit Narayan Mithila University,Darbhanga in year 1980. It was also registered under the UGC Act 2F in year 1982 and was Accerdited by NAAC in 2005 & 2014. The Mahanth sacrificed himself economically and all that can possible. Thus, the name of the college was given GARHI MANHANTH RAMESHWAR DAS COLLEGE ,MOHANPUR. It is a co-education institution of this rural and backward areas in this district and oldest in North Bihar. It fulfills the academic need of higher co-education in the district.The college has 14 departments including Science & Arts.

The current Covid-19 Pandemic is unprecedented. But it's not the biological characteristics of the virus that are most dangerous. Rather,it's how people behave towards it that really matters. Covid-19 has shown it has the ability to overwhelm healthcare systems around world. This is a clever approach because, in purely biological terms, SARS-COV2-the virus that causes COVID-19-is not that dangerous to most people.
The COVID-19 Pandemic is not a break for nature-let's make sure there is one after the crisis.
I wish every success to this Webinar.
Welcoming you all

GR Roy 28/05/2020

(Dr.Ghanshyam Roy)
Principal Cum Chairman,
National Webinar, Dept of Zoology,
G.M.R.D.College,Mohanpur(Samastipur)

Principal
G.M.R.D College, Mohanpur
(Samastipur) 848506

P.Nath
H.O.D.(retd)
Dept of zoology
Patna University
Patna(Bihar)

MESSAGE

Sociobiological impact of covid 19 on environment.

National webinar, GMRD college(LNMU} Bihar.

30 th may,2020

At the outset ,I extend my sincere thanks to prof Ghanshyam Roy ,Principal ,GMRD College(LNMU) for having invited me as guest speaker to the above mentioned webinar.

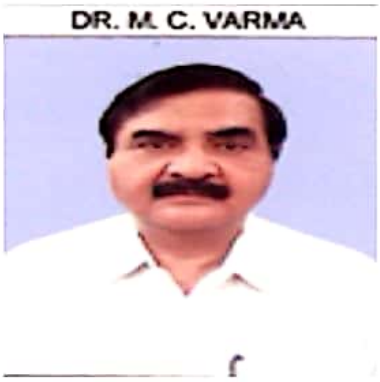
n coronavirus and resulting pandemic has taken the whole world in its grip.Number of sufferers the world over has crossed several millions;the number of deaths several lakhs in five month duration In india,it is showing a constant rise,reaching almost two lakh,and number of death mounting to more than five thousand.

Scientists the world over are constantly trying to decipher its biological secrets and trying to find out ways and means to fight it,either through a drug or a vaccine which are in various stages of trial.

The pandemic has also put our entire socio economic and cultural system on trial Some tenets are proving useful which are being assimilated; some are proving harmful which are being discarded.Amidst this interplay of assimilation and discard, civilizations ate writing script of post pandemic world.

I hope and pray this playwright does not prove tragedy of errors but errorless comedy and romance of life.....

Dr. MANISH CHANDRA VARMA
Former Professor and Head
University Department of Zoology
Ecotoxicological Laboratory,
T. M. Bhagalpur University,
Mob –09431214481, 09334482977
E-mail: mvbgp86@gmail.com



Message

I am delighted to know that the department of Zoology GMRD College Samastipur, a constituent unit of L.N.M.U., Darbhanga is organizing a national Webinar on " Socio-Biological impact of COVID–19 on the Environment". The Webinar on the above Topic is very much relevant to know about all the information regarding its impact on environment as well as on the social behavior of man, about its spreading and related patho-biological impact of this unknown man made medicine less Disease.

I extend my warm greetings and best wishes to Dr.Ghanshyam Roy Principal cum Chairman, Organizing secretary Dr. Pryuttma, Assistant Professor Department of Zoology GMRD College Samastipur and the Participants.

Prof (Dr.) Ashok Kumar Thakur
University Department of Zoology
PROF. & HEAD , T.M. Bhagalpur University
Dean Faculty of Science
Mob. - 7004137826
Email:- drashokthakur1963@gmail.com

Date- 28.05.2020

MESSAGE

It gives me immense pleasure to know that the Department of Zoology, G.M.R.D. College

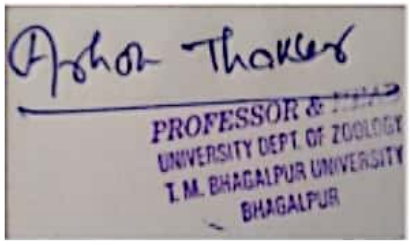
Samastipur, a constituent unit of L.N.M.U., Darbhanga is organising a national webinar on

"Socio-Biological impact of COVID-19 on the Environment".

The webinar on the above topic is very significant today to know all about the Pandemic

COVID-19. I extend my warm greetings and best wishes to Dr. Ghanshyam Roy Principal Cum

Chairman, Organising secretary Dr. Pryuttma, Asst. Prof. Dept. of zoology and the participants.



Prof. Ashok Kumar Thakur

Prof. & Head, University Dept. of Zoology; TMBU,Bhagalpur

UNIVERSITY DEPARTMENT OF ZOOLOGY

B.N.M.Univeristy, Laloo Nagar, Madhepura- 852113 (Bihar)

Dr. Arun Kumar (Gold Medalist)

M.Sc., Ph.D. F.Z.S.I., F.S.L.Sc.,

Professor and Head

Contact No.- 9006991000

8544377101

Email:prfarunkumar@gmail.com

: Message :

It is a matter of great pleasure for me for getting an opportunity to provide a message for the Souvenir likely to be published on the occasion of ongoing webinar on 30th May, 2020 in the premises of G. M. R. D. College, Mohanpur, Samastipur.

I am further thankful to the organizing committee for selecting such a lucid topic related to the pandemic Covid - 19 . Both the Central and the state governments are trying hard to its menace.

We should feel the proud of corona warriors during during periods of corona lockdowns.Doctors, nurses, policemen,media persons, delivery guys etc are our corona warriors for whom two words which when spoken, have the most unfathomable power to completely change one's life and these words are "Thank You".No doubt, all Indians feel happy to salute the courage and energy of these corona warriors so much so that it gives us a feeling that God has taken avatar in these forms.

Lastly, I wish to place on record my sincere thanks and appreciation to all team members for their sincere efforts in bringing their "Souvenir" in order to disseminate the scientific contents to all concern teachers, students and research scholars.

With refards,

Yours faithfully

(Arun Kumar)

Dr PARIMAL KUMAR KHAN
Professor
Mob: 8789629990
email: parimal_khan@yahoo.co.in

DEPARTMENT OF ZOOLOGY
PATNA UNIVERSITY
PATNA - 800 005 (INDIA)
Phone + Fax : 0612-670970

Date:- 18.05.2020

MESSAGE

It is a matter of great pleasure for me to know that a National Webinar on Socio-Biological Impact of COVID-19 on the Environment" is being organized by the Department of Zoology, G.M.R.D. College, Samastipur, a constituent unit of L.N.M.U., Darbhanga

From the youngest of siblings to octogenarians, it is more than pertinent to discuss such environmental issues as COVID-19, a WHO enlisted global pandemic. Peceptions, facts and knowledge are growing exponentially and on a daily basis.

Present webinar is targeted towards strengthening the drive against the effective management of this pandemic and as such is also embattled to create a strong awareness on this issue on a broad level.

I wish the organizers a great success and congratulate them for creating a platform for live discussions on such a relevant issue and believe that the outcome will definitely be benefitting everyone.

Prof. (Dr) Parimal K Khan
Date: 28.05.2020

Dr Gyanendra Bahadur Chand
FMSET, FICCB, FZSI, FISEC, FSLSc,
Associate Professor
Department of Zoology
Patna University
Patna-800005, Bihar, India

Professors quarter no. 4
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Message

It gives me immense pleasure to know that GMRD College, Mohanpur, Samastipur is organizing a webinar on the topic "Outbreak of COVID-19 and its socio-biological impact on the Environment" on 30th may 2020. The chosen topic is very apt and timely. COVID -19 has declared global pandemic. It has affected the human physiology as well as created profound social changes in their livelihood. Any small contribution will pave the pathway to achieve bigger success in making strategies to combat this global menace.

I am sure that the webinar will offer appropriate platform to share the views and concern about socio biological impact of COVID-19 on the environment. It will equally provide the opportunity to the youngsters and students to interact with the expertise in the said field.

I wish a grand success of the seminar.

G. B. Chand

Dr. D.N Choudhary (Associate Professor , Univ dept. of Zoology, TMBU, Bhagalpur)

Email ID: dncgopal08@gmail.com , Mob. 9430088707

UNIVERSITY DEPARTMENT OF ZOOLOGY

TILKA MANJHI BHAGALPUR UNIVERSITY, BHAGALPUR

BIHAR, 812007

MESSAGE

I am extremely happy to know that Dept. of Zoology of G. M. R. D. College, Mohanpur , Samastipur is going to organise a National webinar on the topic "Socio-Biological Impact of COVID-19 on the Environment" on 30th, May, 2020.

I extend my thanks to the members of the organizing committee for the selection of this important contemporary topic .

As we know that most of the countries including India are presently running under serious threat and facing the global disaster due to effect of Corona virus i.e. COVID-19. A significant negative impact on the flora, fauna, environment as well as on human population is coming out and mortality rate is increasing day by day .

In this adverse condiion a healthy discussion should be needed to overcome the present situation and it is the urgent need of the hour.

I hope this webinar will be successful and will aware the people to find out the possible solutions to overcome the COVID-19 pandemic. I am sure that the participants will get benefits to hear the views of the learned speakers.

I wish success to this National Webinar.

Department of Zoology
DEEN DAYAL UPADHYAYA GORAKHPUR UNIVERSITY
GORAKHPUR-273 009, U.P., INDIA

Prof. Dr. Veena B Kushwaha ☎: 09451214195

Email:veenabatrakushwah@gmail.com

Date: 28.05.2020

Message

It gives me immense pleasure to know that the Department of Zoology, G.M.R.D. College, Samastipur, a constituent unit of L.N.M.U. Darbhanga is organizing a national webinar on "Socio-Biological impact of COVID-19 on the environment".

The topic of the seminar is of much importance and relevance today, as society is facing many challenges due to the present scenario of pandemic. It is worth appreciating as this will provide a platform to students, researchers and teachers to share and discuss their views about the pandemic. I hope the outcome of the seminar will definitely help participants to come out of the fear of not knowing about the outcomes of the pandemic.

I extend my good wishes to the organizers and pray for success of this webinar.

Veena B Kushwaha

NAGALAND UNIVERSITY

(A Central University Estd. By the Act of Parliament No.35 of 1989)

Department of Zoology

Headquarters: LUMAMI, ZUNHEBOTO DISTRICT-798627 NAGALAND, INDIA

Dr. Pranay Punj Pankaj
Department of Zoology

Mobile: +91-9771162090
E-mail: pranaypunj@gmail.com

MESSAGE

I learn with great pleasure that the Department of Zoology, G.M.R.D. College Samastipur, a constituent unit of L.N.M.U., Darbhanga is organising a national webinar on "Socio-Biological impact of COVID-19 on the Environment" on May 30, 2020 and is bringing out a Souvenir to mark the occasion.

I compliment the Dr. Ghanshyam Roy Principal Cum Chairman, Organising secretary Dr. Pryuttma, Dept. of zoology, participants Principal, Staff & Students for their initiative in this regard. The theme of the webinar is so timely and of contemporary relevance.

The COVID-19 crisis has caused freezing of public activities including conferences, festivals, and concerts. Lockdowns have closed schools and non-essential businesses. The interest in tourism has also declined. COVID-19 outbreak affected all segments of the population, especially to the detriment of members of those social groups.

I wish the webinar a grand success.

Pranay Punj Pankaj

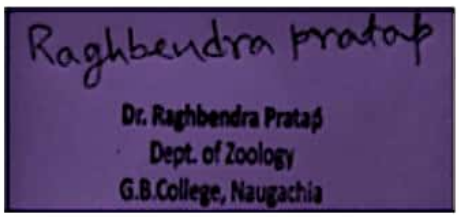
(Dr. Pranay P Pankaj)
Assistant Professor
Department of Zoology
Nagaland University Lumami-798627

Dr.Raghbendra Pratap
Assistant Professor (Guest)
Department of Zoology
GB College Naugachia
Mill Road, Naugachia, Bhagalpur (Bihar)
Zip- 853204
Mob: 09835870085,8789314180
Email: raghbendrapratap@gmail.com

Message

I am delighted to know that the department of Zoology GMRD College Samastipur, a constituent unit of L.N.M.U., Darbhanga is organizing a national Webinar on " Socio-Biological impact of COVID–19 on the Environment". The Webinar on the above Topic is very much relevant to know about all the information regarding its impact on environment as well as on the social behavior of man, about its spreading and related patho-biological impact of this unknown man made medicine less Disease.

I extend my warm greetings and best wishes to Dr.Ghanshyam Roy Principal cum Chairman, Organizing secretary Dr. Pryuttma, Assistant Professor Department of Zoology GMRD College Samastipur and the Participants. Lastly I prey almighty to give imence success.



FROM THE CO-ORDINATOR DESK MESSAGE

It gives me immense pleasure and satisfaction that the Department of Zoology, GMRD College Mohanpur (Samastipur) is organising a National Webinar on *Socio-Biological impact of COVID-19 on the Environment* on 30th May 2020 on behalf of the organising committee members of national webinars. I feel privileged to welcome all the designates and students from different parts of the India. I am sure that the wide-ranging deliberations will go a long way in discussing implications and objectives regarding today's changing environment from biological as well as social aspects specially due to COVID-19.This will ensure that appropriate safeguards and management strategies be devised.
I convey my regards and good wishes to all the steamed members who are associated with the National Webinar.

Dr Pryuttma
Co-Ordinator (National Webinar)

ABSTRACTS

THE GENETIC BASIS OF NOVEL CORONA VIRUS (SARS-CoV-2)

PARIMAL KUMAR KHAN
DEPARTMENT OF ZOOLOGY
PATNA UNIVERSITY, PATNA
Email: parimalkkhan@gmail.com

Abstract

The causative agent of pandemic respiratory disease, COVID-19, is a newly reported member of Corona virus family and is named SARS-CoV-2. The first outbreak of this disease was reported in Wuhan (China) in December, 2019 that spread rapidly to over 200 countries and became a pandemic in March, 2020. Till date, around 6 million persons have been affected globally and at least 0.35 million deaths have been reported. SARS-CoV-2 is an enveloped RNA virus. It has a single stranded RNA genome of 29.8 kb with 14 ORFs which encodes a total of 29 proteins. It includes 4 structural proteins (envelope, membrane, nucleocapsid and spike), 16 non-structural proteins (including RNA dependent RNA polymerase) and 9 accessory proteins. The RNA polymerase of SARS-CoV-2 is the key component of its replication-transcription machinery showing proof-reading activity. The entry of SARS-CoV-2 into human (host) cells is mediated by its 1273 amino acid long glycosylated spike protein (S) which interacts with ACE-2 receptors on host cells. Once inside the host cells, it synthesizes its RNA polymerase for the replication of its genome as well as transcription of sub-genomic RNAs followed by translation of structural proteins and finally assembly and release of new virion. Recent analyses revealed the occurrence of high rate of mutation in the region of RNA genome of SARS-CoV-2 that encodes spike proteins. It has been further shown that various mutant forms of this virus have evolved in different countries. The sequencing of viral isolates from India is being done at CCMB (Hyderabad), Gujarat Biotech Research Centre (Ahmedabad), Institute of Genomics and Integrative Biology (Delhi) and Institute of Biochemical Genomics (Kolkata). The study revealed the dominance of A2a subtype of SARS-CoV-2 in India (~50%) followed by O subtype (~40%) and other subtypes (~10%). The A2a subtype (D614G mutant) also shows a larger prevalence across the globe; hence this mutation eases the entry of virus into host cells and spread rapidly, more than the nine other subtypes. The A2a subtype originated in China around late January from an ancestral O subtype which had been found in late December, 2019 in China. Researchers are yet to come up with a conclusion on whether spike mutation in virus will affect the severity of disease or interfere with the effectiveness of COVID-19 vaccines.

Corona Virus (SARS CoV-2)

Prof (Dr.) Ashok Kumar Thakur
PROF. & HEAD, Department of Zoology; Bhagalpur University
DEAN, FACULTY OF SCIENCE Bhagalpur, Bihar
Email:- drashokthakur1963@gmail.com

Abstract

We know that, the Corona virus has spread from China at the end of 2019 and become an epidemic. Today it has spread all over the world. Most developed and medically equipped countries are surrender in front of Corona virus. The reason for this is that people are becoming rapidly infected by this because it is a highly communicable disease and there is no effective medicine or vaccine to treat it or stop its transmission, only social distancing is effective to stop its transmission. But it's worth noting that, by doing this we can only stop its transmission cannot cure this disease. We are safe from this virus only when an effective medicine is available or vaccine is available.

How corona infect our body

It is new virus of corona family Named SARS CoV-2. It spreads by coming into contact with an infected person and mainly affects throat and lungs. If we are infected with corona, it is possible that we may or may not see some initial symptoms. It depends to some extent on our immune system, if symptoms appear these can be, mild to high fever, dry cough, difficulty in breathing, sometimes headache, etc. Like other viruses, the Corona virus also increases its numbers by infecting living cells. It infects our nasal cells, throat cells and lungs. Corona virus contains RNA in the form of genetic material which is protected inside a layer of protein. The virus genome is a positive-strand RNA of 29 kilobases, which encodes a RNA-dependent RNA polymerase and four main viral structural proteins: spike (S), envelope (E), membrane (M) and nucleocapsid (N). The spike of corona virus acts as key to enter into cell. Spike protein is responsible for both binding to receptors on host cells and membrane fusion. When these viruses come into contact with living cells inside our body, its spike acts like a key to locks on membrane receptors. They then fuse with the membrane and enter into the cell, but do not enter the nucleus like a common virus, but rather directly into the ribosome. Viral RNAs bind to ribosomes to form different proteins, like spike (S), envelope (E), membrane (M) and nucleocapsid (N) proteins. These proteins are transported from ribosome to plasma membrane. At First these proteins enter into the Golgi bodies, after which they are reached by the vesicles near the plasma membrane. All those parts which are needed to create a new virus, are deposited near the cell membrane, then a new virus is born. In this way they increase their numbers rapidly, till now, all this process is happening around the throat cells or the cells around it. When they increase their numbers completely, they move towards the lung and infect the lungs. However it takes 10-15 days and depends upon various factors like immune system, age, old medical history. By the way, people who are strong immunity, their immunity will stop the virus till the throat, however in this process lot of mucus will be formed and dry cough will also occur. When these viruses move towards the lung, the mucus present in this passage acts to stop it.

In this way, the mucus accumulates in the respiratory passage and the passage becomes narrower, thereby reaching less air than usual. If the virus reaches the lung, then the inflammation in the bronchi is maintained by the immune system, which causes breathing problems. Fluid accumulates in the alveoli due to such a constant condition, it happens due to the death of the cells present here. It is difficult to breathe in such a situation.

SARS CoV-2 is able to stay undetected. Normally if a cell is infected from a virus, it releases a cytokine called interferons. It is a glycoprotein secreted by cells when infected with a virus. It triggers a cellular reaction that halts synthesis of viral nucleic acid and consequently disrupts viral life cycle. But these processes become very slow in those cells which are infected by corona virus or these cells are so quickly destroyed that they cannot give signals to other cells. And it is also believed that a high number of corona virus infect many cells simultaneously, so to fight it, it is necessary to have a strong immune system. Despite all this we cannot say that our immune system fails against the corona rather, cytokines and chemokine cause inflammation in cells. This inflammation produces mucus and rainy nose to trap viral particles and prevent their ingress. This also trigger sneeze to expel out the virus, whereas inflamed sinus cause headache. The inflammation triggers a fluid build-up in the lungs. The fluids also contain the residue of a host of specialised cells — including T cells — that carpet bomb and damage many of the body's own cells as well as the viral particles. It is in expelling this fluid that a dry cough, characteristic of the coronavirus infection, begins. As more air sacs are infected, the lungs find it harder to perform their core job of extracting oxygen from the air, and eventually, this aggravates breathlessness.

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CATASTROPHIC OUTBREAK OF COVID-19 AND ITS SOCIO-BIOLOGICAL IMPACT ON THE GLOBAL ENVIRONMENT

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Abstract

The COVID-19 pandemic is considered as the most crucial global health calamity of the century and the greatest challenge that the humankind faced since the 2nd World War. In December 2019, a new infectious respiratory disease emerged in Wuhan, Hubei province, China and was named by the World Health Organization as COVID-19 (coronavirus disease 2019). A new class of corona virus, known as SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) has been found to be responsible for occurrence of this disease. As

far as the history of human civilization is concerned there are instances of severe outbreaks of diseases caused by a number of viruses. But the catastrophic outbreak, sensitive spread, consistent mutation in the viral genome and subsequent resistant to host immune system and most of the pathological drugs have made this RNA virus a menace and WHO has to announce its invasion as a global pandemic.

Global scenario of COVID-19 outbreak

According to the report of the World Health Organization (WHO as of May 28 2020), the current outbreak of COVID-19, has affected over 5846538 (nearly 5.84 million) people and killed more than 359529 people in more than 215 countries and territories around the world. As on 28th May 2020 USA holds first position globally with total number of COVID-19 positive cases 1753212 and total death recorded is 102556, followed by Brazil (total cases -418608 and total death-25935),Russia (total cases- 379051 and total death- 4142), Spain (total cases- 283849 and total death-27118),United Kingdom(total cases- 269127and total death- 37837), Italy (total cases- 231732 and total death-37837),France(total cases- 182913and total death-28596), Germany(total cases- 182209 and total death-8552).Unfortunately today India slipped on to the ninth position with having 165069 (nearly 1.65 lacs) COVID -19 positive cases and the death toll rises to 4695, leaving Turkey to move on to the tenth position (total positive cases- 159759 and total death- 4431).

National scenario of COVID-19 outbreak

As per ministry of Health and Family welfare corona positive cases have been reported from every state and union territory in India. As on 28th May, 67% of the total corona positive cases in India have been reported from four states namely Maharashtra, Tamilnadu, Gujrat and Delhi. Maharashtra alone has contributed 37% of the total corona positive cases in India having 56948 reported cases; Mumbai alone has shown more than 32000 conformed corona positive cases. Tamilnadu cadres second with 18458 corona positive cases reported followed by Delhi (Total cases- 15257) and Gujrat (total cases- 15195).

Scenario of COVID-19 outbreak in Bihar

COVID -19 positive cases have been reported from all the thirty eight district in Bihar, with the highest number recorded in Patna (Total cases 233) and least in Sheohar (total cases-7).Out of first ten districts, the second district in terms of number of active COVID-19 cases is Rohtas (201) followed by Madhubani (176), Begusarai (159), Munger (148) Khagaria (143), Katihar (134),Buxar (114), Jahanabad (112) and Banka (106).With the advent of incoming migratory workers the number of active COVID-19 cases has increased with an alarming rate.

SARS CoV-2 Anatomy: At a Glance

The SARS-CoV-2 has a single stranded RNA genome of approximately 29.8Kb in length and possesses 14 ORFs encoding 29 proteins that includes four structural proteins: Envelope (E), Membrane (M), Nucleocapsid (N) and Spike (S) proteins, 16 non-structural proteins (nsp1 to nsp16) and 9 accessory proteins, including the RNA dependent RNA polymerase (RdRp) (also named as nsp12). RdRp is multi-domain proteins that catalyze RNA-template dependent formation of phosphodiester bonds between ribonucleotides. The SARS-CoV-2 RdRp is a

key component of the replication/transcription machinery. The structure of the SARS-CoV-2 RdRp has been recently solved. This protein contains a "right hand" RdRp domain (residues S367-F920), and a nidovirus-unique N-terminal extension domain (residues D60-R249). The polymerase domain and N-terminal domain are connected by an interface domain (residues A250-R365).

SARS-CoV-2 utilises a densely glycosylated spike (S) protein to access entry into host cells. The viral Spike glycoprotein is localised in the outermost layer of their envelope and required for attaching with the host's receptor protein. Once attached to the host cell receptor the Spike glycoprotein go through an extensive structural rearrangement that enables the fusion of viral and host cell membranes. Spike glycoprotein of SARS-CoV-2 is 1273 amino acid long, comprised of a distinct N-terminal domain, receptor-binding domain, subdomain 1/2, transmembrane domain, C-terminal domain with heptad repeats 1/2 and a cytoplasmic tail. Further, each Spike monomer consists of an N-terminal S1 domain and a membrane-proximal S2 domain, that mediate receptor binding and membrane fusion, respectively. The N-terminal S1 region of Spike glycoprotein interacts with ACE2 receptor to attach with the host cell. Because of the indispensable function of the S protein, it is one of the most attractive viral target molecules for various interventions.

The SARS-CoV-2 spread worldwide within a few months of time and this rapid global reach provided the virus an ample opportunity to mutate and for natural selection to act. Most likely, due to these mutations in SARS-CoV-2,contributing minor variation in viral genome, the new and more resistant strains are constantly generated, which can successfully evade host immune system and pharmacological molecules designed against them

Pathogenesis of SARS CoV-2 and its impact on human physiology

Based on the cells that are likely infected, COVID-19 can be divided into three phases that correspond to different clinical stages of the disease.

Stage 1: Asymptomatic state (initial 1–2 days of infection)

The inhaled virus SARS-CoV-2 likely binds to epithelial cells in the nasal cavity and starts replicating.ACE2 is the main receptor for both SARS-CoV2 and SARS-CoV. The close examination of the *In vitro* data with SARS-CoV indicate that the ciliated cells are primary cells infected in the conducting airways. There is local propagation of the virus but a limited innate immune response. At this stage the virus can be detected by nasal swabs. Although the viral burden may be low, these individuals are infectious. The RT-PCR value for the viral RNA might be useful to predict the viral load and the subsequent infectivity and clinical course. Perhaps super spreaders could be detected by these studies. For the RT-PCR cycle number to be useful, the sample collection procedure would have to be standardised. Nasal swabs might be more sensitive than throat swabs.

Stage 2: Upper airway and conducting airway response (next few days)

The virus propagates and migrates down the respiratory tract along the conducting airways, and a more robust innate immune response is triggered. Nasal swabs or sputum should yield the virus (SARS-CoV-2) as well as early markers of the innate immune response. At this time, the disease COVID-19 is clinically manifest. The level of CXCL10 (or some other innate response cytokine) may be predictive of the subsequent clinical course. Viral infected epithelial cells are a major source of β and λ interferon. CXCL10 is an interferon responsive

gene that has an excellent signal to noise ratio in the alveolar type II cell response to both SARS-CoV and influenza. CXCL10 has also been reported to be useful as disease marker in SARS . Determining the host innate immune response might improve predictions on the subsequent course of the disease and need for more aggressive monitoring.

For about 80% of the infected patients, the disease remained mild and mostly restricted to the upper and conducting airways. These individuals may be monitored at home with conservative symptomatic therapy.

Stage 3: Hypoxia, ground glass infiltrates, and progression to ARDS

Unfortunately, about 20% of the infected patients will progress to stage 3 diseases and will develop
pulmonary infiltrates and some of these will develop very severe disease. Initial estimates of the fatality rate are around 2%, but this varies markedly with age . The fatality and morbidity rates may be revised once the prevalence of mild and asymptomatic cases is better defined. The virus now reaches the gas exchange units of the lung and infects alveolar type II cells. Both SARS-CoV and influenza preferentially infect type II cells compared to type I cells. The infected alveolar units tend to be peripheral and sub-pleural. SARS-CoV propagates within type II cells, large number of viral particles are released, and the cells undergo apoptosis and die. The end result is likely a self-replicating pulmonary toxin as the released viral particles infect type II cells in adjacent units. The areas of the lung will likely lose most of their type II cells, and secondary pathway for epithelial regeneration will be triggered. Normally, type II cells are the precursor cells for type I cells.
The pathological result of SARS and COVID-19 is diffuse alveolar damage with fibrin rich hyaline membranes and a few multinucleated giant cells. The aberrant wound healing may lead to more severe scarring and fibrosis than other forms of ARDS. Recovery will require a vigorous innate and acquired immune response and epithelial regeneration. Elderly individuals are particularly at risk because of their diminished immune response and reduced ability to repair the damaged epithelium. The elderly also have reduced muco-ciliary clearance, and this may allow the virus to spread to the gas exchange units of the lung more readily.

The apical cilia on airway cells and microvilli on type II cells may be important for facilitating viral entry. In conclusion, COVID-19 confined to the conducting airways should be mild and treated symptomatically at home. However, COVID-19 that has progressed to the gas exchange units of the lung must be monitored carefully and supported to the best of our ability, as we await the development and testing of specific antiviral drugs.

Till now there is no report of any clinically approved antiviral drugs or vaccines that are effective against COVID-19. It has rapidly spread around the world, posing enormous health, economic, environmental and social challenges to the entire human population. The coronavirus outbreak is severely disrupting the global economy. Almost all the nations are struggling to slow down the transmission of the disease by testing & treating patients, quarantining suspected persons through contact tracing, restricting large gatherings, maintaining complete or partial lock down etc.

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Impact of COVID-19 pandemic on the Global Environment:

The worldwide disruption caused by the COVID-19 pandemic has resulted in numerous impacts on the environment and the climate. The severe decline in planned travel has caused many regions to experience a drop in air pollution. In China, lockdowns and other measures resulted in a 25 per cent reduction in carbon emissions and 50 % reduction in nitrogen oxides emissions. However, the outbreak has also provided cover for illegal activities such as deforestation of the Amazon rainforest and poaching in Africa, hindered environmental diplomacy efforts, and created economic fallout that is predicted to slow investment in green energy technologies.

Air quality

Due to the coronavirus outbreak's impact on travel and industry, many regions and the planet as a whole experienced a drop in air pollution. Reducing air pollution can reduce both climate change and COVID-19 risks .Between 1 January and 11 March 2020, the European Space Agency observed a marked decline in nitrous oxide emissions from cars, power plants, and factories in the Po Valley region in northern Italy, coinciding with lockdowns in the region. The reduction in motor vehicle traffic has led to a drop in air pollution levels. NASA and ESA have been monitoring how the nitrogen dioxide gases dropped significantly during the initial Chinese phase of the COVID-19 pandemic in Wuhan and slowly spread to the rest of the world. Even the air quality in different metropolitan cities in India showed remarkable improvement in their quality during first and second Lockdown period announced by Hon'ble prime minister of India.

NOx emission changes in East China

A joint research led by scientists from China and U.S. estimated that nitrogen oxides (NOx=NO+NO2) emissions decreased by 50% in East China from 23 January (Wuhan lockdown) to 9 February 2020 in comparison to the period from 1 to 22 January 2020. Emissions then increased by 26% from 10 February (back-to-work day) to 12 March 2020, indicating possible increasing socioeconomic activities after most provinces allowed businesses to open.

Water quality

In Venice, the water in the canals cleared and experienced greater water flow and visibility of fish. The Venice mayor's office clarified that the increase in water clarity was due to the settling of sediment that is disturbed by boat traffic and mentioned the decrease in air pollution along the waterways. In India, the water quality in Kanpur and other downstream pathway of Ganges show improved water quality.

Wildlife

Demand for fish and fish prices have both decreased due to the pandemic. As people stayed at home due to lockdown and travel restrictions, some animals have been spotted in cities. Sea turtles were spotted laying eggs on beaches they once avoided (such as the coast of the Bay of Bengal), due to the lowered levels of human interference and light pollution.

Deforestation and reforestation

The disruption and agony generated from the pandemic opened ways for illegal deforestation operations. In Brazil, the satellite imagery showed deforestation of the Amazon rainforest surging by over 50 %compared to baseline levels. Unemployment caused by the COVID-19 pandemic facilitated the deforestation and other anthropogenic interventions in the natural resources.

Litter

As a consequence of the unprecedented use of disposable face masks, a significant number of masks were discarded in the natural environment, adding to the worldwide burden of plastic waste.

Research and development

Despite a temporary decline in global carbon emissions, the International Energy Agency warned that the economic turmoil caused by the coronavirus outbreak may prevent or delay companies and others from investing in green energy. However, extended quarantine periods have boosted adoption of remote work policies.

Politics

The pandemic has also impacted environmental diplomacy and climate diplomacy, as the 2020 United Nations Climate Change Conference was postponed to 2021 in response to the pandemic after its venue was converted to a field hospital. This conference was crucial as nations were scheduled to submit enhanced nationally determined contributions to the Paris Agreement, with enhanced ambition. The pandemic also limits the ability of nations, particularly developing nations with low state capacity, to submit nationally determined contributions, as they are focusing on the pandemic.
Time argued for three possible risks: that preparations for the November 2020 Glasgow conference planned to follow the 2015 Paris Agreement were disrupted; that the public would see global warming as a lower priority issue than the pandemic, weakening the pressure on politicians; and that a desire to "restart" the global economy would cause an excess in extra greenhouse gas production. However the drop in oil prices during the coronavirus recession could be a good opportunity to get rid of fossil fuel subsidies, according to the Executive Director of the International Energy Agency.
Predicted rebound effect

The restarting of greenhouse-gas producing industries and transport following the COVID-19 lockdowns was hypothesized as an event that would contribute to increasing greenhouse gas production rather than reducing it. In the transport sector, the pandemic could trigger several effects, including behavioural changes – such as more teleworking and teleconferencing and changes in business models – which could, in turn, translate in reductions of emissions from transport.

The Organisation for Economic Co-operation and Development recommends governments continue to enforce existing air pollution regulations during the COVID-19 crisis and after the crisis, and channel financial support measures to public transport providers to enhance capacity and quality with a focus on reducing crowding and promoting cleaner facilities.

The basic need of hours is to take all the precautionary measures as suggested by WHO to break the chain of spread of the virus. A very close vigilance to the generated hot spots,

enhancement in testing procedures, proper judicious management of quarantine policies, ample supply of PPE, masks , sanitizers and other medical requirements, a good governance and proper interventions of the state and central government to combat the sociobiological and economic crisis generated by the pandemic.

India is doing best of its potentials and I hope we will manage the situation to bounce back towards normalcy within a few months.

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Study of Behavioural changes in Birds in Dist. Bhagalpur, Bihar during Lock Down.

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Abstract

COVID-19 or Corona virus is a special kind of virus with its mysterious biological characters. Very little is known about its History and Biology. Presently it has caused global disaster affecting human population in an alarming rate in many Countries of the World. Mortality rate is increasing day by day. COVID-19 spreads through respiratory system from man to man and increases its chain. Considering this fact Government of many countries of the World implemented - a Complete lock Down as a possible solution or to control the spreading of COVID-19. Lock Down period is still continued. In the present work , the behavioural changes shown by the resident as well as migratory birds during this Lock Down period (between 25th, March to 25th May,2020) was studied thoroughly in Bhagalpur Bihar and documented accordingly. Early visit of Pied Crested Cuckoo (a summer migrant species of Cuckoo) was recorded in the month of May (8th May,2020) in comparison to previous records of 14-15th May in Dist. Bhagalpur. Significant Periodical changes in diurnal activities of many resident birds like House crow, Common Myna, Pied Myna, Magpie Robin, Asian Koel, Tree Pie and Pheasant Crow was recorded during Lock Down period. The pitch of the bird's call of some song birds like Red Vented Bulbul, Magpie Robin, Tailor bird, Asian Koel and Purple sunbird was recorded slightly higher in the morning hour. Late departure of few migratory water birds like Pied Avocet, Black tailed God wit, Osprey, common sandpiper and Kentish plover were recorded in Vikramshila Gangetic Dolphin Sanctuary, Bhagalpur in the month of May,(12-15), 2020 during this Lock Down previous record between March last week to April, 2nd certainly a matter of further study.

Key words: Resident birds, Migratory birds, COVID-19, Behaviour, Lock Down.

Impact of covid-19 pandemic on healthcare scenario in India

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Abstract

COVID-19 Pandemic has stretched healthcare infrastructure of even the most developed countries, and is expected to cause economic recession . On March 11, 2020, the World Health Organization officially announced that the COVID-19 virus a pandemic after it had spread to 114 countries in three months and infected over 118,000 people. COVID-19 is caused by a novel coronavirus, a new strain that was not previously found in humans. Symptoms include respiratory problems, fever and cough, and can lead to pneumonia and death. It spreads through droplets from sneezes and by direct or indirect contact with an infected person. The COVID-19 pandemic is straining health systems worldwide. Indian government responded very well by suspending foreign travels and imposing lockdown on the country. The strategy of the government is to move on with 'prevention is better than cure' model. All the agencies in India are focused on controlling the transmission and curtailing morbidity and mortality due to the pandemic. This infection and its fallouts will show there impact the healthcare scenario in India. It will allow fast-tracking of implementation of targets for public health emergencies within National Disaster Management Plan. It will have positive impact on community awareness towards hygiene in the long-term, strengthen government infrastructure and public private partnerships over next few years, will increase the use of technology, telemedicine, training of primary health workers and mobile hospitals. we may observe a major realignment of funds towards healthcare industries. It may also help India to strengthen its Pharma supply chain and focus on manufacturing medical equipments in India. We may observe a drop in medical tourism. Attention entirely on covid-19 patients may lead to an increase in burden on healthcare due to patients of other ailment in the coming time. Hence in this challenging period while focussing on minimum damage to human life we can improve our healthcare system.

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Higher Education in India during the COVID 19 Crisis: An UGC Perspective

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Abstract

The COVID 19 pandemic has dramatically affected India's higher education sector, which is a primary determinant of a nation's economic future. Educational institutes are closed as a step in curbing the spread of the novel Corona Virus, and there's no guarantee when they will reopen. This is a crucial time for the education sector because all of the assessments, admissions, entrance exams and competitive assessments are conducted during this period. The structure of schooling and learning, including teaching and evaluation methodologies, is the first to be affected by prolonged closures. The pandemic will also turn the centuries-old chalk-talk (the model of speaking-teaching) into one fuelled by technology. A multi-stakeholder strategy is needed to address the crisis in the long term and develop a stable Indian education system. Remarkably few institutes can follow online teaching methods other institutes have to shut down entirely for not being able to access e-learning solutions. This revolution in the delivery of education challenges policymakers to figure out how to improve on-scale participation while ensuring equitable approaches to e-learning and addressing the digital divide. In this regard, the University Grants Commission (UGC) has ordered all of the country's Colleges and Universities to create a cell to address student grievances arising from the COVID-19 pandemic related to examinations and other academic activities. The commission also formed a task force to oversee the resolution of grievances and problems posed by the students and teachers. UGC also issued updated guidelines for the new academic calendar, for exams at Universities. The committee is also trying to recommend the implementation of technology supporting online teaching and learning. Teaching/training is a process that continues to change and continues to evolve. The educational institutions in India can use this present challenge in disguise as a blessing, from schools to universities, and make digital education a significant part of the learning process for all learners in the future. Modern Indian expertise in developing sustainable technology and medicines is well known around the globe for its technological advances, principles and advantages. Courses on Indian traditional information systems in the fields of yoga, Indian medicines, architecture, ethnobotany, metallurgy, and agriculture should be combined with a modern mainstream university education to serve the more significant cause of humanity.

Keywords: COVID 19 pandemic, Higher education sector, Educational institutes, e-learning, University Grants Commission, Learning process.

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Identification of twenty two mutations in surface glycoprotein (Spike) of SARS-CoV-2 among Indian Isolates and their impact on protein dynamics.

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Abstract:

SARS-CoV-2, the causative agent of the COVID-19 pandemic, is an RNA virus that have inherent high rate of mutation. Due to the mutations the virus evolves at rapid pace that helps them to survive better inside the host. One of the hotspots of pharmacological interventions is to inhibit binding of virus with host cells, which is mediated by Spike glycoprotein of SARS-CoV-2 and ACE2 receptors present on the human cells. This study was conducted with an aim to identify and characterise the mutation(s) present in the Spike glycoprotein of the SARS-CoV-2, which might facilitate this virus to confer resistance to pharmacological agents. Towards this, an in silicon methodology was used, and mutation on Spike glycoprotein was identified by comparing the Spike glycoprotein of first reported sequence from Wuhan wet sea food market virus with the available sequences of SARS-CoV-2 from Indian isolates. Our analysis revealed twenty two mutations in Spike glycoprotein present in Indian SARS-CoV-2 isolates. These mutations spread all over the protein and at least clustered at three distinct positions. Further, mutations at nine positions exhibited alterations in the secondary structure of the polypeptide chain. We also investigated the effect of these mutations on overall protein dynamics and have shown that it affects the dynamic stability of the Spike glycoprotein. We propose structural and functional implications of this mutation in relation to resistance against sensitivity of drugs that target Spike glycoprotein.

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Biological impact of COVID-19

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Abstract:

The corona virus COVID -19 pandemic is the defining global health crisis of our time and the greatest challenge we have faced since World war II .Since its emergence in Asia late last year, the virus has spread to every continent except Antarctica. Cases are rising daily in Africa, America, Europe and Asia. Countries are rising to slow the speed of the virus by testing and treating patients, carrying out contact tracing, limiting travel, quarantining citizens and cancelling large gatherings such a sporting events, religious institutions, concerts, and schools. COVID -19 is much more than a health crisis by stressing everyone of the countries it touches it has the potential to create devastating social and environmental crisis that will leave deep scars. COVID -19 is containing single stranded (positive-sense) RNA associated with nucleoprotein within a capsid comprised of matrix protein. A Typical CoV contains at least 6 ORFs in its genome. All the structural and accessory proteins are translated from the RNAs of CoV. Respiratory infections by COVID -19 can be transmitted through droplets of different sizes : when the droplet particles are > 5 to 10 mue metre in diameter that they are referred to as respiratory droplets and when they are less than 5 mue metre in diameter they are referred to as droplet nuclei. According to current research corona virus is primarily transmitted between people through respiratory droplets and contact routes. Clinical features and pathogenesis. The disease begin initially with influenza like prodrome starting 4 days to 14 days after exposure called incubation period. This was followed after a further three or more days by the lower respiratory tract phase comprising dry cough, dyspnea, and increasing respiratory distress sometimes requiring mechanical ventilation. Maximum patients showed lymphopenia (70-90%),with a substantial drop in both CD & T cells, COVID -19 infects both airways and alveolar epithelial cells, resulting in lung injury virus and viral products were also detected in other organs, such as the kidney, liver and small intestine, as well as in studs. Although the lungs is recognised as the organ most severely affected by COVID-19. Infection with covid-19 triggers a series of humeral and cellular immune responses in patients. Specific IgG and IgM antibodies against COVID-19 were detected. Increase in cellular adenosine triphosphate (C-ATP) can potentially improve the efficiency of innate and adaptive immune system to either prevent and fight of COVID -19 . There are several approaches to improve C-ATP . Maximum of them are easily available through a change in lifestyle. First regular exercise improves mitochondrial respiratory capacity through an increase in PGC-1 Alpha. Smoking cessation is the second approach to improve mitochondrial capacity and improvement in C-ATP consuming foods with specific dynamic action (SDA), as the energetic budget for consuming food, can potentially boost the immune system through improving the C-ATP.

Keywords: Nucleoprotein, Genome, ATP, Immune system, SDA.

Yagya is a safest way to combat COVID-19

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Since Vedic era (beyond 5000 BC) in Yagya the use of herbs as medicinal plants to prevent health care and Viral protection have been highlighted. Ayurveda, originated from Vedas shapes the oriental knowledge in modified style. Yagya were organized to create healthy atmosphere free from pathogens. In Charak Samhita (beyond 1200 B.C.) extraction of essential oils take the shape which latter transformed in Arka (distillates) and Attars.
Oral, Nasal and Trans-dermal uses of essential oils have been mentioned. Among them the Yagya is more powerful and very easy to use.
Key Words: *Ayurveda, Vedic era , Nasal ,Trans dermal uses, Herbs, Essential Oils, Health and Yagya.*

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HOW COVID – 19 IS AFFECTING SOCIALLY

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Abstract

Surprisingly, such hostility has been observed even against the Corona Warriors like Doctors, Nurses, Health Professionals, Police, and such other people residing in the housing societies or neighbourhood. Several cases of these warriors who are at the forefront of this battle against COVID are being shunned by others for fear of being infected. Instead of showing respect and gratitude towards them, they and their families are treated with suspicion and not supported by the society members in the wake of this undue fear in their minds. This includes the threat of being evicted from their apartments and general ostracism. Many doctors and health workers have been asked to vacate their rented homes by landlords as they believe their stay may make them more susceptible to COVID-19. Analysing the scenario in lower class or slum areas, a similar mentality is seen; only the problem is different. Let us take an example of getting grocery on ration or free food packets. Amidst free distribution of food and essential items to the needy and poor, people were seen fighting amongst themselves in the race to get there first and even to the extent of snatching it from others. Another aspect is that of Panic Buying, which has been largely observed in all parts of the country during this

lockdown. Everyone tries to procure as much as they can, with least botheration or concern about their neighbours. Unwarranted purchasing and stocking of grocery and other essential items by people, without considering the resultant shortage problem which may affect other people in the society shows the unreceptive nature of people. Due to rising cases in Pune during the first week of April 2020, the densely populated areas in which the number of COVID-19 positive cases is reported to be high such as Kondhwa, Dias plot, Maharshrinagar and core city areas like Bhavani Peth, Kasba Peth, Rasta Peth, Somwar Peth, Mangalwar Peth, Budhwar Peth, Guruvar Peth, Shukravar Peth, Nana Peth and Ravivar Peth have been completely sealed. It has caused the small proprietor-partnership businesses, travel/tourism and other service sectors to wind down. Such a situation poses a serious threat to the survival of daily-wage workers, roadside vendors, petty traders, etc. because of no cash in hand. People cannot carry on with their usual jobs or occupations. The existing situation of unemployment worsens. Incomes fall or cease. Economically better-off people manage with varying degrees of difficulty, but people from the lower economic sections become almost destitute. With very less or no money-in-hand people are on the verge of starving. Their weakened physical condition increases their susceptibility to disease. With the weakening of the socio-economic system, a large number of people losing their livelihood are in danger of irreversible impoverishment. They will need immediate concrete help in terms of both food and money and not just a promise of better tomorrow.

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Socio-Biological Impact of COVID-19 Pandemic on the Environment

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Abstract

The coronavirus pandemic and subsequent world shutdown have been linked to a vary of environmental problems from the outbreak being related with environmental degradation and the flora and fauna trade, to the shutdown impacting air first-rate and weather change, biodiversity, Wildlife and Research and development while the specific source of the outbreak is yet to be determined, it has been counseled that it emerged in bats and made its way to humans by every other wild animal host.

Keywords: Coronavirus, Biodiversity, Water quality, Air quality and Litter.

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Impact of the COVID-19 Pandemic on society

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Abstract

While corona virus crisis is destroying the economy globally on the other hand, it is testing our humanity. No crisis in recent history has shaken the world the way corona virus has. A human being is a social animal but these days humans are adopting social distance to avoid corona. This epidemic have changed our daily activities. As cities, states, and countries are locking down and limiting economic activity to the bare minimum, the costs of this crisis to humans, businesses, and societies are just unfolding. Work culture, workplace arrangement is changing as employees of nearly all companies are working from home.

Keywords: COVID-19, corona virus, social distance

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HOW COVID-19 AFFECTS LUNGS

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Abstract

While COVID-19 pandemic spreads over the globe, It is important to understand the transmission and the effect of the virus which has made it a pandemic. COVID -19 belongs to the corona virus family, which also includes the SARS virus(severe acute respiratory syndrome) and MERS (middle east respiratory symptoms) virus. The family of corona virus includes virus strains that cause the common cold and flu. COVID -19 affects the respiratory tract in humans. The infection starts off with a mild flu-like symptoms or no symptoms, and further progress to severe symptoms. COVID-19 primarily infects the lungs in the affected individuals and in severe cases causes death due to AROS and pneumonia. In the majority of the cases i.e. 80% will exhibit mild symptoms, 14% will have pneumonia, 5% will suffer from septic shock and organ failure and in 2% cases it will be fatal. The novel corona virus may affect the lungs way more severely than the seasonal flu virus. This is because the corona virus can attack the inner lining of the blood vessels. The lungs of people who died due to COVID-19 to those who died due to flu. While both the viruses belong to the same category and infect the lungs causing multiple clots, the extent of damage to the lungs differ. The findings of the study were published in the journal- The New England Journal of

Medicine. The study found that since the corona virus damages the capillaries' inner lining, it disrupts the movement of Carbon dioxide, produced by lungs after Oxygen goes in, which caused shortness of breath, one of the most common and initial symptoms of COVID-19. The study also surprisingly found the growth of new blood vessels in the lungs of COVID-19 patients. "Patients with COVID-19 showed wide spread blood clotting as well as new vessel growth- The latter likely a result of the body's response to the virus".

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कोविड -19 का सामाजिक परिवर्तन पर पड़ने वाले प्रभाव का समाजशास्त्रीय अध्ययन

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Abstract

चीन के बुहान शहर से निकली वायरस (covid - 19) ने विश्व के कई देशो के जन समुदाय को प्रभावित परिवर्तन में महत्वपूर्ण भूमिका निभाई है । जहाँ निकटता धनिष्टता प्रेम का प्रतिक माना जाता था वही covid परिभाषा ही बदल रखी है । इस बीमारी से बचने का अभी तक आये सभी स्वास्थ्य शोध में सामाजिक या शारीरिक उपाय बताये गये है । दुनियाभर के स्कूल और यूनिवर्सिटीज इस बात की कोशिश में है , कि पढ़ाई के तरीके को बदला जाए क्लासेज का इस्तेमाल तेजी से बढ़ रहे है । ऐसे में प्यूचर में छात्रो को क्लासरूम की बजाय बर्चुअल क्लासेज आदत डालनी पड़ सकती है । मॉल्स और शॉपिंग की आदते बदलना होगा , क्योकि भीड़ - भाड़ वाली जगहो से कोरोना के संक्रमण फेलने ज्यादा रहता है । खान - पान और हाइजीन की आदते बदलना होगा । कोरोना मे साफ - सफाई और हाइजीन की साबित किया है । भारत में अभी तक हाइजीन के स्टैडर्ड विकसित देशो जैसे नही है लेकिन अब इनमें रहा है ।आने वाले वक्त में फूड के ऑनलाइन ऑर्डर में और इजाफा होगा और इससे छोटे होटलो एवं सड़क के किनारे स्टेशनो , बस स्टैण्डो आदि जगहो पर कम पूजी वाले लोगो को हानि उठाना होगा या अपने स्थिति को बेहतर बनाना होगा । हमारे प्राचीन ग्रंथो में जो साफ - सफाई और शिष्टाचार आदि के बारे में जो वर्णन है उन्हे अपनाना होगा । आज तक नगरीकरण ने इन सभी के ऊपर पर्दा डाल रखी थी सामाजिक विकास की चरण पर गौर करे तो यह उद्विकास की प्रक्रिया से ग्रामीण और शहरी प्रस्थान क्रम आर्थिक और श्रम विभाजन के आधर पर व्यक्ति समूह में परिवर्तन ला दिया है । स्थानीय या पैतृक स्थाई निवास को छोड़कर कोई भी अनिश्चित वातावरण में रहना बड़ा दुर्लभ है । फिर भी आजीविका के लिए जन - समूह को रहना पड़ता था परन्तु कोविड -19 ने साबित कर दिया । 24 जननी जन्मभूमिश्च स्वर्गदपि गरीयसी " सरकार एवं गौर सरकारी संगठन को आगे आकर इन्हे अपने ही पैतृक स्थान पर आजीविका का साधन उपलब्ध करना चाहिए जिला मजिस्ट्रेट और राजस्व अधिकारियों का काम होना चाहिए कि वे गाँव के कौशल का पता लगाएँ प्रवास की समस्या को दूर करे । भारत में 90 % श्रम असंगठित क्षेत्र में है । इन कर्मचारियों का कोई रिकार्ड नहीं रखा जाता है । राज्य सरकार इनके प्रति अपनी कोई जिम्मेदारी नहीं समझती है । वे इन्हे देखभाल के लिए उन उद्योगो और स्थानीय प्रतिष्ठानो के भरोसे

छोड़ देते है । राज्य सरकार के ई - पोर्टल के माध्यम से खुद को पंजीकृत करने को कहा जाना चाहिए ।सरकार एवं गौर सरकारी संगठन को आगे आकर इन्हे अपने ही पैतृक स्थान पर आजीविका का साधन उपलब्ध करना चाहिए जिला मजिस्ट्रेट और राजस्व अधिकारियों का काम होना चाहिए कि वे गॉव के कौशल का पता लगाएं और प्रवास की समस्या को दूर करे । भारत में 90 % श्रम असंगठित क्षेत्र में है । इन कर्मचारियों का कोई रिकार्ड नहीं रखा जाता है । राज्य सरकार इनके अपनी कोई जिम्मेदारी नहीं समझती है । वे इन्हें देखभाल के लिए उन उद्योगो और स्थानीय प्रतिष्ठानो के भरोसे छोड़ देते है । राज्य सरकार के ई - पोर्टल के माध्यम से खुद को पजीकृत करने को कहा जाना चाहिए । मेरे शोध के निष्कर्ष के रूप में केवल यह कहना चाहता हूँ कि जन समुदाय को स्थानीय स्वरोजगार एवं असंगठित श्रमिको का पंजीकरण एवं समाजिक संतुलन बनाये रखना होगा ।

मुख्य शब्द - कोविड -19 समाजिक संतुलन , आजीविका के साधन ।

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HOW COVID-19 AFFECTS LUNGS

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Abstract

Covid - 19 primarily infects the lungs in the affects individuals and in severe cases death due to ARDS and pneumonia in all the cases, which is occurrence I most severe cases.In the majority of the cases that is 80 % will exhibit mild symptoms 14 % will have pneumonia, 5 % will suffer from septic shock and organ failure (mostly respiratory failure) and in 2 % cases it will be fatal. Some of the primary symptoms to look for in a Covid - 19 infected person are fever, dizziness, breathlessness, headache, dry cough (eventually result in phlegm) and in a few cases loss in smell and taste. A few cases have also reported diarrhoea and fatigue. So while a person infected with Covid - 19 can be cure, it is important to understand that the factors that lead to fatality, include underlying illness (hypertension , diabetes , cardiac problems , and respiratory issues) and individuals who are on immune suppressing medications. In older individuals, the risk is higher disposition for other illnesses. Another important aspect in understanding Covid - 19 is its effects on the body system, especially the lungs. Covid – 19 was first identified late last year as a cluster of pneumonia cases caused by a new coronavirus. Doctors have since learned that it's a respiratory diseases , one that especially reaches into your respiratory tract , which includes your lungs. Covid – 19 can cause a range of breathing problems , from mild to critical. Older adults and people who have other health conditions like heart diseases , cancer , and diabetes

may have more serious symptoms. Covid – 19 then spreads into smaller and smaller branches in the lungs. At the end of each branch are tiny air sacs called alveoli. This is where oxygen goes into your blood and carbon dioxide comes out.

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Electronic monitoring of quarantined and isolated individuals .

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Abstract

Taiwan, New Zealand and Thailand use mobile location data for movements of persons who is either quarantine or in isolation. Firstly Taiwan violators can receive heavy fines or be ordered into facilities, but the government first messages individuals to instruct them to return home and asks local police to check ,after that some countries use facial recognition software. Digital technologies are also useful for supporting confined individuals. Remote monitoring through smartphones improves the prospects for isolating and quarantining people at home rather than in facilities. Electronic monitoring by use of cellphone Bluetooth data, bracelets, or video cameras would likely be more effective in detecting public health order violations than current methods, which rely on police detection or police response to complaints. The question is whether more enforcement is better. The benefits of stringently enforcing mass shelter-at-home orders are not entirely clear, and the potential for strict enforcement particularly through electronic eyes to undermine trust in government and stoke resistance is troublesome.

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Coronavirus pandemic: A hazard to mental health and livelihood

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Abstract

The coronavirus pandemic has created a state of widespread crisis in health and economy. It has posed a challenge to control the spread of the virus and to sustain the livelihood of people at the same time. At present, without any vaccine against the COVID-19 disease, restraining anthropological activities is the only way to mitigate the spread of the virus. Several countries have enforced a nationwide lockdown to avoid crowding and bring social distancing into practice. Such lockdowns are taking a toll on people's mental health and have left a detrimental effect on their livelihoods, especially on those with pre-existing psychological conditions. Cases of depression and anxiety disorder have seen a sharp rise amidst the lockdown that has arisen as a result of isolation, reduced human interaction, decreased physical activity, passive-interaction on "Over-the-top" (OTT) platforms, poor diet and financial crisis. People in isolation wards during treatment or at quarantine centers or homes are undergoing mental stress like depression, anxiety, anger, overthinking, mood swings, claustrophobia, etc. leading to chronic psychological conditions. Work-from-home, online learning, and restriction on public places have led to less human interaction, unlike workspaces with people from diverse backgrounds. Working in isolation could decline interactive skills, coordinative skills, teamwork abilities, etc. Confinement would bring under-confidence, nervousness, and hesitation. On the other hand, not all works can be done from home because of which many have lost their source of income. The sufferings are borne mostly by the poor people who are at a higher risk of infection due to unhygienic living conditions. Three-meals-a-day and social distancing is luxury for those who have lost the means of their livelihood and live in slums or small tenement houses. Poor diet and failure to continue medication due to financial restraint, in turn, would deteriorate their immune health and create mental discomfort and instability. Financial losses due to job loss and unemployment have soared amidst lockdown, creating panic and psychological pressure. Students too are suffering from uncertainty and stress. The indirect effects of the pandemic have posed to be a greater threat. Reduction in physical activities, surfing passively on OTT platforms declines the reasoning and creative quotient of a person. These are media platforms where the users have limited control over what they see and involve very less or zero human input. Increasing usage of mobile phones and other devices causes poor eyesight, insomnia, prolonged headache, disturbed biological rhythm, sedentary habits, in turn leading to anxiety, depression, and other health hazards. Telephonic sessions and counselling are ways to address the issue at the earliest or else it will deepen the existing crisis.

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How It Affects Diabetes Patients

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Abstract

The Covid - 19 infections is a doubled diabetes challenge for people with diabetes. Diabetes has been reported to be a risk factor for the serviette of the disease and at the same time patients have to control glucose in a situation with a decreased and more variable food intake. Diabetes is a risk factor for hospitalisation and mortality of the Covid - 19 infections. Diabetes was comorbidity in 22 % of 32 non survivals in a study of 52 intensive care patients. In another study of 173 with severe diseases 16.2 % had diabetes patients, 12 % had diabetes. When comparing intensive care and non – intensive care patients Covid - 19. There appear to be a twofold intensive in the incidence of patients in intensive care having diabetes. Morality seems to be about threefold higher in the people with diabetes compared with the general mortality of Covid - 19. The number of comorbidities is a predictor of mortality in Covid – 19. In addition to diabetes, the other common comorbidities were hypertension, in about 20 % of cases , cardiovascular disease. Notably , diabetes was also a risk factor for severe disease and mortality in the previous SARS, MERS (Middle East Respiratory Syndrome) coronavirus infections and the serve influenza A HINI pandemic in 2008. It is a fact that people with diabetes are at increased risk of infections including influenza and for related complications such as secondary bacterial pneumonia. Diabetes patients have impaired immune-response to infection both in relation to cytokine profile and to changes in immune-responses including T-cell and macrophage activation. Poor glycemic control impairs several aspects of the immune response to viral infection and also to the potential bacterial secondary infection in the lungs. It is likely that many of the patients with diabetes in China have been in poor metabolic control when infected by COVID-19.

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WHAT IS COVID-19

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Abstract

Corona Virus (Covid - 19) is an infectious disease caused by a newly discovered corona virus. Most people infected mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease , diabetes , chronic respiratory disease and cancer are more likely to develop serious illness. The best way to prevent and slow down transmission is be well informed about the COVID - 19 Virus, the disease it causes and how it spreads. Protect yourself and others from infection by washing your hands or using an alcohol based rub frequently and not touching your face. The COVID - 19 VIRUS spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette.(for example , by coughing into a flexed elbow.) At this time, there are no specific vaccines for COVID - 19.However there are many ongoing clinical trials evaluating potential treatments. Covid – 19 affects in different peoples in different ways. Most infected people will develop mild to moderate illness and recover without hospitalisation. Most common symptoms : Fever, Dry cough, Tiredness. Less common symptoms : Aches and pains , Sore throats, Diarrhoea, Conjunctivitis, Head ache, Loss of taste or smell, A rash on skin , or discolouration of fingers or toes. Serious symptoms : Difficulty in breathing or shortness of breath, Chest pain or pressure, Loss of speech or movement. Seek immediate medical attention if you have serious symptoms. Always call before visiting your doctor or health facility. People with mild symptoms who are otherwise healthy should manage their symptoms at home. On average it takes 5 – 6 days from when someone is infected with the virus for symptoms to show , however it can take up to 14 days.

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Immunity and COVID- 19

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Abstract

Coronavirus disease (COVID-19) is caused by a newly discovered virus. This new virus seems to be very contagious. The potential for these viruses grow to become a pandemic worldwide seems to be a serious public health risk. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. COVID-19 pandemic caused by SARS-CoV-2 has devastating global impacts. A better understanding of the immune response to SARS-CoV-2 will be critical for the application and development of therapeutics.The degree to which the innate immune response confers protection or induces pathogenesis through a deregulated immune response. The components of the innate immune system act as first responders for the detection of viral infections. Innate immune cells secrete pro-inflammatory cytokines that inhibit viral replication, stimulate the adaptive immune response, and recruit other immune cells to the site of infection. Granulocytes degranulate in response to extracellular pathogens, releasing enzymes and toxic proteins. Monocytes traffic to tissues and differentiate into monocyte-derived macrophages and dendritic cells (mDCs). Activated DCs present pathogen-derived antigens to naive helper T cells to initiate the adaptive immune response. Natural killer cells kill virally infected cells via degranulation, receptor-mediated apoptosis, and antibody-dependent cell-mediated cytotoxicity. Finally, the complement system plays a role in immune cell recruitment, activation, and destruction of pathogens. In spite of these critical antiviral functions, an overactive innate immune response can contribute to disease pathogenesis. The elderly and those with other illnesses, however, may have a dysfunctional immune system that leads to poor immune response. This can lead to pneumonia, and severe lung damage which can result in acute respiratory distress syndrome (ARDS), which in turn can cause septic shock. ARDS and sepsis are the primary causes of death in people with COVID-19 . Individuals in certain pre-existing illnesses like diabetes, hypertension, cardio vascular disease, and respiratory issues are at a higher risk of having Covid-19 complications, it also aggravates with age as the general immunity reduces as we get older. In the younger generation with no underlying illnesses, Covid -19 can result in a minor infection, provided us have a robust immunity and do not engage in activities like smoking or vaping to combat the onslaught of the virus. Most people who get sick with COVID-19 experience a local infection in the cells that line the airways in the lungs that triggers an immune reaction that eradicates the virus and allows recovery. Symptoms may include fever, cough and shortness of breath, but they are temporary. We can do our bit by limiting our exposure to the virus by staying indoors, use alcohol-based hand sanitizer or wash our hands with soap and water to kills viruses. Maintain social distancing at least 1 metre (3 feet), eating healthy, hydrating and following basic hygiene protocol. We can also undertake to improve our immunity by different ways; Improve our Diet; The food we eat plays a key aspect in determining our overall health and immunity. Vitamin C acts as a powerful antioxidant and protects against damage induced by oxidative stress. Vitamin D supplements have a mild protective effect against respiratory tract infections. Most people are deficient in Vitamin-D, so it's best to

consult with a doctor about taking a Vitamin D. Zinc is a vital component to WBC (white blood corpuscles) which fights infections. It is advisable to take a zinc supplement, especially for older people. Some natural immunity supplements include ginger, gooseberries (amla) and turmeric contains a compound called curcumin, which boosts the immune function. Garlic has powerful anti-inflammatory and antiviral properties which enhances body immunity. Elderberries have antibacterial and antiviral qualities which help fight cold and influenza. Drink warm water throughout the day. Practice Meditation, Yogasana, and Pranayama. Increase the intake of Cumin, Coriander and drink herbal tea or decoction of Holy basil, Cinnamon, Black pepper, avoid sugar and replace it with jaggery if needed. 7-8 hours sleep is the best way to help our body build immunity, exercise for 30 to 45 minutes, depending on our stamina improves metabolism, which has a direct correlation with body immunity. De-stress ourselves, because stress is known to have an adverse effect on immunity. Immunity provides protection to life, mediated through cellular response. Our body promotes systematic immune processes by regulating the formation of T lymphocytes, antibodies, and cytokines. Strong immune system triggers an immune reaction that eradicates the virus and allows recovery.

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Mismanagement of the environment due to the outbreak of COVID-19 and its effect on the future generation.

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Abstract

As we can see the COVID-19 pandemic spreads nearly all over the world within 2-4 months of its outbreak. To prevent its spreading in such a rapid rate countrywide lockdowns are enforced in many countries like India, USA, Brazil, Malaysia, China, and, Colombia having rich environmental diversity or hotspots. Due to nationwide lockdown, no or poor management of the environment and natural resources during the COVID-19 outbreak. The WCC(World Conservation Congress) of IUCN was postponed to Jan 2021 from June 2020, various universities and research institutes are closed almost all training centres of conservation biologist are closed and online teaching has opted for some subjects but practical subjects like conservation biology suffer a great loss as the major component of conservation biology is practical based. Due to the ceasing of such practices, there will be a great loss for humans in the form of various resources. There is no surety till now that how long the nationwide lockdown will continue and after that how much resources are left to run the ecosystem. Crucial time is lost during the outbreak of COVID-19 that can be used to fight the major challenges of biodiversity loss. So the current crisis derails the rate of our actions to protect the environment. All these delays will lead to the loss of various resources and species which are threatened and must need great concern to protect them from vanishing. After the nationwide lockdown is over many resources and species may vanish. A major challenge for

conservation biologists after the lockdown will be conservation budget. As due to months of lockdown a fallout in the economy of nearly all countries may affect every budget including the research and conservation budgets that affect the conservation schemes and also decrease the number of projects related to conservation.

Keywords: COVID-19, Conservation biology, Environment management.

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COVID-19; pandemic caused by SARS-CoV-2 (a contagious and deadliest virus)

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Abstract

In the last two decades, several viral epidemics such as the severe acute respiratory syndrome coronavirus (SARS-CoV) in 2002 to 2003, and H1N1 influenza in 2009, have been recorded. Most recently, in the Middle East respiratory syndrome coronavirus (MERS-CoV) was first identified in Saudi Arabia in 2012 (WHO). An epidemic of low respiratory infections was detected in Wuhan, the largest metropolitan area in China's Hubei province. It became the first to report the beginning of symptomatic individuals in December 2019. The etiology of this illness is now attributed to a novel virus belonging to the coronavirus (CoV) family. On February 11, 2020, the WHO announced that the disease caused by this new CoV was a "COVID-19," which is the acronym of "coronavirus disease 2019".Initially, the new virus was called 2019-nCoV. Subsequently, the International Committee on Taxonomy of Viruses (ICTV) termed it the SARS-CoV-2 virus as it is very similar to the one that caused the outbreak of SARS (SARS-CoVs). The potential for these viruses to grow, to become a pandemic worldwide seems to be a serious public health risk. The new epidemic is very quickly evolving and affecting different vulnerable groups .Most vulnerable are the elderly, as well as people with cardiovascular disease, diabetes, chronic respiratory illness, high blood pressure and cancer. At the moment, the therapeutic strategies to deal with the infection are only supportive, and preventive, aimed at reducing transmission in the community is our best weapon. We can reduce our chances of being infected or spreading COVID-19 by taking some simple precautions:

We must clean our hands regularly and thoroughly at least for 20 seconds with an alcohol-based hand rub or wash them with soap and water. Viruses can be effectively inactivated by lipid solvents including ether (75%), ethanol, chlorine-containing disinfectant.

When someone coughs, sneezes, or speaks they spray small liquid droplets from their nose or mouth which may contain virus. Cover while you cough or sneeze with a tissue-paper, then throw the tissue-paper in the trash. We can breathe in the droplets, including the COVID-19

virus if the person has the disease and if we are too close to them. Avoid going to crowded places. Where people come together in crowds, we are more likely to come into close contact with someone that has COIVD-19. By following good respiratory hygiene, we can protect the people from the viruses of cold, flu and COVID-19. Stay home and self-isolate even with minor symptoms such as cough, headache, mild fever, until we recover. If we need to leave our house, wear a mask to avoid infecting others. Avoid close contact with people who are sick. Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe. Healthy habits will keep us healthy.

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Analysis of outbreak of COVID-19 and its impact on socioeconomy and our environment

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Abstract

Coronavirus (SARS-Cov-2) infections have emerged as a pandemic of global concern. The causative agent of COVID-19 is a novel betacoronavirus or severe acute respiratory syndrome coronavirus (SARS-CoV)-2. Its outbreak has been reported from 203 countries and in all 5 major continents. The World Health Organization has declared worldwide emergency on 11 March 2020. This pandemic originated from an animal market in Wuhan city of Hubei province, China. Thousands of patients were admitted with the symptoms of unusual pneumonia, fever, cough, sore throat, breathlessness, fatigue in various hospitals, and they were found not responding to usual treatment. The world has recently experienced a crisis of public health in the last 2 decades caused by novel virus infections, which include HIV, Influenza A virus subtype H1N1, Influenza A virus subtype H5N1, SARS-CoV1, MERS-CoV, and Ebola. Diagnosis is done by special molecular biology (RT-PCR) test by demonstration of the virus in respiratory secretions. On the basis of epidemiological as well as genomic analysis and its correlation with other strain of coronaviruses led to the isolation of new coronavirus which showed close resemblance with the bat coronaviruses, from the patients of Wuhan. Later on they were confirmed as the SARS-CoV-2. Since there is no vaccine treatment or antiviral agents of COVID-19 have been developed till date therefore, only way to control this mammoth pandemic by adopting some established strategies like social or physical distancing and restrain them to avoid social contact. Prevention entails home isolation of suspected cases and those with mild illnesses and strict infection control measures at hospitals that include contact and droplet precautions. This pandemic has created severe socioeconomic disruption across the globe, and high levels of discrimination have

been seen among the populations of different territories. However, Increase in the number of the lock down of the COVID-19 caused the air quality indices in many cities across the nation to improve and drop in water quality pollutions in many parts of the world. *Keywords* : SARS-CoV-2, Pandemic, COVID-19, Wuhan, pneumonia.

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IMPACT OF CORONAVIRUS ON HUMAN BEINGS AND ITS EFFECTS ON SOCIAL CHANGE IN LIVELIHOOD

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Abstract

Corona virus disease 2019 (COVID-19) is an infectious respiratory illness caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus that causes COVID-19 is a novel corona virus that was first identified during an investigation into an outbreak in Wuhan, China. Coronaviruses are a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as Severe Acute Respiratory syndrome (SARS) and Middle East Respiratory Syndrome (MERS). Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms may have COVID-19: Cough, shortness of breath or difficulty breathing, fever, chills, muscle pain, sore throat, new loss of taste or smell.COVID-19 is a spherical or pleomorphic enveloped particles containing single-stranded (positive-sense) RNA associated with a nucleoprotein within a capsid comprised of matrix protein. The envelope bears club-shaped glycoprotein projections. Some coronaviruses also contain a hemagglutinin-esterase protein (HE). COVID- 9 directly impacts the lungs and damages the alveoli (tiny air sacs). The function of the alveolus is to transfer oxygen to the blood vessels. These blood vessels or capillaries carry the oxygen to the RBCs (Red blood cells). It is the RBCs that finally deliver the oxygen to all the internal organs in the body. The virus works by damaging the wall and the lining of the alveolus and capillaries. The debris from the damage, which is plasma protein accumulates on the alveolus wall and thickens the lining. As the walls' thicken, the transfer of oxygen to the red blood cells is impaired. The thicker the wall gets, the more difficult it gets to transfer oxygen to the red blood cells, which causes difficulty in breathing as the body is running short of oxygen. And the lack of oxygen to the internal organs results in a deficit in the body and impairs the functioning of the organs. At this juncture, the body fights to increase oxygen intake.

FollowingPreventive Measures-

1. Multiple times a day, wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom, before eating, and after blowing your nose, coughing, or sneezing.
2. Avoid close contact with people who are sick.
3. Avoid touching your eyes, nose, and mouth with unwashed hands.
4. Clean and disinfect frequently touched objects and surfaces.

5. Use an alcohol-based hand sanitiser with at least 60% alcohol if you have symptoms of acute respiratory illness.
6. Self-monitoring of health by all and reporting any illness at the earliest.

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Effect of the COVID-19 on rural areas and their livelihoods

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Abstract

The World Health Organisation declared COVID-19 a pandemic because of the unusually fast rate in which the virus is spreading. It has affected more than 5.8 million, with more than 2.5 million recoveries and has killed more than 3.6 lakh worldwide. COVID-19 has profound implications for the livelihoods of the affected society. Their impact on livelihoods has been intensively investigated and there is universal consensus that adversely affects the livelihoods of households and communities and has macro-level implications for poverty, economic growth, unemployment and political stability. There is unequivocal evidence that pandemics adversely affect the livelihoods of households and communities. However, evidence in the literature is dominated by the socioeconomic impacts of COVID-19, while evidence on the impact of the COVID-19 on households' livelihoods remains fragmented and scant. The study also explores the effect of the pandemic disease on agricultural production and productive efficiency of farm households. Moreover, we found that the COVID-19 pandemic weakened the society's trust in institutions. In a nutshell, our results highlight that pandemic, such as the recent outbreak, may have long-lasting negative effects on the livelihoods of a society and their effect may extend beyond the communities directly affected by the pandemic. This means that the nation's recovery from the impact of the pandemic would be more challenging, and the social and economic impacts of the pandemic may extend well beyond the end of the health crisis.

Key words: COVID-19, Pandemic, Livelihoods

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Imprecations of corona virus on human beings & its effect on social changes in livelihood

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Abstract

NOT EVEN A 100 DAYS OF LOCKDOWN AND ALL OF US ARE COMPLAINING ABOUT FEELING ANXIOUS, DEPRESSED OR SIMPLY UNWELL. WE SPEAK ABOUT OUR DESIRES TO ROAM FREE BECAUSE WE FEEL CAGED. WE SHOULD ALL REMEMBER OUR CURRENT STATE THE NEXT TIME WE VISIT A ZOO, A CIRCUS OR ANY OTHER ESTABLISHMENT THAT KEEP ANIMALS CAGED. WE ARE ALL GUILTY OF VISITING THESE PLACES, BUT SOMEWHERE DOWN THE LINE THIS HAS TO STOP. THEY WERE NOT BORN FOR OUR ENTERTAINMENT. THEY HAVE A LIFE JUST LIKE US. THE CURRENT PANDEMIC HAS FORCED US TO THINK ABOUT THE PLIGHT OF WORKERS IN OUR COUNTRY. WHILE THE VIRUS HAS DEMONSTRATED THE ENORMOUS VALUE OF HEALTH WORKERS, IT HAS ALSO ENHANCED PUBLIC AWARENESS OF THE PIVOTAL ROLE OF MIGRANT WORKERS IN OUR ECONOMY. WE HAVE BEEN COMPELLED TO REALISE THAT BETWEEN 100 MILLION TO 125 MILLION PEOPLE LEAVE THEIR VILLAGES, FAMILIES AND HOMES TO FIND WORK FAR AWAY WHEREVER THEY CAN FIND IT; THEIR INVISIBLE HANDS HARVEST THE CROPS AND FEED US, CLEAN STREETS, RUN FACTORIES, BUILD ROADS, AND CONSTRUCT OUR HOUSES. CORONAVIRUS HAS SHOWN US HOW HUGE INDIA'S POPULATION PROBLEM IS. AND IT'S EVIDENT MOST CASES HAVE COME FROM PLACES WHICH HAVE HIGHER POPULATION DENSITY. DELHI, MUMBAI, AHMEDABAD, INDORE, JAIPUR AND MUMBAI'S DHARAVI HAS SHOWN US THAT MANAGING A PANDEMIC IN AN OVERCROWD SLUM CAN BE A NIGHTMARE. WE HAVE 16% OF THE WORLD'S POPULATION, 2.5% OF THE WORLD'S LAND, 4% OF THE GLOBAL WATER RESOURCES. SO, NO DOUBT THERE'S A LOT OF STRESS ON OUR NATURAL RESOURCES AND INFRASTRUCTURE. THIS IS HOW SEVERE OUR POPULATION PROBLEM IS WITH THE CORONA VIRUS LOCKDOWN INDIA SEES A 20% RISE IN MENTAL ILLNESS CASES. AS THE NO. OF COVID-19 PATIENTS SEEMS TO BE PEEKING IN INDIA EVERY SINGLE DAY, THERE'S ALSO A RISE IN MENTAL ILLNESS CASES. STRUGGLE OF THE ECONOMY. GOLDMAN SACHS SAID THAT INDIA'S ECONOMY MAY CONTRACT BY A HUGE 45% IN JUNE QUARTER. PROJECTIONS SAY THAT INDIA'S GROSS DOMESTIC PRODUCT (GDP) WILL FALL BY 5% FOR THE YEAR 2020-21. INDIA'S GROWTH ESTIMATED TO SHRINK FROM AN EARLIER ESTIMATE OF 0.4% TO -3.6%. THIS WILL BE DEEPER COMPARED TO ALL "RECESSIONS" INDIA HAS EVER EXPERIENCED. CORONA VIRUS HAS SHOWN US THE HUGE INEQUALITY IN INDIA. A GREATER IMPACT ON WOMEN- WOMEN ARE ALREADY SUFFERING THE DEADLY IMPACT OF LOCKDOWNS AND QUARANTINES. THESE RESTRICTIONS ARE ESSENTIAL, BUT THEY INCREASE THE RISK OF VIOLENCE TOWARDS WOMEN TRAPPED WITH ABUSIVE PARTNERS. RECENT WEEKS HAVE SEEN AN ALARMING GLOBAL SURGE IN DOMESTIC VIOLENCE; THE LARGEST SUPPORT ORGANISATION IN THE U.K. REPORTED A 700% INCREASE IN CALLS. AT THE SAME TIME, SUPPORT SERVICES FOR WOMEN AT RISK FACE CUTS AND CLOSURES. HERE'S NO DEBATING THE FACT THAT LOCKDOWN DUE TO COVID-19 HAS TAKEN AWAY A LOT FROM US. WITH TWO MORE WEEKS THAT LIE AHEAD, HERE ARE 5 INSTANCES THAT WILL MAKE US LOOK AT THE BRIGHT SIDE OF HOW THE LOCKDOWN HAS AFFECTED US IN A POSITIVE WAY

1. FALL IN THE NO. OF ROAD ACCIDENTS. AN UNINTENDED RESULT OF THE LOCKDOWN HAS BEEN THE FALL IN ROAD ACCIDENTS. BECAUSE OF THERE BEING A FEW TO NO VEHICLES ON THE ROAD, THE ACCIDENTS HAVE CAME DOWN BY A GREAT DEAL. EX- KERALA WHICH ACCOUNTED FOR A LARGE SHARE OF ACCIDENTS RECORDED 105 DURING THE 21 DAY LOCKDOWN WHILE THIS NO. WAS 1787 IN THE SAME PERIOD IN 2019.
2. DECLINE IN CRIME RATES. BEING LOCKED AWAY IN OUR HOMES HAS RESULTED IN FEWER CRIMES TAKING PLACE IN THE WHOLE COUNTRY. THERE HAS BEEN A 42% DROP IN CRIME RATES SINCE MAY 15 2020.
3. SPITTING BAN IN PUBLIC PLACES. THIS WAS A LONG TIME COMING AND NOW, FINALLY THE GOVERNMENT HAS BANNED SPITTING IN PUBLIC PLACES UNDER THE DISASTER MANAGEMENT ACT DUE TO CORONAVIRUS.
4. AIR POLLUTION IN NORTH INDIA AT A 20-YEAR LOW: NASA. FACTORY PRODUCTION, MOTOR VEHICLE, BURNING OF FOSSIL FUELS ARE A FEW WAYS IN WHICH AEROSOL IS RELEASED INTO THE AIR, CONTRIBUTING HIGHLY TO AIR POLLUTION. DUE TO THE LOCKDOWN AEROSOL LEVELS HAVE DROPPED SIGNIFICANTLY.
5. WE HAVE BEEN REMINDED OF OUR BASIC HYGIENE AND SANITATION. WITH SANITISERS AND WASHING HANDS BECOMING THE NEW "COOL" NOW, OUR HABITS ARE AUTOMATICALLY BECOMING MORE HYGIENIC IN NATURE. THE PANDEMIC HAS TAKEN US ALL BACK TO ELEMENTARY SCHOOL AND IT'S TEACHING.
6. THE AIR IS CLEANER AND THE ENVIRONMENT IS GREENER.MANY INDUSTRIES AND OFFICES ARE CLOSED DUE TO THE LOCKDOWN THESE DAYS AND THEREFORE THE YAMUNA IS LOOKING CLEANER. THE STOPPAGE OF INDUSTRIAL POLLUTANTS AND INDUSTRIAL WASTE HAS DEFINITELY HAD A POSITIVE EFFECT ON WATER QUALITY

Impact of COVID-19 Pandemic on Global Environment and Society

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Abstract

The worldwide disruption caused by the COVID-19 pandemic has resulted in numerous impacts on the environment and society. The decline in planned travel has caused many regions to drop in air pollution. Half of the world population is under some form of lockdown due to COVID-19. Environmental pollution is reduced upto 30%. The COVID-19 pandemic is considered as the most crucial global health calamity of the century. It is a great challenge that the humankind faced since the 2nd World war. It has rapidly spread around the world , posing enormous health, economic, environmental and social challenges to the entire human population. Almost all the nations are struggling to slowdown the transmission of the disease by testing and treating patients quarantining suspected persons and maintaining complete or partial lockdown. COVID-19 has hightened wildlife conservation awareness. Pollution and greenhouse gas emissions have fallen across continents as countries try to contain the spread of the new coronavirus. As industries, transport networks and business have closed down, it has brought a sudden drop in carbon emission. Levels of pollution in New York have reduced by nearly 50% because of the measures to contain the virus. In Europe, satellite images show nitrogen dioxide emissions fading away over northern Italy. The COVID-19 pandemic has brought widespread job losses and threatened the livelihoods of millions. Economic activity has stalled and stock markets have tumbled. A global pandemic that is claiming people's life certainly should not be seen as a way of bringing about environmental change either. This is not the first time an epidemic has left its mark on atmospheric CO2 levels. Throughout history, the spread of disease has been linked to lower emissions even well before industrial age. The present research paper will trace the impact of COVID-19 on society and global environment.

KEYWORD : COVID-19, Pandemics, Global health, Prevention , Pollution, NO2 emissions.

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What are the Psychological Change in the society due to covid-19

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Abstract

As the corona virus (covid-19) pandemic sweeps across the world it is causing widespread concern, fear and stress, all of which are natural and normal reaction to the changing finds themselves in the issue facing each and every one of us is how we manage situation unfolding so rapidly in our lives and communities. Psychological impact of the covid-19 crisis on children's mental health. This is indeed on unprecedented time for all of us, especially for children who face an enormous disruption to their lives. Children are likely to be experiencing worry, anxiety and fear and this can include many not of opportunity to be with their friends have been closed due to covid-19. Psychological impact of this disease on the elderly. Regarding older people and also those with underlying health condition, having been identified as more vulnerable to covid-19, and to be told that you are very vulnerable, can be extremely frightening and very fear-inducing. The psychological impact for this population can include anxiety and feeling stressed or angry. Its impact can be particularly decline or dementia and some older people may already be loneliness which can worsen mental health on a positive note, there are many things that older people can initiate themselves or needed to protect their mental health at this time. These include many of the strategies that we are advocating across the entire population such as undertaking physical activity, keeping to routines or creating new ones and engaging in activities which given a sense of achievement. Maintaining social connection is also important. Some older people may be familiar with digital method and other may need guidance in how to use them. Once again, the mental health and psychosocial support services and other service that are relevant to this population must remain available at this time. The major psychological changes in the society due to covid-19 is also enormity of living in isolation, change in our daily lives, job lass, financial hardship and grief over the death of loved has the potential to affect the mental health and well being of many. Even in this time of physical distancing, it's critical to seek social support and connection with others. It's also important to know the signs of anxiety, panic attacks, depression and suicide so you can easily identify them not just among your family, friends and neighbours but for yourself.

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COVID-19

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Abstract

What is COVID-19 :- COVID-19 is the part of a family of viruses called coronaviruses, that infect both animals and people. This particular one originated in CHINA at the end of2019, in the city of WUHAN, which has 11 million residents. In this part two decades corona virus outbreaks have caused global concern, including one in 2003 with the severe acute respiratory in 2012 with the MIDDLE EAST RESPIRATORY SYNDROME (MERS). Structure of COVID -19:-COVID-19 is a spherical or pleomorphic enveloped particles containing single-stranded (positive-Sense) RNA associated of matrix protein. The envelope bears club-shaped glycoprotein projection. Some Coronaviruses also contain a HEM AGGLUTININ ESTERASE protein. HOW COVID-19 AFFECTS LUNGS:- once the virus enters the body, it can cause discomfort when it reaches the air passages on the outside of the lungs. The virus injures the lining of the passage ways, and the body responds with an inflammation, which in turn irritates the nerves in the lining. That is when an infected person coughs. Infection can be more severe if the virus goes past the lining of the airway and reaches the air Sacs at the end of the air passages called ALVEOLI; these Sacs are responsible for the exchange of gas in the lungs. If they get infected, the sacs respond with inflammatory fluids, which fill the air Sacs. That is what leads to Pneumonia- when the lungs ability to transfer oxygen is impaired and the infected person has difficulty breathing. When a person can not inhale enough oxygen and exhale enough Carbon-Da-Oxide, pneumonia can lead to death. HOW IT AFFECTS CANCER PATIENTS:- Patients with cancer are particularly susceptible to respiratory Pathogens and severe Pneumonia because they are at an immunosuppressive state due to malignancy and anti-tumour therapy" the researchers wrote it was found that within 14 days, anti-tumour Therapies were significantly associated with occurrence of severe clinical events in COVID-19 Infection. HOW IT AFFECTS DIABETES PATIENTS :- Diabetes is a Chronic metabolic condition that Causes high blood sugar levels. In general infection diseases such as COVID-19 are more serious in people with diabetes. One reason for this is that the immune system does not work as well in people with diabetes, which makes it harder for their body to fight the virus. Also the novel coronavirus may thrive in an environment of elevated blood glucose. Diabetes also keeps the body in a low-level State ofd inflammation, which makes its healing response to any infection slower. High blood sugar levels Combined with a Persistent State of inflammation makes it much more difficult for people with diabetes to recover form illnesses such as COVID-19. PREVENTIVE MEASURES:- STAY HOME, KEEP A SAFE DISTANCE-SOCIAL DISTANCE, WASH HAND OFTEN, OR AN ALCOHOL BASED HAND RUB, COVER YOUR FACE OR USE MASK.

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Implications of Coronavirus on Human beings and it's effect on social changes in livelihood.

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Abstract

Covid-19 is caused by SARS-CoV -2 (Virus) which traces its origin to Wuhan province in China.The symptoms are dry cough, sore throat, high fever and difficulty in breathing and it spreads via cough/sneeze (air), contaminated objects and contact with infected persons. Worldwide 58 lakhs covid cases and 3.58 lakh deaths has led to WHO declaring it a Pandemic. Covid-19 forced the Indian government to implement nationwide lockdown, thus halting the transportation and economy. This has adversely impacted daily wage labourers, informally employed people and the low earning private sector employees leading to livelihood crisis and homeward return of millions across the country. The governments in order to overcome the current crisis and to be future ready need to take various steps. Villages and cities should follow different developmental framework owing to their unique attributes and needs, making them self reliant hence reducing encases migration. Health infrastructure (Medical Colleges, Hospitals, Research Labs) should be developed under PPP (Public Private Partnership) ensuring both quantity and quality standards.Taking into account Japan's phenomenal success against covid-19 , Public should be made aware of their model. Physical Distancing, health and hygiene consciousness , mask use in public places must become a norm. The present crisis should be a wake up call for the government and the people to understand their faultiness and take mitigating steps to reduce the impact or prevent future uncertainties.

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IMPACT OF THE COVID – 19 PANDEMIC AS A GLOBAL ECONOMY ENVIRONMENTAL & EDUCATIONAL SYSTEM.

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Abstract

COVID – 19 Pandemic is considered as the most crucial global health calamity of the century & the greatest challenge that human kind faced since the 2nd world war. In December 2019, a new infections respiratory disease emerged in Wuhan, China & was named by the WHO as COVID – 19. The global disruption caused by the COVID – 19 Pandemic has many impacts on the environment & climate. It also affects educational system world-wide leading to the near total closures of schools, colleges, universities, lockdowns & reduced access to health care. According to report of WHO April 2020, the current out-break of COVID – 19 has affected over 2164111 people & killed more than 156298 people in more than 200 countries, throughout the world. Till now, there is no report of any clinically approved antiviral drugs or vaccines that affects against COVID – 19.

Keywords:- Pandemic, Infections, Respiratory disease, WHO, Drugs & Vaccines.

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THE STUDY OF CAUSATIVE AGENT, IT'S STRUCTURE, MODE OF INFECTIONS SYMPTOMS AND PREVENTIVE MEASURES OF COVID-19

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Abstract

COVID-19 is an infectious disease caused by newly discovered corona virus . Corona virus is flu- like virus. It causes illness called COVID-19 which can effect the lungs and airways.corona viruses 2 (SARS - CoV -2 firmly called 2019 - n CoV) which was first identified illness cases in Wuhan city Hubei province , china . It belongs to Betacorona virus originating from bats can infect mammals and serve respiratory disease in humans. Other viruses family are SARS corona viruses and MERS corona virus. The structure of covid -19 consists of the following : A spike protein (S) , hemagglutinin esterase dimer (HE), a membrane glycoprotein (M), and envelope protein (E), a nucleoclapid protein (N),and RNA. Corona viruses effect our lungs bcoz it is respiratory disease. It infect upper and lower part of respiratory tract.it travels down our airways. The lining can become irritated and inflammed . The infection can reach all the way down into our alveoli. As the swelling get worse , our

lungs fill with fluid and debris . The air sacs fill with mucus fluid and other cells that are trying to fight the infection. This can make it harder for your body to take oxygen . You may also trouble breathing to swap oxygen and carbon dioxide. In most critical cases our lungs need help from a machine called ventilator. The people who is suffering from cancer those have higher risk of complications in COVID-19 .This is because cancer and treatment of cancer can weaken immune system. The immune system protects the body against illness and infection caused by viruses like corona viruses .The cancer patients have a weak immune system which reduces their ability to fight these infection . Some treatment like chemotherapy can stop the bone marrow from making enough WBC. WBC is a part of immune system. The corona virus also effect corona patients. Diabetis is a chronic metabolic condition that causes high sugar levels. The immune system does not work as well in the people with diabetes which is harder for their body to fight the virus. Diabetes also keep the body in low level state of inflammation which makes its healing response of any infection slower. So more difficult to recover from illness such as COVID-19.

Prevention for covid's :- stay home , keep a safe distance , wash hand often , Don't touch your eyes, nose , or mouth . Cover your nose and mouth with your bent elbow when you cough or sneeze.

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IMPLICATIONS OF CORONAVIRUS ON HUMAN BEINGS AND ITS EFFECT ON SOCIAL CHANGES IN LIVELIHOOD

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Abstract

Humankind is going through a new and unprecedented experience with the rapidly spreading Covid-19 pandemic. We still do not know who 'patient zero', the first person to be infected and transmit it to others, was. The severity of this virus, which has caught the world by surprise, lies not only in the delay of laboratories in finding an effective and efficient vaccine, but also in the fact that the measures taken to counter it differ considerably from what was previously adopted to confront various acute crisis, whether health political, social or economic. There is no doubt that the Covid-19 pandemic will change the face of human society, but it forces us to ask some important questions. Will this change only affect the healthcare systems, or will it extend to consumption patterns, value systems, political regimes and legal systems, thus leading to the fall of the huge financial and economic empires? Will the major transformations the world will undergo be determined by how we recover from the effects of this situation? According to the World Health Organization, the problem does not lie in Covid-19 alone but rather in the fear, panic and terror caused by the spread of this virus, and amplified by the media, which has been presenting the situation as if it were the end of the world. Barring the measures adopted by China, where the virus originated, the methods used to manage the crisis around the world are somewhat similar. To some extent, China succeeded in curtailing the spread of the virus, thanks to the spirit of discipline in its people,

and due to its health infrastructure, the plethora of research centres and laboratories, and the ability to control the sources of information from the onset. Most other countries have wasted precious time after the first cases appeared, relying on legal and security control in dealing with the pandemic and information about it, rather than establishing a single entity to disseminate information backed by science. The current crisis is not of the pandemic alone. Rather, it is of the far-reaching consequences on human behaviour. Addressing these repercussions should not be limited to taking ad-hoc costly measures limited to the current situation but should prompt us to think about putting into place innovative measures and actions that go beyond the pandemic. Measures like imposing quarantines, enacting new laws to manage the pandemic, using modern tools for e-learning and telework, ensuring a minimum standard of living for all, granting loans, exemptions from paying water and gas bills and taxes, assisting the unemployed, and using the military to assist in security measures during the epidemic have cost countries billions of dollars. These are funds that could have been invested in infrastructure or other major projects, but instead have now been used to respond to the immediate needs of the people. The pandemic will radically change the modern world, leading to three likely outcomes. **The first outcome:** A new theory will be integrated within political science in the future. Indeed, traditional legitimacies in the systems of government, which are derived from ballot boxes, hereditary legitimacy or religion, are beginning to decline, leaving room for a new theory called the "theory of achievements". Since the Cultural Revolution of Mao Zedong in the 1960s, China has worked on this emerging legitimacy, as the Chinese Communist Party has distinguished itself from the rest of the Communist parties in the world. **The second outcome:** The traditional conflict between wrong information and right information will transform into a conflict between convincing information and unconvincing information, as legal arsenals and control tools are no longer effective in the spread and prevalence of correct information. The method of producing information and choosing its dissemination channel is becoming a means of turning it into convincing information, regardless of if it is true or false. **The third outcome:** The process of monitoring people will transition from external to internal control using smartphones. This is also what happened in China, to curb down on misinformation on Covid-19 during its early stages and as a preventive measure in the absence of a vaccine. These smart devices have become effective tools for measuring citizens' reactions at home to what is happening in their surroundings. **A coming human revolution:** Humankind is going through a humanitarian revolution, the kind that has occurred only thrice before: first, after the discovery of fire; second, with the advent of agriculture; and third, following the industrial revolution. The most prominent sign of this 'fourth revolution' is the predominance of new technology and the supremacy of modern means of communication, which have spawned a conflict between two major concepts of using the internet. The first can be described as social perception with a human connect, while the second is non-social perception, and can be termed as wild and unbridled. The humanitarian-minded perception is likely to win this conflict, as this human revolution is making its mark on our social existence and old behaviours. This will impact the current value system and will have political and economic implications. The post-epidemic stage will see the emergence of a new human being, whose daily behaviour and thinking will differ from what it was before the Covid-19 outbreak. The political, legal and economic systems will have to adapt to this new human being. Despite the timely importance of the current safety measures being put into action around the world, there is a great need for these to be integrated into a comprehensive post-pandemic thinking. In fact, we will find ourselves faced with a generation who thinks differently from the pre-pandemic generation. In light of the impact of Covid-19 on the individual and collective behaviours of society and State, and

people's continued thirst for information, it is necessary to keep in mind the post-pandemic world when it comes to decision-making. The Covid-19 storm will pass and mankind will survive, despite the loss of many lives. Humankind will soon live in a world that is very different from the one before the virus. However, the pandemic will succeed where the other movements of the 20th century have failed in their struggle to establish democracy and human rights, and preserve a safe environment for all.

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IMPACT OF CORONA VIRUS ON HUMAN BEINGS AND ITS EFFECT ON SOCIAL CHANGES IN LIVELIHOOD

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Abstract

The coronavirus is a new virus linked to the same family of virus. Coronavirus disease 2019 (COVID-19) is defined as caused by a novel coronavirus, now called severs acute respiratory syndrome coronavirus2(SARS-CoV-2) and Middle East Respiratory Syndrome(MERS-CoV).Which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. That originated from animals and then spread to peoples. Coronaviruses 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. *Human coronavirus are Alpha and Beta coronavirus*. Common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. The WHO declared COVID-19 a global pandemic._Coronavirus particles are generally spherical, club- or petal-shaped surface projections (the peplomers or spikes), which give an image resembling the solar corona on electron micrographs of infected tissues. The human coronaviruses may be spread via aerosol infection of the respiratory tract following inhalation of aerosol particles in air. Large particle sizes contaminate the upper airways, but particles of <5 microns size can move into the lower respiratory tract. Coughing, spitting, sneezing and talking generate aerosols made up of mucus droplets containing the virus.

The best way to protect yourself from COVID-19 -

1. Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing.
2. Use an alcohol-based hand sanitizer with at least 60% alcohol. Always wash hands with soap and water if hands are visibly dirty.
3. Avoid touching your eyes, nose, and mouth with unwashed hands.
4. Avoid close contact with people who are sick.

4 Stay home when you are sick.

5. Cover your cough or sneeze with a tissue, then throw the tissue in the trash and wash your hands. If you don't have a tissue, cough or sneeze into your elbow, rather than into your hands.
6. Clean and disinfect frequently touched objects and surfaces.

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GENOMIC STRUCTURE AND EFFECT OF COVID-19 IN HUMAN

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Abstract

Corona viruses (CoV) are a large family of viruses that causes illness ranging from the common cold to more severe diseases such as middle east Respiratory syndrome (MERS-CoV) and severe Acute Respiratory syndrome (SARS-CoV), A novel corona virus (n CoV) is a new strain that has not been previously identified in humans. Corona viruses are zoonotic. COVID-19 is a novel corona virus with an out break of unusual viral pneumonia. Based on it phylogenetic relationships and genomic structures the COVID-19 belongs to general Betacoronavirus, Human Betacoronavirus (SARS-CoV-2, SARS-CoV and MERS-CoV) have many similarities but also have difference in their genomic and phenotypic structure that can influence their pathogenic. COVID-19 is containing single stranded RNA associated with a nucleoprotein with in a capsid comprised of matrix protein. A typical CoV contains at least six ORFs in its genome. All the structural and accessory proteins are translated from the Sg 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 covid-19 pandemic is considered as the most crucial global health calamity of the century and the greatest challenge that the humankind. Till now there is no report of any clinically approved antiviral drugs or vaccine that are effect against covid-19.

Key word: Zonotic , Genomic , Phylogenetic

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BIOLOGICAL, SOCIAL AND GLOBAL IMPACT OF CORONAVIRUS (COVID-19) ON HUMAN

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Abstract

The COVID-19 pandemic is considered as the most crucial global health calamity of the century. In December 2019, Chinese health authorities reported an outbreak of pneumonia in Wuhan, Province of China and spread across china and beyond, resulting in catastrophe for humans. On February 2020, WHO officially named the disease caused by severe acute respiratory syndrome (SARS) coronavirus - 2 (SARS-CoV-2) as Coronavirus disease 2019 (COVID-19). The current outbreak of COVID -19 has affected over 5,824,134 people and killed more and 358,178 people in more than 200 countries throughout the world. Similar to its homologous virus, SARS-CoV, which caused SARS in thousands of people in 2003, SARS-CoV-2 might also be transmitted from the bats and cause similar symptoms through a similar mechanism. However, COVID-19 has lower severity and mortality than SARS but is much more transmissive and affects more elderly individuals than youth and more men than women. Till now there is no report of any clinically approved antiviral drugs or vaccines that are effective against COVID-19. It has affected society and global economy. Almost all the nations are struggling to slow down the transmission of the disease by testing and treating patients quarantining suspected persons through contact tracing, restricting large gatherings, maintaining complete or partial lock down etc. I hope that this paper describe the impact of COVID-19 on society and global environment and help in the understanding and eradication of disease.

Keywords : Pandemic, Pneumonia, Coronavirus, Outbreak, SARS-CoV-2, Catastrophe, Quarantine, Eradication .

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IMPACT OF CORONA VIRUS ON ORNAMENTAL FISH ENTREPRENEURS LIVELIHOOD

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Abstract

Ornamental fishes usually mean attractive colourful fishes with various characteristics which are kept as a pet in confined space of aquarium or garden pool for fun and fancy. Ornamental fish is a fragmented industry with a variety of middle sized and small local privately owned

companies it contribute the livelihood of a large section of economically weaker section of our society. It has estimated that about 1.5 million people are engaged in the world.As we know that COVID-19 (Corona Virus Disease 2019) pandemic has adversely affected every aspect of our life. Especially, weaker section of our society are most affected from this Pandemic. their livelihood is on the verge of starvation due to a long time of lockdown. A large number of people also badly affected who informally engaged in this industry because they have no any direct aid by the government in this time. In these days, no one can say when we overcome this situation. So we have to adopt new and innovative way to again establish the demand and supply chain. our govt. has also taken some initiatives that will help to doubling the income of those people (fishers, fish farmer and fish worker) by 2024 under PMMSY (Pradhan Mantri Matsya Sampada Yojna). The PMMSY was announced 20050 thousand Crore to bring up the new possibilities to uplift their livelihood.

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PRESENT AND FUTURE SCENARIO OF COVID-19: CAN THE PANDEMIC REALLY LAST 2 YEARS

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Abstract

The outbreak of corona virus diseases 2019 (COVID-19), which began in Wuhan, China in late 2019, has spread to 227 countries as of May 28, 2020 and has been officially declared a globe pandemic. There are 5,792,907 active cases and 357,480 deaths worldwide. The University of Minnesota's Centre for Infectious Disease Research and Policy (CIDRAP) report attributes the ease at which COVID-19 has spread to "a longer incubation period, more asymptomatic spread, and a higher reproductive number than the influenza virus which, in turn, means that the pandemic will remain for a longer period than expected, before the population can develop herd immunity. Covid -19 disease will become seasonal similar to other diseases caused by closely related viruses such as flu or common cold with higher transmission rates in colder months. Prof. Dr. Lothar Wieler, president, Robert Koch Institute, Berlin, Germany, announced in a press conference during March 2020, that the pandemic would likely last 2 years. He noted that by the end of the pandemic, approximately 60% to 70% of the world's population would have been infected with SARS-CoV-2, recovered, and developed immunity to COVID-19. The social distancing may need to continue until 2022 which is also suggested by Harvard T. H. Chan School of Public Health.

Keywords: COVID-19, Social Distance, Immunity

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THE STUDY OF CHANGE IN PHYSICOCHEMICAL CHARACTERISTICS OF WATER OF TELIA POKHAR IN BEGUSARAI DISTRICT AFTER COVID-19 LOCKDOWN

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Abstract

The Begusarai is an important district of Bihar. It is also known as industrial and financial capital of Bihar. It lies on the northern bank of river Ganges. Geographically, it is lies between latitude 25° 15' N and 25° 44' N and longitude 85° 45' E and 86° 45' E. It covers an area of 1918 square kilometre. Telia Pokhar is an important pond which is situated in the heart Nagar Nigam of Begusarai district. It covers an area of about two hectares. This water body harbours a number of fish species and a number of different animal and plant species. It receives rain water and effluents from laundry, cloth dyeing shop, home effluents, vehicle washing workshop, a number of different shops and some other sources. People of this locality used this pond as bathing place, washing of clothes, cattle washing and other purposes. This pond is also used for immersing of idols during Puja festivals. Due to excess of these human activities, water quality of this pond is badly affected. After the lockdown of COVID - 19 a number of human activities has stopped which badly affect water qualities. I examined different physicochemical characteristics of water such as dissolved O_2, free CO_2, pH, Alkalinity, Total hardness, temperature, transparency, electrical conductivity etc of water just starting of COVID – 19 lockdown and after two months of lockdown. Dissolved oxygen (DO) is increased from 5.5 ppm to 9 ppm. Free CO_2 decreased from 20 ppm to 12 ppm, pH increased from 6.5 to 7.2, transparency of water increases from 35 cm to 40 cm. Other parameters of water also changed positively that lead towards batter water quality. Thus I can say that COVID – 19 lockdown become a boon for aquatic organisms, our areal environment and also for human beings. COVID - 19 lockdown gives a lesson of self, social and environmental cleanness for healthy life.

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Impact of COVID-19 On Human Being and its effect on the environment

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Abstract

The ongoing corona virus pandemic has witnessed global political responses of unimaginable proportions.COVID 19 is the most crucial global health calamity of the century.In December 2019,a new infectious respiratory disease emerged in Wuhan,Hubei Province,China and was named by the World Health Organisation as COVID –19(Corona Virus Disease, 2019).A new class of corona virus known as SARS- COV-2(Severe Acute Respiratory Syndrome corona virus-2) has been found to be responsible for occurrence of this disease.WHO has declared the COVID 19pandemic on March,13,2020as a global health emergency.According to the report of WHO as of May,26,2020,the current outbreak of COVID – 19 has affected over 56,46,120people and killed more than 3,50,121people in 213countries throughout the world.In India,1,50,79people are affected by COVID-19 in which,82,172active cases, 4,344fatal cases and 64,277recovered cases.Recovered cases is 41.61% in ratio in India.Almost all the nations are struggling to slow down the transmission of the disease by testing and treating patients, quarantining(about 14 days) suspected person through contact tracing,restricting large gathering and maintaining complete or partial lockdown etc.This is major cause for concern, the ramping down of human activity appears to have had a positive impact on the environment.Industrial and transport emissions and effluents have reduced, and measurable data supports the clearing of pollutants in the atmosphere, soil, and water.This effect is also in contrast to carbon emissions,which shot up by 5%after the global financial crash over a decade ago,as a result of stimulus spending on fossil fuel use to kickstart the global economy. The month of May, which usually records peak carbon emissions due to the decomposition of leaves, has recorded what might be the lowest levels of pollutants in the air.In India, the results were similar too other countries, March22 was the *Janta Curfew* following which a significant dip in air pollution levels was measured across the country.Cities like Delhi,Bengaluru,Kolkata and Lucknow saw their average Air Quality Index staying within two digits. Water bodies have also been clearing and the rivers Yamuna and Ganga have seen significant improvement.According to the real-time water monitoring data of the Central Pollution Control Board(CPCB) the average water quality of 27points of the Ganga seen in recent days is suitable for propagation of wild life and fisheries.The takeaway from this is that once nations come to grips with the corona virus better implementations of the environmental transport and industry regulations should be considered a priority to ease the detrimental impacts of human activity on the environment.The environment for one bounced back faster than we thought it could.

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IMPLICATION OF CORONA VIRUS ON HUMAN BEINGS

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Abstract

On December 30, 2019, a cluster of patients with pneumonia of unknown aetiology was observed in Wuhan, China. On Jan. 7, 2020, a new coronavirus was initially referred to as "Noval coronavirus" (2019-nCOV) by WHO, but, on Feb 11, 2020, was given the official name "SARS-CoV-2" by the international committee on Taxonomy of viruses. Coronavirus disease (COVID 19) is an acute respiratory disease caused by a new strain of coronavirus that is SARS-CoV-2 virus.CO stands for corona, VI stands for virus, and D stands for disease 2019. Coronavirus are large family of viruses that are known to cause illness ranging from common cold to more severe diseases such as MERS and SARS. They are enveloped, single stranded, positive-sense RNA virus. It is a betacoronavirus that shares 79% of its genetic sequence with SARS-CoV. The virus contains four proteins i.e. spike, envelope, membrane, and nucleocapsid and single stranded RNA. The RNA genome consist of 29,900 nucleotides-larger than most other RNA viruses. One third of genome consists of genes for the four structural proteins and eight genes for accessary proteins that inhibit host defences. Most of the remainder of the genome consists of the replicase gene, which encodes two large polyproteins that are cleaved into 15 or 16 nonstructural proteins (NPS) that assist replicating and proof reading the viral genome. When virus gets in our body, it comes into contact with the mucous membranes that line your nose, mouth, and eyes. The virus enters a healthy cell and uses the cell to make new virus parts. It multiplies and the new viruses infect nearby cells. As the infection travels down the airways and alveolar sacs, your immune system fights back and lungs and airways swell and become inflamed. When infection is severe, the swelling gets worse and lungs fill with fluid, mucus and other cells that are trying to fight infection. In more severe case, the infection can damage the walls and lining of the air sacs and as our body tries to fight it, lungs become more inflamed and fill with fluid. This can make it harder for them to swap Oxygen and Carbon di oxide . You might have severe pneumonia or Acute Respiratory Syndrome (ARDS). In critical cases, a ventilator is used to do the job of lungs.

KEYWORDS: 2019-nCoV, SARS-CoV-2, Betacoronavirus, nonstructural proteins.

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Implication of corona virus on human being and its effect social change in livelihood.

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Abstract

The Current outbreak of covid_19 Corona virus infection among human in Wuhan (China) and it' Spreading around the globe is heavily impacting on the global health and mental health. The Corona virus pandemic has led to biggest number of employee globally bound to work remotely. The world most culture institutions had been indefinitely closed. The 2019_20 Corona virus pandemic had a sudden and substantial impact on the society and culture .The global health crisis and the uncertainly resulting from it profoundly affected organisation operation as well as individual - both employed and independent across the sector. Great Impact in the society covid -19 play the role in day to day life. All of sudden close all the thing in the world " lockdown" Due to Lockdown people has to suffer a lot ..but there is no option except lockdown to control covid 19 .The poor people, labours ,worker had suffers lot during the lockdown, they loss their job because factory ,company ,had closed ...due Covid-19 they have no money no place to stay ,no food to eat , ..in the pandemic situation government try to help those people are in trouble...by distributing food , money...many people help each other in critical situation without excepting anything in return. During the lockdown all the people have to stay at home only...start the work from home only. Since the buses and modes of transport are not available so the laboured they decided to walk to reach home by walk. All the culture program ,fair ,sports ,conference had been cancelled due covid 19 Lockdown is very important for India to fight against Corona virus and control and spread....

Keywords: pandemic, Organisation, Operation, Institutions, Remotely, spreading Employed, Global, Health Current lockdown, control stay, home, decided suffer .

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OCD and Coronavirus How to Cope with Obsessive Compulsive Disorder

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Abstract

COVID-19 may cause concern for many people, but someone with OCD may become 'intensely fearful of being affected by the pathogen'. People with OCD experience intrusive and distressing recurring thoughts, urges, or images which can seriously affect daily life. Expert advises sufferers to have a plan in place for when their anxiety reaches high levels. "There are many examples of obsessions but the common ones include fear of contamination, fear of causing harm and fear of things not being in order. Fear of contamination may lead someone to become obsessed with hand hygiene, general cleanliness and avoiding situations which they might perceive to be high-risk, such as travelling on public transport. People with OCD who have a history of excessive hand washing, cleaning and avoiding contamination may well be 'triggered' by news of a viral outbreak such as coronavirus. "The compulsion to wash or clean is likely to intensify, and for those who have successfully recovered from the compulsion to wash or clean, the symptoms may return." News reporting, and health warnings, would lead to concern "because there is no way of avoiding the facts. "However, instructions to wash hands for at least 20 seconds, to wash hands whenever one arrives home or at work and whenever one handles food will worry people affected with compulsive hand washing. "One of the defining features of OCD is that there is a tendency to doubt the completion of a compulsive behaviour. For example, if someone is affected by the fear that they have not locked the front door, they may have to check the door is locked again and again; they may even have to take a photograph of the engaged lock before they might reassure themselves that the door is locked. Similarly, in the current coronavirus outbreak, people with OCD may find it difficult to stop washing after 20 seconds; the added risks around the virus may leave the person feeling compelled to wash for longer, or they may feel compelled to repeat the hand washing cycle a specific number of times. There may also be doubt about the technique and the effectiveness of the washing. This may lead to the idea that the washing must be repeated; it may also lead people to go to excessive lengths such as using cleaning solutions such as bleach, or abrasive materials such as nailbrushes to satisfy the idea that the hands are still contaminated. The breakdown of the skin's natural oils will make hand washing painful and will affect the skin's ability to protect itself from infection." A number of ways sufferers can try to help themselves, and alleviate their symptoms. While selective serotonin repute inhibitors (SSRIs) and clomipramine are currently recommended as first-line agents for drug treatment of OCD, there are also many apps and breathing exercises, as well as relaxation techniques and mindfulness exercises, which can be useful. It advises sufferers to take a break from the news and ensure that while they follow all official advice, they don't go to excessive lengths which might be counter-productive.

Keyword:- ocd, symptoms, news triggering, cleaning, breathing exercise

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COVID-19: "A Journey from Bench to Bed"

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Abstract

Viral diseases epidemics have great impact on community health and economy since back. During past decades, many new viral outbreaks have been documented in different regions of the world by some well known viral disease like Nipah, Zika, Ebola, Dengue, MERS and SARS. Recently an outbreaks emerged by a newly SARS-CoV-2 causing disease COVID-19 is a severe public health problem in more than 213 countries reporting 5.7 M cases, 356 K deaths (till date) and large number of people at risk. The effect of this pandemic is being felt across all the sectors including all aspects of economy, education and never be ignored its influence at individual level. India is going into an unprecedented nation wise consecutive lockdown to control the exponential spread of this pandemic. Various organization like WHO, CDC constantly working to display the updates towards statistics of this pandemics and impacts among peoples. However, despite the apparent influence of their impact on public sector, the effect of four consecutive lockdown and the relation of spreading have remained unexplained. Furthermore, the frequency of spreading of COVID-19 with respect to four phase of lockdown particularly in Bihar has been poorly described. Herein, we have collected the data to investigate the number of cases, recoveries and deaths in India vs Bihar and compare its effect in different phases of lockdown. The case study shows that in Bihar the number of cases is only 0.6% of total cases of India in 1st phase of lockdown but the case rises abruptly to 4.5 fold in the 4th phase. However the case in 2nd and 3rd phase remains constant only increases 2.5 fold. Furthermore, the recovery and death rate analysis revealed that Bihar has lower rate in all the phases of lockdown when compared to country recovery and death rate. This study also showed that the 4th phase of lockdown in Bihar have a higher number of cases, low recovery rate and high date rate, this is accompanied by the migrant workers returning from work place to home town. Thus, the shifting of migrant workers proofs that it may have a role in spreading and rising rapidly of Covid-19 cases following an easing the restriction of lockdown by avoiding the social distancing. **Keywords:** Pandemic, Lockdown, COVID-19, Outbreaks, SARC-CoV-2

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Herbals: A hope to overcome from coronaviruses

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Abstract

Coronaviruses are a family of viruses that can cause illnesses such as the common cold, severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in China(wuhan).Now the entire world is dealing with an unprecedented crisis due to COVID-19. People need to become more conscious about their diet and health. It is essential to give your body excellent daily nutrition to keep your immune system healthy and strong. Nutritional deficiencies make it easier for us to be susceptible to viruses and bacteria.Many viruses lack preventive vaccines and efficient antiviral therapies, which are often be set by the generation of viral escape mutants. Thus, identifying novel antiviral drugs is of critical importance and natural products are an excellent source for such discoveries. In this review, we tried to summarise the antiviral effects reported for several natural products and herbal medicines.

Keywords: Antiviral,Natural product,Herbal medicine and coronaviruses

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IMPLICATION OF CORONA VIRUS ON HUMAN BEINGS AND ITS EFFECTS ON SOCIAL CHANGES IN LIVELIHOOD

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Abstract

The **COVID -19** Pandemic through Human to Human transmission has taken a toll of Millions of people and it has turned many Americans and Europeans cities which are known for their tourist attraction, into virtual graveyard. Even the super-power Find it hard to tackle it. Major tourist destination **(96%)** on the global map are closed, which impacted tourism like never before. Seeing the gravity of the situation all international borders, borders within the country and even border within the states are completely locked. A huge mass of people become unemployed, that effects all the sectors like tourism, communications, hospitality, industries, accommodation have been completely crash. Apart from economical impact it is devastating trans-cultural diffusion which leads to isolation of culture across the world. As per some media -reports, **COVID-19** once controlled can revive again which has been seen in CHINA. According to survey in cities like Delhi, Goa, Chennai, Kolkata, Mumbai the hotel occupancy rate dropped by **5% to 17%** also the revenue of the hotels declines by **13% to 29%** from January to March. This is our responsibility to maintain the safety and

Government are also preparing proper Guidelines by the consultation with the State. The reasonable steps to be followed by everyone:- Social distancing, Wearing mask.
Keeping our home, hotels, hospitals etc clean and Sanitise. Aarogya Setu App is facilitating better tracking in India should be mandatory in phones. We all need to unite together to support our communities, healthcare workers, NGO'S, doctors and Government organisations who works for us .Fascinatingly ,Digital transformation is taking an improve as never before in the sectors like online education, IT security are Observing significant growth. As said by "ALBERT EINSTEIN -In the midst of every crisis, lies great Opportunity. So, let's make this opportunity into a great achievement."
KEYWORDS: COVID -19, Pandemic, Virtual graveyard.

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SOCIO-PSYCHOLOGICAL EFFECTS AND CHANGES DUE TO COVID 19 AND ITS OBJECT OF VARIATION IN ENVIRONMENT

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Abstract

The perceived outcome of the analytical data and survey have positive and negative indirect effects. The research claims towards the tri-directional concentration of effects due to covid-19. While these steps may be critical to mitigate to the understanding of the morphosis of the contagious disease widely in the social perspective guided by the vehement psychological changes in society. The realm of environmental sector due to the virus upliftment and spread has widely been discussed but with the proper tenet of multidimensional point of view. The epitome of collateral damage in the socio-psychological dominion with the purview of the novel social contract. The adversities on the procedural changes of the world society has been outlined with the insuring structure, continuity of existence and socialization to mitigate approaches of dimensions towards the socio-psychological emission of the world due to the historical outbreak of this inexorable pandemic. All the major artefacts of factual informations and their implications have been widely arranged in context of the procedural chain of statistics and curves of reports generated through the snoring cases of the pandemic. The prolonged exposure of the effects and their detrimental perspectives have been analysed in terms of socio-psychological and behavioural determinants the world is at present facing.

Keywords :- collateral damage, socio-psychological emission, detrimental perspectives, socio-psychological and behavioural determinants

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COVID-19 AND THE INDIAN DIASPORA

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Abstract

Indian Diaspora is a term used to define people who have migrated from India to different parts of the world. Indians have a long history of migrating to different parts of the world. With the incorporation of the British Empire in India, Indians were forced to migrate to British colonies all over the world for plantations from as early as the 1800s. Even after Independence, Indians have continued to migrate to different parts of the world in search of jobs, livelihood, education, family unification and for a better lifestyle. Indians constitute the largest Diaspora population in the world. According to a report published by the International Organisation for Migration in its 'Global Migration Report 2020', the number of Indian migrants abroad is 17.5 million strong. As per the Indian MEA website, the total number of Indians abroad when we include NRIs and PIOs is 32 million. With such a large Diaspora, they also contribute towards the Indian economy by sending remittances to India up to the tune of USD 78.6 billion. The remittances sent by the Indian migrants is more than the FPI inflows and FDI combined. The world is currently witnessing a large economic and humanitarian crisis since World War II caused due to Corona virus Pandemic or COVID-19 Pandemic. This pandemic has caused countries to shut their borders forcing the large migrant population to return to their home countries. The remittances sent by the migrants will be affected greatly which in turn will impact the local Indian economy. These remittances are at great risk which will further create additional challenges for the Indian economy. This paper will discuss the impact; the sudden reduction of remittances will cause to the Indian Economy. This paper also discusses the problems faced by the Indians living abroad including Persons of Indian origin with closed borders and COVID-19. The study will be largely using qualitative research methods.

Keywords: Diaspora, NRI, PIO, FPI, Remittances, Corona virus, Economy.

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INDIA'S FEMALE WORKFORCE & WOMEN EMPOWERMENT IN TIMES OF COVID-19

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Abstract

According to the WHO, Coronaviruses are a large family of viruses which may cause illness in animals or humans. COVID-19 is an infectious disease caused by the most recently discovered coronavirus. Covid-19 has been spread into many countries of the world and thus has turned itself into a pandemic. This virus spreads very quickly and has proved to be life-

threatening. As of May 28 2020, more than 5 million persons all over the world have been infected and 355 thousand people have succumbed to this virus. As per the official data more than 158000 people in India have been infected. This pandemic has forced Governments all around to enforce complete Lockdown barring essential industries. The economy is severely hit due to this pandemic. Many rating agencies of the world have forecasted a contraction of up to 5% for the Indian economy in this fiscal year. Many formal and informal sectors have been forced to cut jobs due to complete slowdown in the economy. Women workforce in India will be severely hit. It is expected that most sectors will have to work with social distancing in force and women will be most affected in the unorganised sector as their participation in this sector is much more than men. We were still afar from gender equality in jobs. Now, this pandemic may result in more women being laid off in formal sector as well as many industries still see women less productive and more costly post the Maternity Benefit (Amendment) Act, 2017 which entitles women with 26 weeks of paid leave and should by completely borne by the employer. Women already had the burden of running a household with their jobs and now with schools and daycares closed, this burden just got heavier. Rural Women need to prepare themselves for the opportunity when they arrive and use this time to gain a skill which may help them with self-employment if need be. This paper discusses ways to improve women participation in the workforce and various self-employment ventures. This paper also discusses ways through which a society can help women during this pandemic. The role of SHGs has become very important and this paper will also discuss ways the SHGs can play in empowering women during this time.

Keywords: Coronavirus, Government, Lockdown, Economy, Women, Employment.

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Environment verses covid-19 and Impact Analysis

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Abstract

Corona viruses are a type of virus there are many kinds and same causes disease. A newly identified types has caused a recent outbreak of respiratory illness now called covoid-19 AS of now with several researches it comes to know that the new corona viruses is spread through droplets released into the air when infected person cough or sneezes, the droplets generally do not travels more than a few feet and they fall to the ground in a few seconds. This is why social and physical distancing is effective in preventing the spread. social distancing say isolation and travel restriction force a decrease in the work force a overall economies sectors and caused many jobs to be lost school have closed down and the need of commodities and many other products has decreased in contracts the need for medical supplies has significantly increased. Economic turn oil associated with the covid-19 pandemic has had wide ranging and severe impacts upon financial market inducing stocks,

bond. The covid-19 that first come to light in Wuhan the capital of Hubei province in central China in December 2019 become a global pandemic in no time and by march 2020 it had effected the lives and livelihood of the entire world population as of 15th may the world wide positive cores were close to 4.5 millions and the total death coursed by pandemic were close to 300000 significantly the most severally effected countries were the Us, Spain, Russia, The Uk, Italy, Brazil, Germany, Turkey, France, Iran and China, As the world debate and discussed the origin, Impact and fall out of the pandemic, There is no doubt that the post covid-19 world will be different, Though the countries are under, The completion for limited resources might see growing geo political and geo economic struggles and rivalries. In the middle east the covid-19 could not have come to worse time the time the region is yet to recovers from the tumults of political instability coursed by Arab spring protest which began in December 2010 in Tunisia pushing many regional counties into turmoil and gave raise to the Islamic states (ISIS). The larger problem are the enduring economic impact the pandemic is likely to here upon the region and how that might redline the middle caster polities. Besides being the public health threat the pandemic is a regional strategic challenge that demands urgent and collective response How were economics strains and geopolitical competition have limits the ability of the leader to take a more cooperative approach. It would be appropriate for regional leader to think about managing and fighting the pandemic and its fallouts. If not collectively at least with some coordination without and effective crisis management mechanism the region sates at an uncertain future as NASA and BSA have been maintaining how the nitrogen dioxide gave dropped significant during the initial Chinese phase of the covid-19 pandemic In venice the water in the canal cleared and Experienced greater water flow and visibility of the fish. The OECD points out that business in many countries have become highly indebted were the very low cents of borrowing and accommodative monetary policy have contra but-eel to unpredicted corporate dept issuance consequently corporate debt study at very high level in many G-20 countries. The worldwide disruption caused by covid-19 pandemic has resulted in numerous impact on the environment and the climate. The sever decline in planned travel has caused many region to experience a drop in air pollution reduced air pollution. and reduced climate change and covid-19 risk but it is not yet clear which types of air pollution (If any) are common risks to both climate change and covid-19

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SOCIO-BIOLOGICAL IMPACT OF COVID-19 ON THE ENVIRONMENT

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Abstract

The COVID-19 pandemic has overwhelmed the entire world. India is facing severe effect of this epidemic. It is rapidly spreading all over the India. This mammoth pandemic has affected

all the human being not only socio-biologically but also psychologically and economically as well.

SOCIAL IMPACT : This global epidemic has badly affected the human beings. We can see, each and every sector of people have become victims of the said disease whether they are students, traders, businessmen or labourers. Due to this we are losing our basic nature of humanity. To control this dangerous virus, our government has taken a strong decision of lockdown which was supported by the masses. Nearly, most of the citizens showed sensibility whereas the rest of them showed lack of responsibility and became a threat for others. On the other hand this virus has also something good within it. Our mother nature is healing because of we humans are imprisoned in this lockdown and not exploiting it. After decades of times we are breathing fresh oxygen. Rivers and seas are getting cleaned which is good for aquatic and marine animals. And the most important OZONE LAYER is healing again. Pollution is reduced. On the whole this pandemic has proved to be a boon for nature. But again for human and some pet and stray animals, it is still a curse. We are forced to cut from the society and fearful to help others. Humans are known for their civilized behaviour but because of this, we are losing our basic genes of being a human, like we can see those who have nothing left with them are fighting over a mere packet of food only to survive. This epidemic has taught to live life in less.

BIOLOGICAL IMPACT : This corona virus is so strong that it has made all the human being biologically helpless. It is attacking on our respiratory system making breathing difficult. It's genetic feature enables these virus to quickly and effectively take over host cells and rapidly expand. The major biological impact on our daily lives are : The rapid spread of this virus over the past few months. The Infant mortality rate and the mortality rate of people of higher age because of this disease which has threatened the whole global health care system. The people who are already suffering from auto immune disease are at high risk during this pandemic. The immense reservoir of carriers of the disease. The situation is getting worse day by day as it is estimated that there could be over seven and a half millions carrier worldwide now which is a threat for surviving. And no wonder why this pandemic has brought the world on it's knees. It is said that this covid-19 is a result, showing that we humans have exploited the nature too much and now time has changed, the nature is taking revenge. The only way to get rid of this virus is wearing masks, washing hands, using sanitizer as well as to keep our life simple and natural, not luxurious. Famous economist E.F. Schumacher has said 'small is beautiful'. So come to nature, come to simplicity.

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THE IMPACT OF THE COVID-19 PANDEMIC ON FISHERIES SECTOR AND AQUATIC ENVIRONMENT.

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Abstract

As the COVID-19 pandemic continues to spread globally, many countries are putting in place unprecedented lockdown measures designed to contain its impact on public health. However, such measures are having significant impacts on other domains of human activity, including food and nutrition security, jobs, livelihoods, gender equality, and potential social unrest. Fish and other aquatic foods are a key part of our global food systems and a highly nutritious food group of major social, cultural and economic significance. Disruptions in supply chains for fish and aquatic foods are already happening due to disruptions in transportation, trade, and labour. Falling production from reduced fishing efforts and delayed stocking of aquaculture systems will lead to lower supplies, access, and consumption of these foods. Decreased consumer demand and increased transaction costs will have a knock-on effect that will push the price of fish and aquatic foods up and make them less affordable for poor consumers. Many people employed in these supply chains, such as fish vendors, processors, suppliers or transport workers will lose their jobs. The nationwide lockdown that brought 1.3 billion people to a stop has apparently caused positive changes in the environment, at least temporarily. Skies are clearer and river water seems cleaner.

COVID-19's gift to Ganga: The Ganga enters Uttar Pradesh in Bijnor district and passes through major districts such as Meerut, Bulandshahar, Aligarh, Kanpur, Allahabad, Varanasi, among others. The nationwide lockdown was imposed on March 25, 2020, and within 10 days, signs of improvement in water quality started surfacing. According to the real-time water monitoring data of the CPCB, out of the 36 monitoring units placed at various points of the Ganga river, the water quality around 27 points was found suitable for bathing and propagation of wildlife and fisheries. This paper describes the impact of COVID-19 on society and global environment, and the possible ways in which the disease can be controlled has also been discussed therein.

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COVID-19: Good Bad and Ugly

Dr. Kiran Kumari
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Abstract

World was unaware that 2020 will bring unimaginable tragedy for every one of US. Story began to unfold, when people from Wuhan city reported to suffer from pneumonia due to unknown reason. Most of infected individuals share a few common symptoms such as pneumonia, tiredness, headache, fever or shortness of breath. Very soon many people in Wuhan city got infected. Some of them got mild infection some of them experience sever symptom such as shortness of breath and eventually death. Very first death was reported on in Wuhan. Deceased was doctor and first person to educate others about spread of new diseases in Wuhan city. Eventually Wuhan city was lockdown to prevent the spread of infection. By the time authority of Wuhan city decided to lockdown, many people had already travelled from Wuhan to many other parts of world, carrying COVID-19 without knowing and vice versa. At alter stage, world has witnessed the large number of death due to COVID-19 in Italy, Iran, USA. Many of country adopted the complete lockdown to break the chain of COVID-19 infection. Social distancing is new normal in today world, credit goes to COVID-19. COVID-19 has impacted all aspect of our life. It has impacted our lifestyle, economy, pattern of education and healthcare. Most of activities are happening online. COVID-19 imparted an economic and emotional burden to almost every individual on this earth. Unfortunate, there is no anti-viral therapy is available to treat COVID-19. Since, it is virus, anti-viral agents which generally used to treat other viral infection such as HIV being tested. Nonetheless, none of agents have been proven effective against COVID-19. Remarkably, few vaccine candidates have been shown efficacious in animal study. However, these molecules yet to be tested on humans. Almost whole world undergone lockdown for couple of months. Lockdown impacted our economy adversely. As we know every coin has two aspect : Good and bad. Similarly, lockdown also has some positive aspect. Due to extended lockdown pollution levels gone down, sky looks more cleaner, carbon emission reduced. Collectively, all these things brought the pollution levels down. Hence, based on above mentioned fact, my talk would be covering Good Bad and ugly aspect of COVID-19.

Key words : COVID-19, virus, anti-viral, Social distancing, lockdown.

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Impact of COVID-19 in People with Diabetes

Dr. Puja Verma

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Abstract

We are facing a global health crisis that is killing people, spreading human suffering and upending people's lives. The COVID-19 infection is a double challenge for diabetic patients. Diabetes is a risk factor for hospitalisation and mortality of the COVID-19 infection. In study of 173 patients with severe disease, 16.2% had diabetes, and in further study of 140 hospitalised patients, 12% had diabetes. Mortality seems to be about threefold higher in diabetic patient in compare to general mortality of COVID-19 in China. It is a fact that people with diabetes are at increased risk of infections including influenza and secondary bacterial pneumonia. Diabetic patients have impaired immune-response in relation to cytokine profile, T-cell and macrophage activation. Poor Glycemic control impairs several aspects of the immune response to viral infection and also to the potential bacterial secondary infection in the lungs. It is likely that many of the patients with diabetes in China have been in poor metabolic control when infected by COVID-19. Many patients with type 2 diabetes are obese and obesity is also a risk factor for severe infection. Specially, metabolic active abdominal obesity is associated with higher risk. The abnormal secretion of adipokines and cytokines like TNF-alfa and interferon characterise a chronic low-grade in abdominal obesity and may induce an impaired immune-response. People with severe abdominal obesity also have respiratory problems, with reduced ventilation of the basal lung sections increasing the risk of pneumonia as well as reduced oxygen saturation of blood. Diabetic complications such as diabetic kidney disease and ischemic heart disease may complicate the situation for people with diabetes, making them frailer and further increasing the severity of COVID-19 disease and the need for care such as acute dialysis. Some findings indicate that COVID-19 could cause acute cardiac injury with heart failure, leading to deterioration of circulation. Diabetes and hypertension often treated with angiotensin-converting enzymes (ACE) inhibitors. Corona virus binds to target cells through angiotensin-converting enzyme 2 (ACE2), which expressed in the epithelial cells in the lungs, blood vessels and in the intestine. In patients treated with ACE and angiotensin II receptor blockers, expression of ACE2 is increased. Therefore, it has been suggested that ACE2 expression may be increased in these two groups of patients with hypertension and diabetes, which could facilitate infection with COVID-19 and increase the risk of severe disease and fatality.

Keywords :- Mortality, immune-response, glycemic control, angiotensin, cytokine.

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Impact of the COVID-19 Pandemic on society

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Abstract

While corona virus crisis is destroying the economy globally on the other hand, it is testing our humanity. No crisis in recent history has shaken the world the way corona virus has. A human being is a social animal but these days humans are adopting social distance to avoid corona. This epidemic have changed our daily activities. As cities, states, and countries are locking down and limiting economic activity to the bare minimum, the costs of this crisis to humans, businesses, and societies are just unfolding. Work culture, workplace arrangement is changing as employees of nearly all companies are working from home.

Keywords: COVID-19, corona virus, social distance.

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कोरोनावायरस के आर्थिक प्रभाव

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Abstract

कोरोनावायरस ने दुनिया भर के कारोबार को चौपट कर दिया है। भारत में भी कोरोनावायरस और इसे काबू में रखने के लिए लगाए गए लॉकडाउन से व्यापार बहुत बुरी तरह प्रभावित हो रहा है। छोटे-बड़े सभी कारोबार ठप्प हो गये हैं। जिसका सीधा असर भारतीय अर्थव्यवस्था पर पड़ रहा है। हालात ये हैं की विभिन सेक्टरों में करोड़ों लोगों का रोजगार दांव पर लग गया है। भारत के निर्यात सेक्टर में 1.5 करोड़ लोगों के रोजगार खतरे में हैं। IMF सहित कई रेटिंग एजेंसियां भारत की विकास दर के लिए 1.9 फीसदी का अनुमान लगा रही है। GDP को स्थिर का अनुमान है। भारत के सामने मांग व पूर्ति का संकट गहरा रहा है, इनदोनों में अंतर बढ़ना भारत की अर्थव्यवस्था के लिए बिलकुल भी शुभ संकेत नहीं है। मौजूदा स्थिति कितने दिन या समय तक स्थिर होगी इस बारे कुछ नहीं कहा जा सकता। प्रत्येक क्षेत्र में निराशा, अनिश्चितता व अन्धकार की स्थिति व्याप्त है। लोगों के भविष्य से लेकर वर्तमान तक अपने जीवन हेतु अनिश्चिता का माहौल व्याप्त है। कुछ विशेषकों, अर्थशास्त्रियों और नीति निर्माताओं के अनुसार कुछ बिंदुओं को रेखांकित किया गया है, जो इस प्रभाव को स्पष्ट करने में सहायक है। जैसे- आर्थिक गतिविधियों का नुकसान , लोगों को नौकरी खोने के कारण आय का नुकसान,वैश्विकबंद के कारण निर्यात गिरावट, उत्पादन व्यवधान, GDP में कमी, कच्चे तेल की वैश्विक कीमत में तेज गिरावट व मुद्रास्फीति पर दबाव बढ़ने की उम्मीद है।

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IMPACT OF CORONA VIRUS ON HUMAN BEING AND IT'S EFFECT ON SOCIAL CHANGES IN LIVELIHOOD

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Abstract

COVID-19 simply described by it's full name "CORONA VIRUS DISEASE " which is found in the year 2019 that is why it is called COVID-19. Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases. It is a respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes, or through droplets of Saliva or discharge from the nose. A person can possibly get COVID-19 by touching a surface or an object that has the virus on it and then touching his own mouth, nose, or eyes. To protect yourself clean your hands frequently with an alcohol based hand rub or wash them with soap and water. The virus can cause a lung of symptoms, from ranging from mild illness to pneumonia symptom of the disease are fever, cough, sore throat and headache. Wear a mask if you are coughing or sneezing. Mask are effective only when use in combination with frequent hand cleaning with alcohol based hand wash. If you wear a mask then you must know how to use it and dispose of it properly. If you are healthy, you only need to wear a mask if you are taking care of a person with suspected 2019-nCOV infect.

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विश्व और भारत के समक्ष महामारी के कारण व्याप्त आर्थिक, राजनितिक और सामाजिक चुनौतियॉ

SWATI RAI

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LNMU, DARBHANGA

महामारी आरम्भ से ही मानव जाति के लिए चुनौतीपूर्ण रही है। आरंभिक समय मे जब चिकित्सा विज्ञान प्रौद्योगिकी इतनी संपन्न नहीं थी, तब महामारी का फैलना मानवता के विनाश का माध्यम था, परन्तु जैसे-जैसे मनुष्य ने प्रगति के पथ पर बढ़ना शुरू किया वैसे-वैसे उसने इन जानलेवा जीवाणुओं और विषाणुओं पर अध्ययन करने की क्षमता का भी विकास कर लिया तथा मानव सभ्यता के विकास से लेकर अब तक अनेक महामारियों को नियंत्रित भी किया । यह मनुष्यो की सबसे बड़ी प्रगति थी क्योंकि ब्रह्माण्ड को समझना या पृथ्वी की संरचना को समझने इन सभी से अधिक महत्वपूर्ण है, मनुष्य की शारीरिक संरचना को समझाना एवं इस पर घातक सिद्ध होने वाले सूक्षम जीवों का अध्ययन करना एवं मानवता को बचाना । भारत 1.35 अरब की आबादी वाला देश है, जिसकी 2.9 ट्रिलियन वाला अर्थव्यवस्था है । इस महामारी (करोना) ने जहाँ सारे विश्व की चिकित्सीय दुर्दशा की पोल खोल दी है, वही भारत में इसने चिकित्सीय दुर्दशा के साथ-साथ आर्थिक नीतियों के क्रियान्वयन का भी भंडाफोड़ कर दिया है । असंगठित क्षेत्र में कार्य करने वाला मजदूर, आधारभूत आवश्कयताओं के अभाव में गाँव को छोड़ कर अपने और अपने परिवार के जीवन निर्वाह के लिए शहरों की ओर जिस आशा से निकला था, वह भी आज इस महामारी के कारण निराशा में बदल गई । भोजन, पानी और आवास के अभाव में वो एक बार फिर शहरों से गाँव तक की दूरी पैदल ही मापने के लिए मजबूर हो गए है । महिलाएं, बच्चें एवं बुजुर्ग इस महामारी से उपजे मानसिक तनाव से जूझ रहे है । बच्चो का विदयालय बंद होने से वे ऑनलाइन पढ़ाई में ज्यादा समय स्क्रीन के आगे बिता रहे है । महिलाये घरेलु हिंसा एवं बुजुर्ग एकाकीपन के शिकार बन रहे है ।

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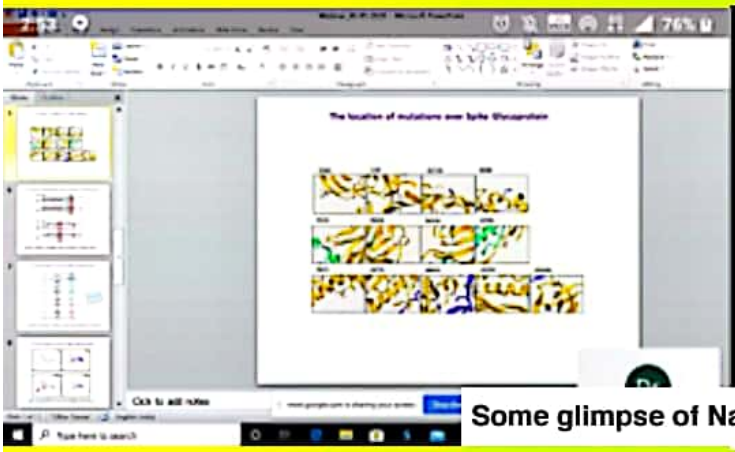

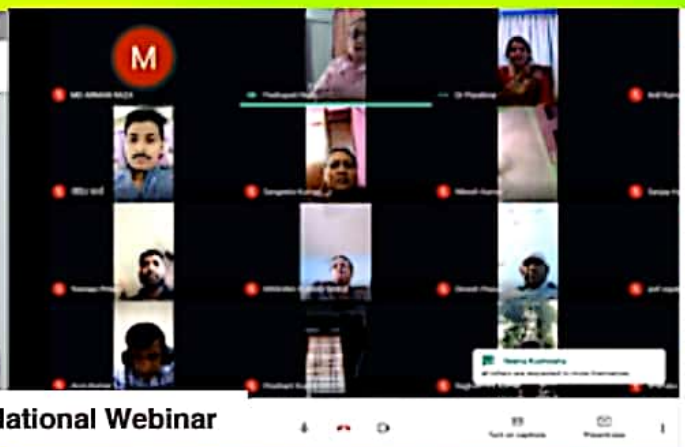

Some glimpse of National Webinar