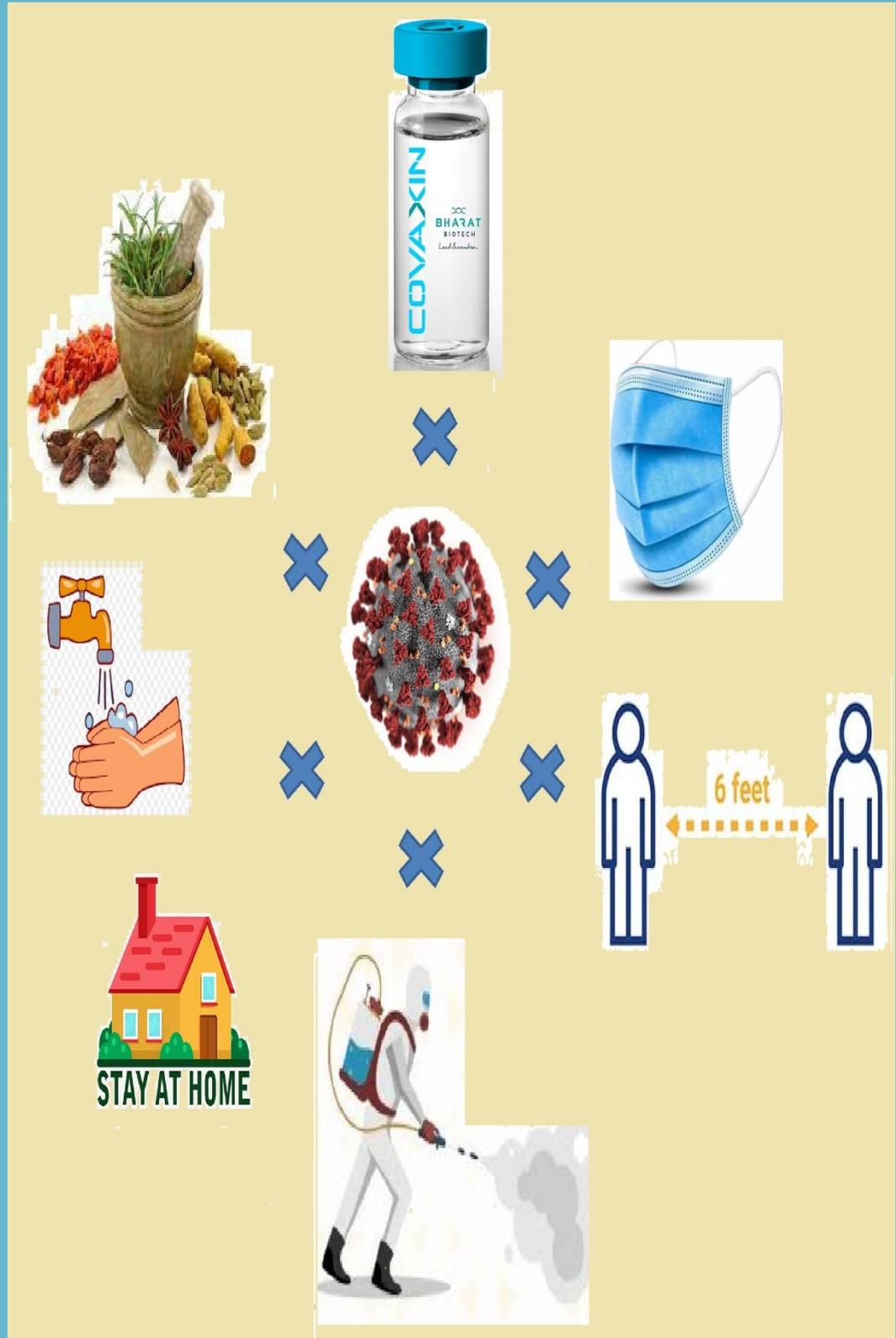


Issue No.-
13
July - Dec, 2020



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*DEPARTMENT OF CENTRAL RESEARCH
& INNOVATION*

*2ND Floor, Department of Pharmacy Building,
Sumandeep Vidyapeeth Deemed to be University
(SVDU)*

Piparia, Vadodara - 391760 GUJARAT

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8. *Acknowledgements*

Newsletter Release by Research Advisor



Dear all readers and our staff of Sumandeep Vidyapeeth, we feel it is most appropriate and crucial time to release the 13th issue of this Research Newsletter. The theme of the present issue is “COVID -19 Prevention and Safety Measures”.

In this issue, we present information about how to deal, manage and prevent the occurrence of new WHO recognised worldwide disease Coronavirus Disease 2019 (COVID-19). The world is facing huge crisis in terms of human loss.

The social, economic and environmental changes have driven even the superpower nations into new thought process of improving healthcare conditions, to devise new safety measures and preventive strategies to combat COVID-19. With constantly emerging challenges, our team of doctors are ready to handle every situation. I wish these COVID-19 warriors all the best for managing and handling this ever alarming crisis. I hope this newsletter will bring new insights into this disease so that appropriate preventive measures and worthy new information for producing new innovations and research in the healthcare.

- **Dr. Usha Shah**
Research Advisor. SVDU

From the Desk of Research Director



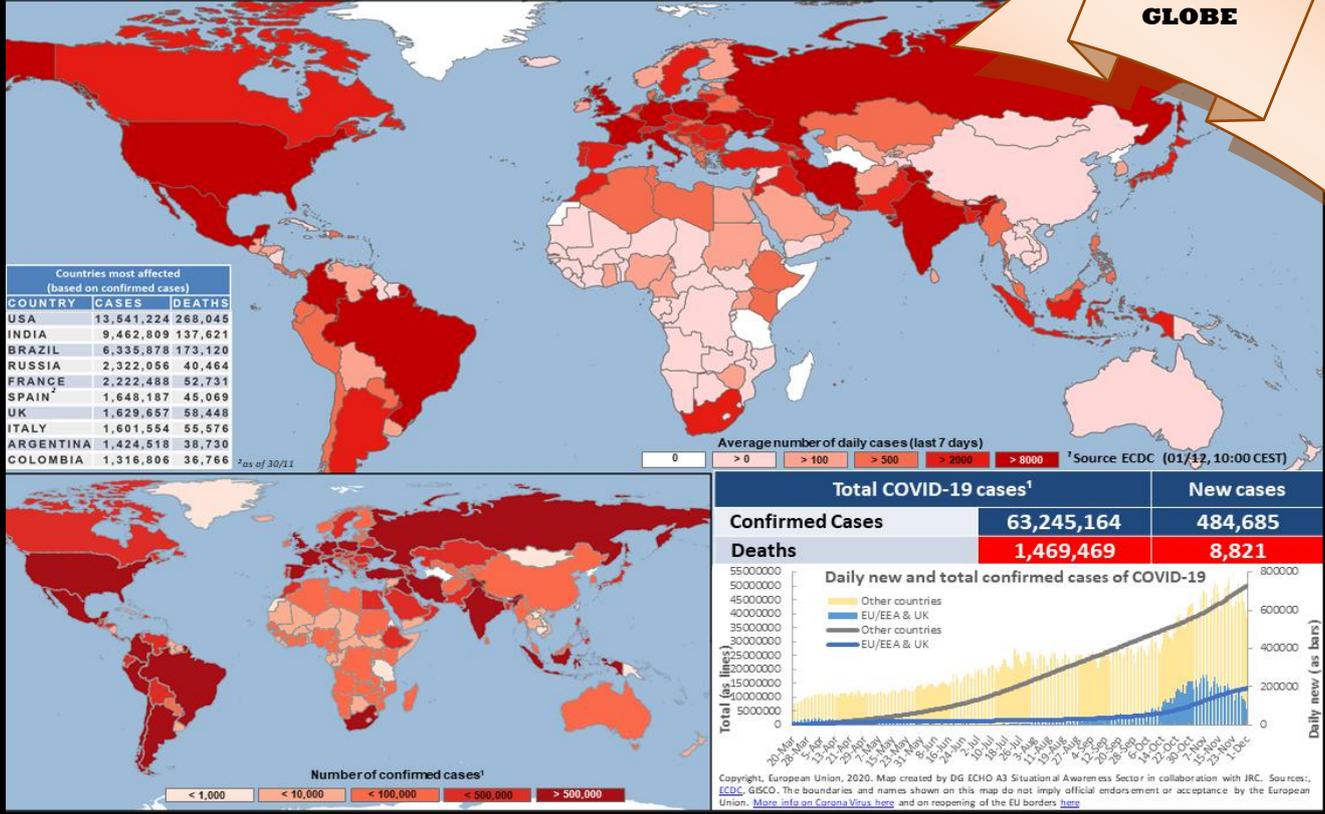
First of all, we wish all the readers, SVDU staff & their families, a safe, fit, happy and healthy life forever. To fulfil the same wish, we present you the 13th issue of this newsletter, which is an attempt to provide you all the safety and preventive or prophylactic measures against COVID-19 to be adopted for living a healthy and safe life ahead.

This newsletter provides an update of current situation around the Globe, a glimpse of indigenous and other COVID-19 Vaccine Developments and an important interview of Dr. Arti Shah, HOD, Respiratory Medicine regarding COVID-19: Safety Measures & Concerns. An interesting session included is Ayurveda as New Hope for rescue: Prophylactic Guidelines by Ayush Department, Govt. of India for all. Later on, a brief on updates of Research Activities in Department of Innovation and Research has been covered.

I hope this will aid in research in all the constituent institutes of Sumandeep Vidyapeeth with active participation of all the researchers and faculty members to develop better solutions, therapeutic interventions and vaccine designs for benefit of mankind. Once again, we believe that the students, faculty and clinicians should work together for designing and submission of research proposals leading to development of products and innovations. Your kind suggestions are always welcome to make this communication more meaningful.

- **Dr. Avinash K. Seth**
Director Research

AROUND THE GLOBE



10 Countries

with highest number of COVID-19 infections

Jul 17, 2020
10.30 AM

Ranks	Countries	Cases	Recovered	Deaths
1	UNITED STATES	3,574,371	1,090,645	138,358
2	BRAZIL	2,012,151	1,397,531	76,688
3	INDIA	1,005,637	636,602	25,609
4	RUSSIA	751,612	530,801	11,920
5	PERU	341,586	230,994	12,615
6	SOUTH AFRICA	324,221	165,591	4,669
7	MEXICO	324,041	257,681	37,574
8	CHILE	323,698	295,301	7,290
9	UNITED KINGDOM	294,114	1,403	45,204
10	IRAN	267,061	230,608	13,608

Data sources : WHO, CDC, ECDC, NHC and DXY : Johns Hopkins CSSE, worldometer, DCD

Stay home and stay informed with Thai PBS World.
 © covid19.thaipbs.or.th

Thai PBS

COVID-19 Tracker

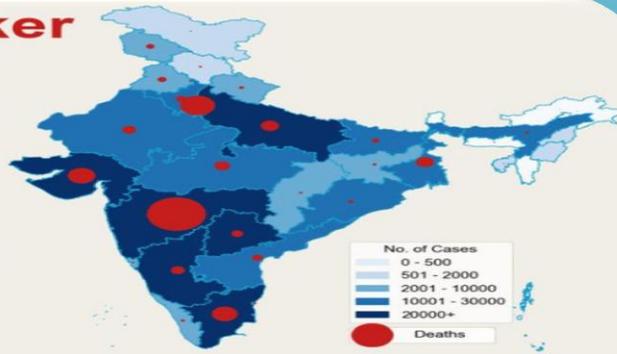
As on 10th July, till 8 AM

Confirmed Cases 793,802 (▲ 26,506)

Active Cases 276,685 (▲ 6,896)

Cured* 495,513 (▲ 19,135)

Deaths 21,604 (▲ 475)



Statewise - Confirmed Cases (6000+)

State	Confirmed Cases	Change
MAHARASHTRA	230,599	(▲ 6875)
TAMIL NADU	126,581	(▲ 4231)
DELHI	107,051	(▲ 2187)
GUJARAT	39,194	(▲ 861)
UTTAR PRADESH	32,362	(▲ 1206)
KARNATAKA	31,105	(▲ 2228)
TELANGANA	30,946	(▲ 1410)
WEST BENGAL	25,911	(▲ 1088)
ANDHRA PRADESH	23,814	(▲ 1555)
RAJASTHAN	22,563	(▲ 500)
HARYANA	19,369	(▲ 679)
MADHYA PRADESH	16,341	(▲ 305)
ASSAM	14,032	(▲ 696)
BIHAR	13,944	(▲ 755)
ODISHA	11,201	(▲ 577)
JAMMU & KASHMIR	9,501	(▲ 240)
PUNJAB	7,140	(▲ 233)
KERALA	6,534	(▲ 339)

Cured vs. Deaths

State	Cured	Deaths
MAHARASHTRA	127,259	9,667
TAMIL NADU	78,161	11,765
DELHI	82,226	3,258
GUJARAT	27,718	2,008
UTTAR PRADESH	21,127	862
KARNATAKA	12,833	486
TELANGANA	18,192	331
WEST BENGAL	16,826	854
ANDHRA PRADESH	12,154	277
RAJASTHAN	17,070	491
HARYANA	14,510	287
MADHYA PRADESH	12,232	634
ASSAM	8,726	22
BIHAR	9,816	115
ODISHA	7,407	52
JAMMU & KASHMIR	6,695	153
PUNJAB	4,945	183
KERALA	3,708	27

*Migrated case is included in Cured
▲ Increase in the number in the last 24 hrs

INCREASING CASES
AROUND NATION
(JULY-DECEMBER 2020)



Ministry of Information and Broadcasting

#IndiaFightsCorona

3/4



States with 250000+ confirmed cases

(as on 15 December 2020, till 08:00 AM)



S.No.	State/UTs	Total Confirmed Cases*	Discharged/Cured/Migrated	Deaths
1.	Maharashtra	1883365	1761615	48269
2.	Karnataka	902240	874202	11954
3.	Andhra Pradesh	875836	864049	7059
4.	Tamil Nadu	800029	778081	11909
5.	Kerala	672037	611600	2647
6.	Delhi	608830	583509	10074
7.	Uttar Pradesh	566728	539727	8083
8.	West Bengal	523629	493145	9100
9.	Odisha	324089	319458	1811
10.	Rajasthan	292539	273784	2555
11.	Telangana	278599	269828	1499
12.	Chhattisgarh	258635	236588	3116
13.	Haryana	253385	241544	2733

*(State-wise distribution is subject to further verification and reconciliation)

[/COVIDNewsByMIB](#)

[/MIB_India](#)

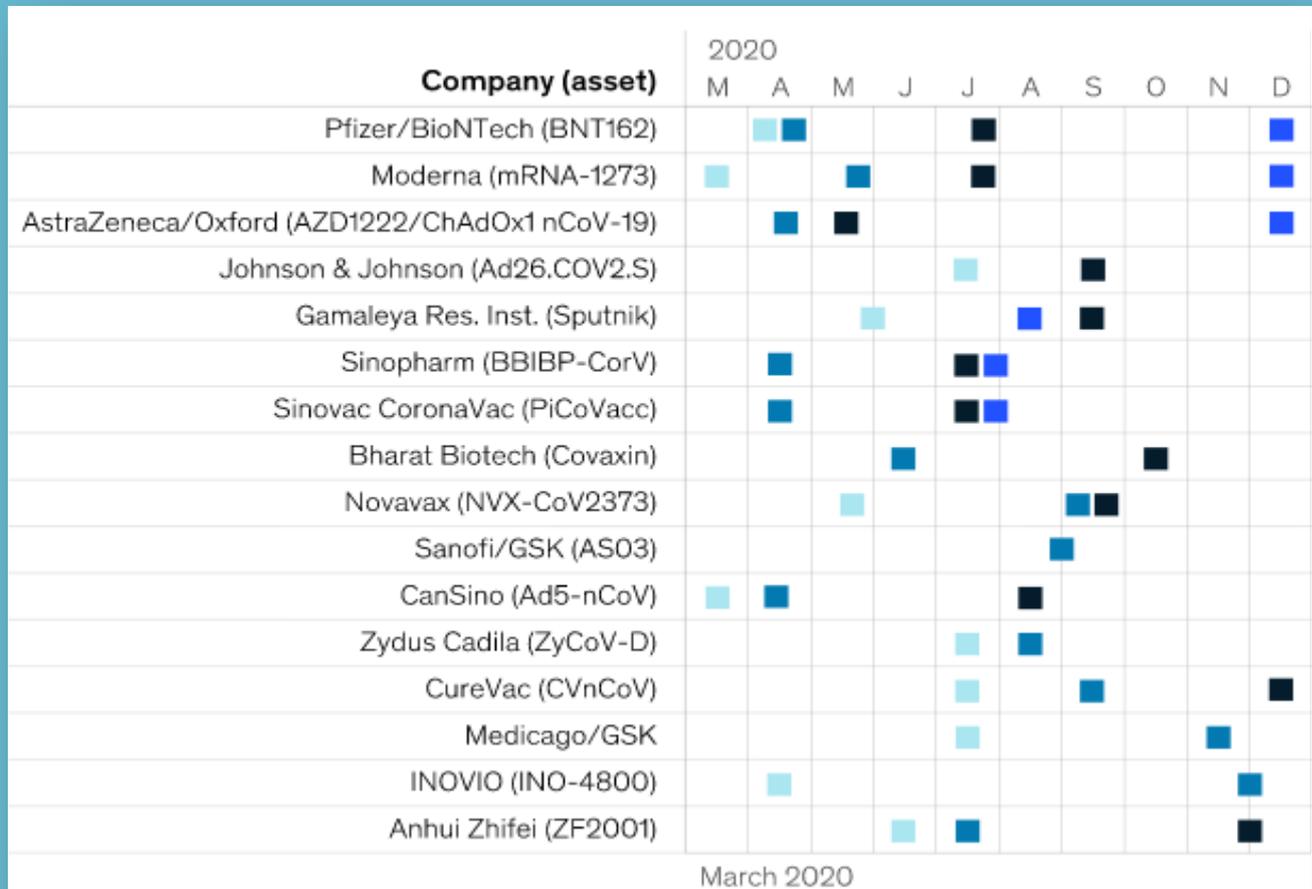
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COVID-19 VACCINE DEVELOPMENT



Clinical-trial timelines for vaccine candidates

■ Phase I start date
 ■ Phase II start date
 ■ Phase III start date
 ■ First Emergency Use Authorization

Source: BioCentury; clinicaltrials.gov; Milken Institute COVID-19 Treatment and Vaccine Tracker; press search

Interview of Dr. Arti Shah regarding COVID-19: Safety Measures & Concerns

1) What are your views regarding the current pandemic?

- ❖ To understand about this Pandemic, we will have to trace the way how COVID – 19 has spread throughout since last year. An apt analysis of the pandemic and implying specific measures are needed to control the spread of the pandemic. We have tried to control with the resources and knowledge we had, but as time passed, infected cases have peaked to a level difficult for medical world to handle. The wait is on for everyone to get effectively vaccinated. The Pandemic demands all precautions to be followed till date, as the best way to fight against it. A ray of hope lies in the form of the vaccine, the outcomes of which seem promising. As we say, everyday COVID – 19 has been teaching us something.

2) How are the SARS CoV2 novel coronavirus transmitted and what are the symptoms of COVID-19?

- ❖ SARS-CoV-2 occurs usually through droplet infection from cough or nasal/oral secretions of an infected person to other person in contact within 2 meters. Also, infection may occur from any surface/object on which virus has landed. This aerosol generation procedure or airborne transmission or of the virus generally may occur in indoor public crowded spaces, like Restaurants, colleges/schools, malls, shops, etc. Common symptoms include fever, dry cough, tiredness, sore throat, diarrhoea, loss of taste or smell, Headache, body pain, eye infection, etc. Serious symptoms or warning signs include difficulty in breathing or shortness of breath, chest pain or pressure & loss of speech or movement.

3.) Who are less contagious amongst asymptomatic and pre-symptomatic patients?

- ❖ Well, very little is known about the proportions of people with positive results and asymptomatic throughout the course of the disease and the proportions who are pre-symptomatic and/ or still viral RNA is detectable from an earlier infection. Integrating testing into clinical care missed an important opportunity to better understand the role of asymptomatic infection in transmission.
- ❖ Searching for people who are asymptomatic yet infectious is like searching for needles that appear and reappear transiently in haystacks, particularly when rates are falling.

4.) Who are at great risk for getting infected with COVID-19?

- ❖ Persons who are older than 60 years or having co-morbid conditions like lung or heart disease, diabetes or immune-compromised conditions, or Health Care Professionals are at high risk for COVID – 19 due to frequently being exposed to the virus.

5.) What are some protective measures to prevent COVID-19 transmission within the hospital premises by doctors & staff?

- ❖ All should use their own mask always inside & outside the hospital premises. All should maintain social distancing of 2 meters or 6 feet, maintain good hygiene, wash hands for 20seconds every time in contact with any surface or anyone. Everyone should be screened before entering a Healthcare Facility for Signs and Symptoms of COVID-19. Also, points of entry may be limited inside a facility. In waiting rooms, appointments may be scheduled and limited with distanced sitting arrangement. Group activities may be limited. Eye protection, use of N95 equivalent or higher-level respirator and Personal Protection Equipment Kit (PPE) must be used by all healthcare professionals, especially during Surgical procedures.

6.) What is a grade 1 emergency in COVID -19 ?

- ❖ As per definition, a single or multiple country event with minimal public health consequences that requires a minimal WCO (world customs organization) response or a minimal international WHO response.

7.) What are the diagnostic tests for COVID - 19 ?

- ❖ Two kinds of tests are available for COVID-1; Reverse Transcriptase polymerase chain reaction, RT-PCR test and Rapid Antigen Tests from nasopharyngeal swab.

12) What follow-up steps should be taken care by patients & Doctor?

The most serious complications of COVID-19 such as pulmonary fibrosis and pulmonary vascular disease are identified at the earliest possible stage without over-investigating those patients who will make a full recovery. Needs of Acute patients with breathlessness and oxygen requirements shall be identified and addressed at the earliest. Patients diagnosed with COVID-19 pneumonia who have made a full recovery should be reassured that their chest X-ray changes have resolved. At all points of patient contact, teams should be instructed to follow 'post-COVID-19 holistic management.

COVID-19 WARRIORS OF SUMANDEEP VIDYAPEETH

Dhiraj Hospital's Special Ward for COVID-19 patients



Ayurveda as New Hope for rescue: Prophylactic Guidelines by Ayush Department, Government of India

Ministry of Ayush, GoI has issued separate guidelines as documents downloadable from its website for every practitioners (Ayurveda, Yoga, Naturopathy, Unani, Siddha & Homopathy). The Also, general guidelines for public welfare may also be found on the same website.



Government of India
Ministry of AYUSH

<https://www.ayush.gov.in/ayush-guidelines.html>

Download Practitioners Guidelines

About Ayush Sanjivani App



AYURVEDA YOGA NATUROPATHY UNANI SIDDHA HOMEOPATHY



COVID-19 Crisis



Ministry of AYUSH recommendations, based on Ayurvedic literature and scientific publications, for preventive health measures and boosting immunity with special reference to respiratory health.

Measures for Enhancing Immunity

- Drink warm water throughout the day.
- Daily practice of Yogasana, Pranayama and Meditation for at least 30 minutes.
- Spices like Haldi (Turmeric), Jeera (Cumin), Dhaniya (Coriander) and Lahsun (Garlic) recommended in cooking.

Simple Ayurvedic Procedures

- Nasal Application**– Apply Sesame Oil/Coconut oil or Ghee in both the nostrils (Pratimarsh Nasya) in morning and evening.
- Oil Pulling Therapy**– Take 1 table spoon Sesame or Coconut Oil in mouth. Do not drink, swish in the mouth for 2 to 3 minutes and spit it off followed by warm water rinse. This can be done once or twice a day.

Ayurvedic Immunity Enhancing Tips

- Take Chyavanprash 10gm (1tsf) in the morning. Diabetics should take sugar free Chyavanprash.
- Drink Herbal Tea/Decoction (Kadha) made from Tulsi (Basil), Dalchini (Cinnamon), Kalimirch (Black Pepper), Shunthi (Dry Ginger) and Munakka (Raisin) - once or twice a day. Add jaggery (Natural Sugar) and/or fresh Lemon Juice to your taste, if needed.
- Golden Milk- half tea spoon Haldi (Turmeric) powder in 150 ml Hot Milk - once or twice a day.

Actions During Dry Cough/Sore Throat

- Steam inhalation with fresh Pudina (Mint) leaves or Ajwain (Caraway Seeds) can be practiced once in a day.
- Lavang (Clove) powder mixed with Natural Sugar/Honey can be taken 2-3 times a day in case of cough or throat irritation.
- These measures generally treat normal dry cough and sore throat. However, it is best to consult doctors if these symptoms persist.

Immunity Boosting Measures for Self-Care

[/PIB_India](#) [/PIBHindi](#) [/pibindia](#) [/pibIndia](#) [/pibindia.wordpress.com](#) [/pibindia](#) [pib.gov.in](#) **KBK**



अयुष मंत्रालय
Ministry of Ayush

Help us to Help you

COVID-19

Helpline Number: +91-11-23978046 | Toll Free: 1075
Helpline Email ID: ncov2019@gov.in

Updates of Research Cell Activities

Sr. No.	Name of Workshops/Seminars	Date (dd/mm/yyyy)	Venue	Theme of event	Name of Organizing Institute/ Dept.
1	Intellectual Property Rights (IPR): A Growing Field of Career Opportunities & Future Prospects	23-May-20	Research Cell	Webinar	Research Cell
2	"Intellectual Property Rights for Healthcare"	24-May-20	Research Cell	Webinar	Research Cell
3	Research Methodology : Grant Writing and Applying Statistics in Research	25-May-20	Research Cell	Webinar	Research Cell
4	Revolutionary Technologies in Genomics and Proteomics	29-May-20	Research Cell	Webinar	Research Cell
5	Training Programme on ICH-GCP-E6 (R2) & New Drugs And Clinical Trial Rules-2019, Clinical Trial and Covid-19 Pandemic	11-Jul-20	Research Cell	ICH-GCP and Schedule (ICMR)	Research Cell
6	Role of Institutional Animal Ethics Committee (IAEC) in research and IAEC Standard Operating Procedures (SOPs)	30-Nov-20	Online Webinar, Department of Central Research and Innovation	ICH-GCP and Schedule (ICMR)	Research Cell

Intellectual Property



5/23/2020

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Trade Mark

- A "sign" used to distinguish the goods or services of a person from those of another in the course of trade.
- A sign can include any letter, word, name, signature, numeral, device, brand, heading, label, tickets, aspects of packaging, shape, colour, sound or scent, or any combination thereof.



Sandeep Aggarwal

Copyrights

- Copyright protects a range of original material, such as artistic, dramatic & musical works
- Protects material form of expression
- No copyright in mere ideas or information.



DEFINING THE PROBLEM

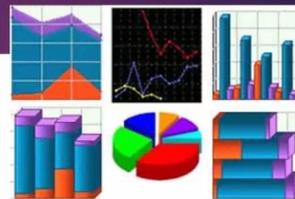
- ▶ Clearly defined
- ▶ Sharply delineated
- ▶ Unambiguous



Dr Medha.mp4

DISPLAYING DATA

Weight (Kg)	Frequency	Cumulative Frequency
0 up to 20	2	2
20 up to 40	7	9
40 up to 60	12	21
60 up to 80	6	27
80 up to 100	3	30



Preferred cola	Age						
	18 to 24	25 to 29	30 to 39	40 to 49	50 to 54	55 to 64	65 or more
Coca-Cola	65	41	55	28	46	36	36
Diet Coke	2	10	13	15	8	12	23
Coke Zero	9	23	19	22	28	16	14
Pepsi Light	0	3	0	3	3	6	9
Pepsi Max	16	18	6	10	13	24	14
Pepsi	7	5	7	22	3	6	5
NET	100	100	100	100	100	100	100

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Programme	Qualifications	Amount of Fellowship per month	To
Women Scientist Scheme (WOS-A)	Ph.D. in Basic or Applied Sciences/ MD or equivalent degree	Rs.55,000/-+HRA* as applicable	Rs.30 lakh (excluding HRA and Overhead)
Women Scientist Scheme-B (WOS-B)*	M.Phil/M.Tech/ M.Pharm/ M.VSc or equivalent degree	Rs.40,000/-+HRA* as applicable	Rs.25 lakh (excluding HRA and Overhead)
	M.Sc in Basic or Applied Sciences/ MBBS/B.Tech or equivalent degree	Rs.31,000/-+HRA* as applicable	Rs.20 lakh (excluding HRA and Overhead)
Women Scientist Scheme-C (WOS-C)	Ph.D. in Basic or Applied Sciences/MD or equivalent degree	Rs.35,000/-
	M.Phil/M.Tech/M.Pharm/M.VSc or equivalent degree	Rs.30,000/-
	M.Sc in Basic or Applied Sciences/ MBBS/B.Tech or equivalent degree	Rs.25,000/-

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Call for Proposals | Department - x +

dst.gov.in/call-for-proposals

Category	Call for Proposals	Download	Date
Call for Proposals	Call for Proposals under National Health and Risk Communication Programme 'Year of Awareness on Science and Health' (YASH) for COVID19	Download (118.78 KB)	29/04/2020
Announcement	Special Call under SATYAM to fight against COVID 19	Download (619.84 KB)	08/04/2020
Awards/Prize/Result	Revised India-Slovenia Joint S&T Call 2020	Download (621.3 KB)	10/03/2020
Recruitment	Call for proposals: Integrated Technology Interventions for Sustainable Environment	Download (353.92 KB)	31/12/2019
Tender	Revised India-Portugal Joint S&T Call 2020	Download (609.97 KB)	01/05/2020
India Science (DD Science)	DST- Training Programme on Entrepreneurship: 2020-21: Call for Proposals		21/05/2020
India Science, Technology & Innovation	Revised India-Serbia Joint S&T Call 2020	Download (1.14 MB)	24/02/2020
AWSAR	India-EU joint Call on Integrated Local Energy Systems	Download (1.48 MB)	08/05/2020
Voter Awareness Forum			

Archive Call For Proposals

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शोधकर्ताओं के लिए फेलोशिप
Fellowship Opportunities for Researchers

पूरे वर्ष में आवेदन हेतु योजनायें
Schemes Open Throughout the Year

1:01:28



Impedance Biosensor

Negative terminal

Positive terminal

ACKNOWLEDGEMENTS

OUR SPECIAL THANKS TO

Dr. Arti Shah (HOD, Respiratory Medicine), all *staff of Respiratory Medicine* and all *COVID-19 SVDU warriors*
For giving the valuable time for imparting knowledge & awareness regarding
COVID-19 treatment & Prevention strategies

&

All Staff of Department of Central Research & Innovation

Dr. Priyanka Sharma (Sr. Research Scientist)

Dr. Akansha Budakoti (JRF & Sr. Lecturer)

Mrs. Hemali Shukla (Sr. Clerk)

For compiling, formatting, editing and preparing this newsletter.

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