

TRAUMA & EMERGENCY ACADEMIC MEDICINE SENTINEL

"Proclaiming and Promoting Academic Leadership"



TEAMS



OFFICIAL VOICE OF ACADEMIC COLLEGE OF EMERGENCY EXPERTS (ACEE) &
EMERGENCY MEDICINE ASSOCIATION (EMA) - AN INDUSEM UNDERTAKING



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From the Editor's desk.

Dear friends,



A new year is always considered as a new beginning. We try to dream about new ambitions to achieve and try to work for it. First quarter of a year witness the anxiety of the new batch of post graduates who are awaiting counselling and sorting out their seats and their future, trying to go with their dream. Emergency Medicine which has grown to a speciality of its own with deep roots has become a speciality of choice to many young doctors. Over the last decade, Emergency Medicine has spread across the country with lot many seats both MD EM & DNB EM getting added on every year. Understanding the speciality is important, even more is knowing what you exactly want and choose correctly. Your future is in ur hand. Work for it. Be passionate about what you choose.

Year 2020, looked promising. But 2020 began with a bang of a worldwide pandemic - COVID 19. Life has changed dramatically ever since. The global crisis unleashed by COVID 19 has toppled the World democracies. Financial stabilities of many countries started showing negative trends. Health system has taken the heat of it. Hospitals have started to get flooded with patients. This virus is spreading across the globe in no time. Numbers started stepping up. It's a battle that we need to fight together. A battle against something we cannot see. Together we can and Together we will.

The welcome change that came along with COVID 19 is that the pollution has come down and the ecosystem can breathe freely now. Before this pandemic, families were far apart but now each and every waking day is spent together. Work from home and social distancing are the new norms. But along with these wonderful changes, there are some 'unwelcome' ones too. People are facing mental health issues, alcohol withdrawal, unemployment and many more. Besides, there is always a doubt and speculations of a second and more powerful wave of COVID 19 about to come and we as frontline health workers and emergency medicine physicians have to brace ourselves for this reality.

As Emergency Medicine Physicians and Residents, we must be prepared. Stick to our infection control and isolation protocols. Let's work together and fight this together. Towards the end, what matters the most is that we work as a TEAM.



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COVID 19 vs The WORLD – Things to consider

An infectious disease that brought the world to a standstill. A thing that can't be seen, made us sit at home through lockdowns across the Globe. The world biggest democracy needed to go through a lockdown and standstill. Life has changed, priorities have changed, healthcare system is getting flooded.

What has changed the world in the last few months ? What has made the world look different ?

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by a novel coronavirus now called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV). Coronavirus are a large family of RNA viruses, earlier known to cause Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Initially called as the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), later on "Coronavirus disease 2019" (abbreviated "COVID-19"). First identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China in late 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic. COVID 19 is indeed a public health risk and emergency, because of its high Person-to-person transmission.

The disease spreads primarily from person to person through small droplets from the nose or mouth, which are expelled when a person with the virus coughs, sneezes, or speaks. It also spreads through the contaminated environment and materials via fomites in the immediate environment around the infected person.

The incubation period is 2 to 14 days. Common presentation is fever, cough, sore-throat, diarrhoea and can lead to breathing difficulty. Most people (about 80%) maybe asymptomatic or having mild disease and recover from the disease without needing hospital treatment. Around 1 out of every 5 people who gets COVID-19 becomes seriously ill and develops respiratory distress. Large portion of people maybe asymptomatic carriers who can be potential transmitters of the infection.

Emergency room is one of the most challenging area in managing these patients. Evaluate all cases as COVID 19 unless otherwise proven. Various methods of routine screening procedures have been implemented by various

institutions. After initial screening and assessment for symptoms and epidemiological risk factors, including travel to affected areas and exposure to confirmed COVID19 patients within last 14 days, patients are classified in a risk-stratified system. Identifying exertional hypoxia gives a better idea about the status of the patient. Hence can be used as an important screening method. Evaluate baseline SpO₂ of all patients. All patients, who are stable enough to walk, consider doing a 40-step test (40 steps on a flat surface). Evaluate SpO₂ of the patient after the 40-step test. If there is a drop in SpO₂ more than 3% than baseline, is considered significant.

Full PPE - Long sleeved gown with hood/coverall, cap, goggles/face shield, gloves, N95 mask, shoe cover should be used in emergency room and isolation wards whenever managing cases of COVID 19. For airway and intubation strategy, biggest concern is aerosol generation. Aerosol generation should be avoided as much as possible. Try to avoid the use of high-flow nasal oxygenation, Nebulisation and mask CPAP or BiPAP due to greater risk of aerosol generation. Avoid awake fiberoptic intubation (due to risk of coughing and aerosols). Elective & planned intubation is better than an emergency crash intubation. Whenever possible use video laryngoscope and aerosol box for intubation. Full PPE is for all aerosol generating procedures.

RT-PCR is the confirmatory test. Researches are going on regarding antibody detection test. Test - Isolate - Manage should be the main step.

Researches are going on regarding finding a vaccine for COVID 19, hope those researches becomes fruitful. Herd immunity is a distant dream as of now. Precautions are the most important things. Social distancing, using of face mask, hand sanitising/hand washing are the key. Mass gatherings should be avoided. Most countries adopted lockdown strategies to fight COVID 19. Lockdown is only a time to prepare and upgrade the stockpile and it isn't the final solution. Reverse quarantine of vulnerable population has been another strategy.

Central and State governments, Health authorities are taking all the necessary steps to fight this battle. Both government and private hospitals are taking this battle seriously. We need to support it wholeheartedly. Let's fight this battle together, Take precautions and Stay Safe.

An overview of Disaster Management

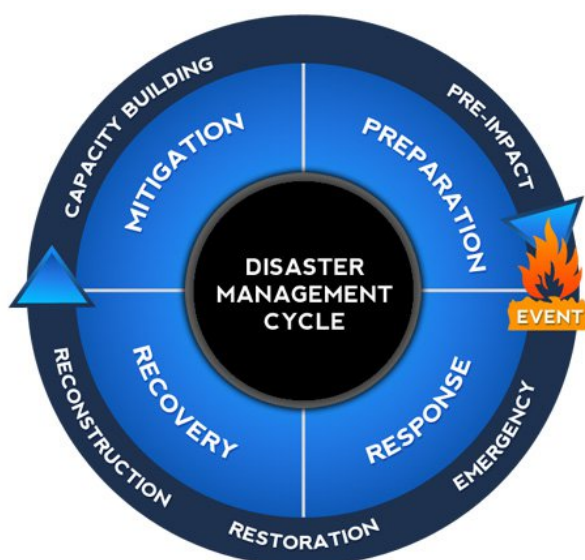
India has been traditionally vulnerable to natural disasters on account of its unique geo climatic conditions. Floods, droughts, cyclones, earthquakes and landslides have been recurrent phenomena. About 60% of the landmass is prone to earthquake of various intensities; over 40 million hectares is prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought. Disaster could be Natural, Man-made or Human system failure.

Disaster not only bring down human loss, but also have a great impact on the environment and which directly and indirectly have grave effect on humans and on animals. Disaster also brings about huge financial loss. Disasters effects the stability of the state and central government. This can affect the financial budget which have impact on the progress of the concerned state.

Pandemic due to infectious diseases can be a consequence of disasters or can result in a disaster.

Disaster has been a major concern globally too. In fact, there is a considerable effect on the mortality and morbidity as well as the economic losses. It was in this background that the United Nations General Assembly, in 1989, declared the decade 1990 – 2000 as the International Decade for Nature Disaster Reduction with the objective to reduce loss of lives and property and restrict socio – economic damage through concerned international action, especially in developing countries. According to the World Health Organisation Centre for Research on the Epidemiology of Disaster (WHO/CRED), frequency of disaster have doubled since 1995. This could be due to better reporting, improved surveillance, communication technologies, increase in international travel which can cause/spread emerging infectious disease / bioterrorism.

Response to a disaster is through numerous groups. For most of the disasters, the initial response is from the individuals in and around the scene, followed by governmental agencies and also NGOs. The main aim of disaster response is to work together to conserve life and property, to make maximum output, reduce duplication of work and ultimately to protect the safety of the community, responders and the environment.



The main four phases of disaster response are Mitigation, Preparedness, Response and Recovery. This is also considered as the disaster management cycle. Till 1990's this cycle was focussed on only on Response and Recovery. But later on, it was understood that Mitigation and Preparedness is key to

reduce the impact of disaster. Both of these are Preimpact strategies mainly focus on capacity building.

In India, The Disaster Management Act, 2005 has been enacted as the central Act to deal with the management of disasters. This act envisaged a three tier Disaster Management structure in India at National, States and District levels. Disaster Management Act, 2005, is an act to provide for the effective management of disasters and for matters connected therewith or incidental thereto. The act calls for the establishment of National Disaster Management Authority (NDMA), with the Prime Minister of India as chairperson.

Epidemic Diseases Act of 1897 is an act to provide for the better prevention of the spread of dangerous epidemic diseases.

Disaster is all about team work. Here the perspective changes from individual to the society. Let it not come, but if it comes let's be prepared.

EM Activities and Achievements in the past quarter

TOX TRENDS @ TRIVANDRUM



The Gokulum Toxicology Conference was held under the Aegis of Emergency Medicine Association (EMA) – Kerala State Chapter on January 10, 2020 at Sree Gokulam Medical College Research Foundation, Venjaramoodu. The Programme was inaugurated by Dr. Manojan K K, Honourable Director of SGMC& RF. The Toxicology meet drew eminent experts in the field like Dr. Ashish Bhalla, Professor of Internal Medicine, PGIMER Chandigarh and President of Asia Pacific Association of Medical Toxicology (APAMT); Dr. Indira M Associate Professor of Internal Medicine, Government Medical College

Thrissur; Dr. Linu S M, Assistant Professor of Emergency Medicine, SGMC&RF, the primary fellow of the Toxicology pathway of Academic College of Emergency experts (ACEE); Dr. Geetha O, Professor and HOD, Department of Forensic Medicine, SGMC&RF. The launch of APAMT 2020, The 19th Annual International Scientific Congress of Asia Pacific Association of Medical Toxicology was done during the Conference

EM KARNATAKA 2020 Knocks Completeness !

The Emergency Medicine Association Karnataka held its 2nd State Level Conference. The EMKARNATAK2020 Annual Summit was held from 15th to 18th January 2020 at JSS Academy of High Education and Research, Mysuru, Karnataka. The conference had multiple hands-on workshops, scientific sessions, panel discussions and competitions for under-graduates, post-graduates, nurses, paramedics and specialists when offered a learning experience, which was the best. Led by EMA Leader Dr. Madhu Srinivasarangan and other leaders from the EMA Karnataka Family the 2020 EMK was a grand success.



EXAMTHALON 2020 XCellence !

EXAMTHALON is an EM based board exam simulation conducted for post graduate residents in EM. Eminent faculty from prestigious institutes across India team up to test the candidates and give them structured feedback. This enables the candidates pinpoint areas of their strengths and weaknesses. EXAMTHALON helps EM postgraduate residents brace themselves before the hurdles of their board exams. The fourth installment of this highly valued program, EXAMTHALON 2020, was conducted at Jubilee Mission Medical College on 29th and 30th January 2020. The two-day program included mock theory exam as well as practical sessions like OSCEs, Spotters, Skill assessment stations and Case presentations. Twenty one MD and DNB EM aspirants from various colleges across India enrolled for the program.



NEMBRIC2020 ~ A Decade of Legacy!

The Annual National Emergency Medicine Board Review of India Course (NEMBRIC2020) concluded at the headquarters of National Board of Examinations (NBE) in New Delhi. Organized by the Academic College of Emergency Experts in India (ACEE), Emergency Medicine Association (EMA) & INDUSEM, It is the Only Legitimate Academic Review Course in Emergency Medicine in the country. NEMBRIC 2020 was conducted over 5 days, with over 48 hours of rigorous and well-structured academic extravaganza, to give the participants a complete overview of various academic topics in Emergency Medicine.



Mega Success of MAHAEM2020 PUNE



The 3rd Annual EMA Maharashtra State level Conference MAHAEM2020 was held on the weekend of 8th and 9th March 2020. It was hosted by The NBE recognized Department of Emergency Medicine at Jehangir Hospital Pune. Attended by Residents and Academic faculty from all over Maharashtra, MAHAEM2020 had august speakers from across MCI/NBE Residency Programs in India. Practicing physicians from various specialties

spoke at the meeting. The theme was focused on Emergency Neurosciences in partnership with the Academic Department of Neurosurgery at BJ Medical College Pune led by Professor Dr. Sanjay Vhora and Professor Rajeshwari Vhora.

For further informations regarding these events, log on to <http://www.indusem.org/news>