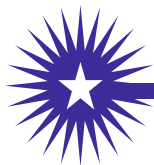


Celebrating  
**15**  
YEARS



# TRAUMA & EMERGENCY **TEAMS** ACADEMIC MEDICINE SENTINEL



Proclaiming & Promoting Academic Leadership

WWW.INDUSEM.ORG



Official Voice of  
Academic College of Emergency Experts  
(ACEE)  
&  
Emergency Medicine Association (EMA)  
An INDUSEM Undertaking

## Chief Editor



**Prof (Dr.) Bikram K Gupta**  
Heritage Institute of Medical Sciences  
Varanasi, Uttar Pradesh  
Ph. : +91-8400100128  
Email : teamsindusem@gmail.com

## TEAMS Editorial Board

**PRINCIPLE PROMOTOR**  
**Prof (Dr.) Sagar Galwankar**  
CEO, INDUSEM

**PATRON**  
**Prof (Dr.) D K Singh**  
Executive Director, AIIMS Bathinda

**JOINT EDITORS**  
**Dr. Shashiprakash Mishra**  
IMS, BHU, Varanasi

**Dr. Jyoti Sharma**  
AIIMS, Bathinda

**Dr. Akash Rai**  
HIMS, Varanasi

## From the Editor's desk...

Dear friends,

At the outset I am very humbled to be appointed as the new Editor of TEAMS as we usher in the 15th Year of Publishing TEAMS. I congratulate the INDUSEM Family on this momentous occasion. Our Editorial Team will carry forward the phenomenal work done by our predecessors as I thank the outstanding leadership of my colleague Dr. Ajith Venugopalan who did a marvelous job as Editor in Chief for last 4 years.

The Emergency Department becomes the first point of contact in a variety of settings from urban emergency and rural emergency clinics, to humanitarian and disaster situations. In recent times, the Indian healthcare system has immensely progressed and the Government of India is very aptly taking steps in this direction to ensure standardization of emergency medicine practice. Electrifying amendments have been made by the Government of India under our honourable Prime Minister Mr. Narendra Modi in researches and advancements in the field of healthcare, drafted by the Ministry of Health and Family welfare in session 2022, primarily focusing on:-

1. Developing a sturdy integrated and standardized Department of Emergency Medicine at all healthcare care centers which can comprehensively address all types of surgical and medical emergencies including trauma-related care.
2. Standardize protocols, and SOPs for emergency care, inclusive of triage to have a common optimal nationwide policy.
3. Maintenance and up-gradation of existing Emergency and Health facilities: The emergency department is like a mini hospital that requires to have wide resource availability with apt management of staff, medicines, and equipment. Efforts are being put to integrate EMS so that the patients shift earliest to the appropriate facility on the basis of its capacity and manage the disease profile.
4. Establishing Academic Emergency Medicine,

Emergency Nursing, and Emergency Medical Technician: It's a basic necessity in today's generation in those district hospitals which deal with high patient load in the emergency.

5. Adequate space for emergency care systems is to be created at the prevailing health facilities such that regularized emergency departments with the recommended proportion of beds, infrastructure, drugs, equipment, and human resources become a norm.
6. Accreditation of all EDs and health facilities for delivering and improving quality care.
7. Focus on expanding Blood Bank-related services so that timely availability of on-demand blood and its related products is provided even in smaller government hospitals.
8. 22 new AIIMS and 157 new Medical colleges are to be constructed in the country. Specifically, in Uttar Pradesh, it is proposed that each district will have its medical college.
9. Every Indian will be given a health ID under the "National Digital Health Mission" recently launched by Prime Minister Narendra Modi thus revolutionizing the country's health sector. GOI also started many schemes that will improve directly or indirectly EMS like **Rashtriya Swasthya Suraksha Yojna, Ayushman Bharat, Jeevan Jyoti Rashtriya Abhiyan, etc.**
10. **National Emergency Life Support (NELS):-** GOI launched a NELS course for doctors, nurses and paramedics; this will replace the health care professionals' dependency on foreign modules.

Much is being done to strengthen the healthcare system and instill emergency medicine as an easily approachable and feasible aspect of medical care. To combat future challenges, we need democratized access to the best capabilities and technologies, and also need to embrace the next-generation, decentralized method of delivering healthcare, which has already started to happen in some places and which has the potential to be more rapidly adopted in our nation. Undoubtedly, we are moving forward toward a better healthcare system providing good quality of life.

**Together we can make a difference.....**

## In Conversation with AIIMS Bathinda Director Prof (Dr.) D K Singh

**“Technology doesn't save lives, a critical decision made in split second does”**



Prof (Dr.) DK Singh presently Executive Director at AIIMS Bathinda, was appointed as the officer on special duty for India's largest 324-bedded Trauma Centre at BHU, he was the HOD of Trauma and Emergency at AIIMS Bhopal, and he has mentored more than 100 PG students and has published several articles in journals of international and national repute, he has worked in different capacities at National Assessment and Accreditation Council (NAAC) and Medical Council of India (MCI).

Prof (Dr.) DK Singh talks to us from the interview portal about Emergency Medicine and its emergence, recent advancements, and its future aspects.

**Q.1 Sir in all these years of experience in trauma and emergency medicine you have thoroughly seen it all, please enlighten us with your journey in this field as a well-renowned administrator**

**Answer :-** My trust in Emergency Medicine started very early in my career as an anesthesiologist at BHU, Varanasi. In 2006 there were a series of bomb blasts in Sankat Mochan Hanuman temple which left many people injured (much above the capacity of our emergency) who were rushed to my hospital and managed meticulously. I was then entrusted with the task of setting up India's largest Trauma centre at BHU as an officer on special duty. Following it I established the Dept of Emergency medicine and Trauma as HOD at AIIMS, Bhopal. As Executive Director and CEO, of AIIMS Bathinda I look forward to establishing emergency and trauma services in this remote area of Punjab.

**Q.2 Emergency medicine was recognized as a separate specialty by the Medical Council of India in 2009, your views on how emergency medicine has evolved over the past few years in India.**

**Answer :-** It took a long time to recognize Emergency Medicine as a separate specialty in India as compared to the western world.

However, we are progressing well with about 185 MD Emergency Medicine seats per year across India. The newer AIIMS established by the GOI under PMSSY with the aim of correcting regional imbalances in the availability of tertiary healthcare services including emergency and trauma will go a long way in improving the health sector of our country. Of the sixteen new AIIMS of Honourable PM Shri Narendra Modi Ji's regime, 9 will be ready by the end of 2022.

**Q.3 In these times of recent advancements in diseases as well as medical technologies, what is the scope of further improvement to reduce the impact of emergency conditions and to fulfill the gap in treatment standards?**

**Answer :-** Timely management is paramount in emergencies and trauma. The newer technology can be used to decrease time lags and optimal use of manpower at various levels of emergency by cutting short lines using digital payments or cashless facilities, use of AI-enabled screening tools, teleconsultations, and use of health management information systems, triaging and implementing quality improvement programmes.

**Q.4 While choosing emergency medicine as a career what are the opportunities and obstacles one would go through?**

**Answer :-** Emergency medicine has a vast scope spanning myriad areas of medicine. Resuscitating moribund patients and saving lives every day can be very gratifying. Also, even though it may sound counter-intuitive, it is possible to strike a healthy work-life balance in emergency medicine since emergency physicians are generally required to work on a “shift” basis and the duty hours are fixed. An emergency medicine trainee is also expected to master a wide repertoire of clinical skills by the end of the residency programme. These range from emergency airway management to placement of invasive catheters to performing ultrasound and echocardiography in the emergency setting, before the patients are referred to the concerned specialties. The onus of stabilizing a patient lies on the emergency physician and this can be daunting and rewarding at the same time. However, emergency physicians will also have to deal with grieving relatives, impatient and violent crowds, and patients who themselves may be combative due to the underlying clinical condition, more often than other specialties. This poses a big challenge to one's mental and physical health and safety. Some trainees may also feel deprived of the opportunity to follow up with patients after the phase of initial stabilization and be involved in their subsequent treatment plans. In addition, given that it is an evolving and emerging specialty, layperson may not be aware of emergency medicine as a separate specialty and the magnitude of the contribution of emergency physicians to healthcare. But, having said that, being equipped to manage life-threatening emergencies is a reward in itself and external validation should not really matter.

**Q.5 Emergency room generally has a stressful and pressurising environment, what steps can be taken to promote a healthier work culture and to manage the workload of an emergency physician**

**Answer :-** One of the most practical ways to mitigate the workload of an emergency physician would be to ensure that the nursing staff, paramedical staff, and the support staff assisting the physician are adequately trained. Addressing logistical and administrative issues promptly would also go a long way in managing the overwhelming workload an emergency physician has to deal with. Another key step to optimize efficiency and reduce stress would be an earnest attempt

on the part of the concerned authorities to create a blame-free work culture, where everyone should be accountable while working together as a team to ensure that patients receive the best possible care that can be given.

**Q.6 What regulations can be added to the teaching protocol of emergency medicine at the bachelor's level to make it more accessible, feasible, and approachable as a career.**

**Answer :-** Simulation-based training for emergency medical scenarios could be incorporated into the undergraduate programme to pique the interest of undergraduates with respect to the diverse field of emergency medicine. Regular clinical rotations in the department of emergency medicine would also stimulate learning. At the end of the day, there is no replacement for a dedicated and experienced teacher who takes pride in his/her job as an emergency

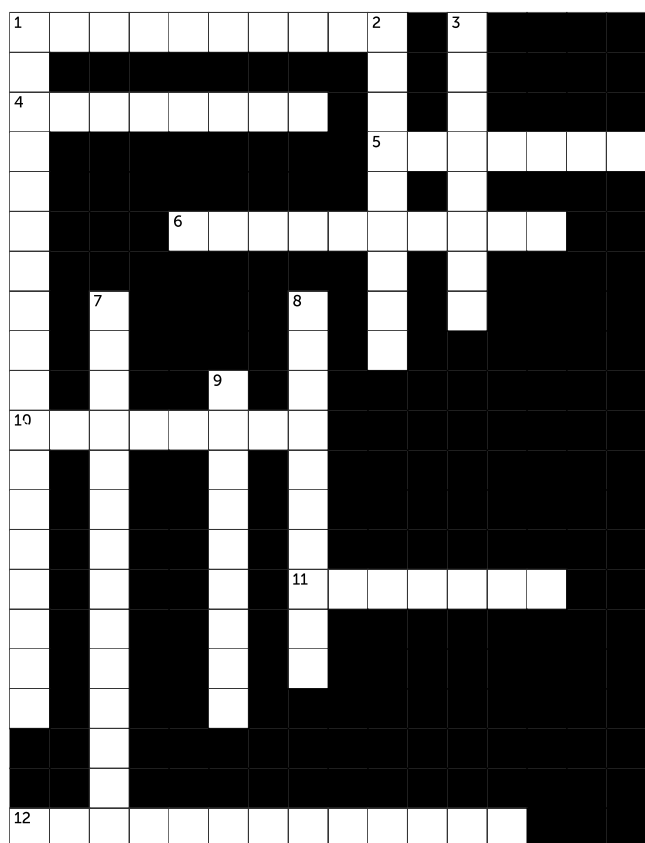
physician and can inculcate a sense of belonging in the minds of budding clinicians.

**Q.7 Sir lastly few words of encouragement for our aspiring undergraduates and ongoing residents specifying the future aspects of emergency medicine.**

**Answer :-** Emergency medicine is a dynamic, fascinating, and rewarding branch of medicine. It embodies the ethos of medicine. There is probably no greater satisfaction for a doctor than bringing back a patient from the jaws of death. And there is no substitute for high-quality resuscitation in the emergency room. It save lives and that is what all of us have set out to do. Of course, it is grueling, but that is part of the game. Nothing worth cherishing in life comes easy. And the future belongs to emergency medicine. So, rest assured you are making the right choice.

***“INDUSEM championed the growth of Academic Emergency Medicine in India & this growth remains the Single Most Important Factor which catapulted the Sustainable Development of Emergency Care for over a Billion Citizens of India.”***

***Dr. Sagar Galwankar***



**Solve The Crossword**

#### Across

1. Relieve symptoms of asthma and COPD.
4. Used in insulin overdose, hyperkalaemia, sulphonyl urea overdose, acute alcohol intoxication.
5. Used in immediate general treatment of chest pain suggestive of ischaemia.
6. Used in oedema associated with acute and chronic heart failure, as well as cirrhosis & nephrotic syndrome.
10. Treats organophosphate, insecticide or nerve gas poisoning and in mushroom poisoning.
11. Treat high blood sugar in patients with diabetes.
12. Used to control seizures, relieves anxiety

#### Down

1. Treatment of severe metabolic acidosis in cardiac arrest
2. Used in rapid Tranquillisation of an agitated patient, alcohol withdrawal delirium, muscle spasm, insomnia, panic disorder, psychogenic catatonia
3. Treatment in extremity trauma and analgesia in moderate to severe pain
7. Supplements the action of adrenaline. Used in case of anaphylactic reaction to drugs, acute allergic reactions, status asthmaticus
8. Rapid relief of severe hypersensitivity reaction to drugs and allergens. Used in emergency treatment of anaphylactic shock.
9. Treats acutely painful conditions in ED

# Burnout in Emergency Physicians

**Dr Jyoti Sharma & Dr Bhanupreet Kaur**

Burnout refers to “exhaustion may be physical, mental, emotional caused by prolonged and excessive stress”. It leads to a lack of energy and enthusiasm at work because of working too hard initially. Furthermore, this leads to treating patients as subjects rather than human beings, and a lack of empathy. Burnout is rampant in emergency physicians and has become a global problem. It includes emotional exhaustion, reduced sense of personal accomplishment, and depersonalization, physical exhaustion, poor judgement, wrong decision-making, guilt, and ineffective feeling. Emergency physicians are most prone to it due to dealing with a wide variety of domains from very sick patients to stable but psychiatric patients, along with violent and non-understanding relatives. More so after primary dealing, no patient remembers them. It is associated with negative outcomes both on part of the physician as well as the patient. Physician burnout leads to poor performance, negative attitudes, patients, and absenteeism. On part of patients, it is associated with decreased quality of care.

Burnout is assessed using Maslach Burnout Inventory (MBI). It is a scoring system (0-33) that includes three subscales.

1. 9 items to measure emotional exhaustion
2. 5 items to assess depersonalization
3. 8 items assessing personal achievement.

It is categorized into low, medium, and high levels of burnout as a spectrum with higher scores equating to a higher level of burnout and not as an exact cut-off value defining burnout. Copenhagen burnout inventory is also used to assess burnout.

Erratic schedules and odd timings of working lead to a loss of circadian rhythm. Social plans and family get-togethers have to be missed on many important occasions. Along with social insecurity there occurs professional insecurity as physicians mostly work as employees of hospital administration and are rarely allowed as freestanding physicians. The roaring pace and action-packed working environment requiring a quick response in sick and trauma victims which initially looks alluring to the young when they choose the field, over the years leads to disinterest and exhaustion. Many times the physician may have a sense of rolling a boulder over a steep hill, when all his efforts seem Sisyphean futile, especially in drug abusers, alcoholics, and addicts. The fear of contracting contagious diseases while conducting life-saving procedures and too speedily always remains at the unconscious level. COVID -19 pandemic has witnessed how emergency physicians stake their life and remain fully dedicated to their duty. The second victim syndrome is also a matter of concern occurring after burnout. Any medical error leading to an adverse outcome occurring due to lack of sleep or disturbed mental status of the physician can make him a “second victim” and lead to further psychological trauma. Zero-mistake standards laid down by society can leave these second victims isolated, with low self-esteem, depression, or drug abuse and addiction. Although not all medical errors occur due to burnout, many of them have their roots in system malfunction, however, a burnout physician can have a false

perception of not being supported by one's own hospital authorities and fear of litigation further aggravates the situation leading to a vicious cycle.

Early recognition of the symptoms of burnout is the most crucial step in its prevention. Family, friends and colleagues need to be vigilant and inform any symptoms urgently to the authorities. Evaluation scores such as Maslach's Burnout Inventory need be periodically filled.

Creating a proper balance between personal and professional life is important. Dedication to medical profession and patients is taught in medical schools and are the hallmarks of a good physician, however stress and overwork can be sour to their dedication and have a negative impact. Spending quality time with family and loved ones, old friends, social meetings, and regular conversation with mentors who would listen to small problems and guide how to overcome them as they can be perceived as barriers to career satisfaction must be sought. The isolating effects of chronic stress can be alleviated by social gatherings. These days social media has taken up on the role and provides a wealth of opportunity to connect with the stalwarts of every field and discussion with the mentors has become easy. Physicians should try take out time for their hobbies, self-care, mind and body relaxation from their busy schedules to relieve on-the-job stress. Next the onus also lies on the administration that the physicians who are working their sweat out to treat patients in crisis along with dealing with their agitated relatives should be given regular breaks, coalescent and healthy work environment amidst the already crisis-ridden atmosphere and a sense of security against the litigation and prosecution. It is also preferred that the emergency physicians are not over burdened with additional administrative duties along with patient care. Good and effective communication among co-workers can act as building stones for a positive work environment. Communication is a skill that always has a scope for improvement.

The best way to treat burnout is to think on a daily basis how to avoid it among you yourself and your colleagues. We need to think about it as we don't have any scope of losing the “best of our healthcare soldiers”.



**HERITAGE INSTITUTE OF MEDICAL SCIENCES**

• हमारी विशेषता आप हैं •

**THE MOST AFFORDABLE  
SUPER SPECIALITY HOSPITAL**

7408602222 , 0542-7111071

@himsmedicine

https://www.facebook.com/heritageims



N.H.2 (G.T. ROAD, BYPASS, BHADWAR, VARANASI, 221311) SCAN HERE