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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...

Hello Doctors,

Artificial Intelligence in Emergency Department - A Game Changer

Artificial Intelligence (AI) is rapidly reshaping industries across the globe, with the medical sector at the forefront of this transformation. As healthcare faces mounting challenges, AI is emerging as a critical tool, poised to revolutionize diagnosis, treatment, and patient management. AI's potential goes beyond conventional methods, enhancing diagnostic precision and streamlining administrative tasks, thus significantly improving efficiency and patient outcomes. As we approach this technological shift, it is evident that AI is not just an emerging technology but a cornerstone of the future of healthcare. With ongoing advancements in machine learning, data analysis, and robotics, AI is all set to play a pivotal role in creating a more precise, personalized, and efficient healthcare system, heralding a new era of medical innovation. As AI continues to advance, staying informed and engaged with these developments will be vital for healthcare professionals to leverage these tools effectively and responsibly.

In 2024, the implementation of AI in emergency medicine is proving to be a game-changer, revolutionizing the way triage and diagnostics are conducted in the high-pressure environment of emergency departments (Eds). As healthcare systems around the world face increasing demands, AI stands out as a crucial tool to enhance efficiency, precision, and patient care outcomes.

AI in Triage : Increasing Speed and Accuracy -

Triage is a fundamental component of emergency medicine, determining the priority of patients based on the severity of their conditions. Traditionally, this process relies on the expertise and judgment of healthcare providers, which,

while reliable, can be susceptible to errors, particularly when EDs are overcrowded. AI offers a powerful solution by rapidly analyzing data such as symptoms, vital signs, and medical histories to support clinicians in making more accurate triage decisions. AI-powered triage systems use sophisticated algorithms to assess the urgency of a patient's condition in real-time. These systems can flag high-risk cases, such as those with potential sepsis or myocardial infarction, much faster than traditional methods. Early adopters have noted that AI-assisted triage can reduce waiting times and significantly lower the risk of missing critical conditions during the initial assessment. This is especially vital in busy EDs, where swift and accurate triage can be life-saving.

AI in Diagnostics : Enhancing Precision -

Beyond triage, AI is also making significant contributions to diagnostics in emergency medicine. Machine learning algorithms are increasingly being integrated into clinical workflows to assist in the accurate diagnosis of conditions that are often challenging to identify. For instance, AI can analyze medical images—like CT scans and X-rays—more quickly than a human radiologist and with high levels of accuracy, identifying critical conditions such as intracranial hemorrhages or pulmonary embolisms. Additionally, AI's ability to process and compare a patient's symptoms with vast databases of medical cases allows it to suggest possible diagnoses that might not be immediately evident. This is particularly beneficial in complex cases where the range of potential diagnosis is broad. AI serves as an invaluable tool, supplementing the clinician's expertise and leading to more accurate and informed decisions.

Challenges and Ethical Considerations -

While AI's potential in emergency medicine is significant, its integration is not without challenges. Concerns around data privacy, the risk of algorithmic bias, and the necessity for

rigorous validation of AI tools are important considerations that must be addressed. Furthermore, the widespread adoption of AI requires substantial investment in technology and training, raising questions about the accessibility and equity of these advancements across various healthcare settings. Despite these challenges, the benefits of AI in emergency medicine are clear. As the technology continues to evolve, its role in improving the speed and accuracy of triage and diagnostics will likely expand, leading to better patient outcomes and more efficient care delivery.

In conclusion, All in all, AI is set to transform emergency medicine, particularly in the areas of triage and diagnostics. Although the technology is still developing, initial results suggest that AI can help emergency departments manage patient flow more effectively, reduce diagnostic errors, and ultimately save lives. Moving forward, it is essential to embrace these technological advancements while carefully considering the ethical and practical challenges they present.

This upcoming year 2025 is not just a new year; it is the gateway to an era where the convergence of AI and human ingenuity paves the way for transformative possibilities.

AI in emergency medicine represents not just an innovation but a crucial step towards a more efficient and resilient healthcare system. As AI matures, it invites us to rethink boundaries, redefine progress, and reimagine a future where innovation and inclusivity coexist.

Dear Readers,

As we approach the end of another year filled with growth, learning, and progress, I want to extend my heartfelt gratitude to all our readers, contributors, and supporters. Your unwavering dedication to advancing medical knowledge and practice continues to inspire the work we do at INDUSEM - TEAMS, & I am confident it will continue to thrive, innovate, and uphold its mission to serve as a trusted platform for medical excellence and knowledge sharing.

In past 2 and half years, our shared journey has brought us closer to groundbreaking discoveries, highlighted stories of resilience, and fostered meaningful discussions in the ever-evolving field of medicine.

A special gratitude goes to **Prof (Dr.) Sagar Galwankar**, Principal promotor, CEO, INDUSEM and **Prof (Dr.) D K Singh**, Patron, Executive Director, AIIMS Bathinda, thank you for trusting us with your valuable work and for enriching our publication with cutting-edge research, thought-provoking insights, and stories that truly matter and enriching every edition of our newsletter.

A huge applause to my brilliant co-editors, **Dr. Suman Rastogi**, EM Consultant, Princess Cruises and **Dr. Tanvi Anand**, PG-Resident Anaesthesiology & Critical Care, Heritage IMS, Varanasi, without

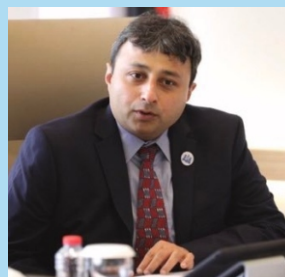
whom this journey would not have been as successful or rewarding. Your dedication, expertise, and unwavering support have been the cornerstone of our collective achievements. From brainstorming sessions to tackling tight deadlines, your teamwork and shared vision have been nothing short of inspiring. None of this would have been possible without your engagement, insightful feedback, and contributions.

A heartfelt thanks to our loyal readers, your continued trust and enthusiasm drive our commitment to excellence, your loyalty and feedback have been our guiding light, reminding us of the impact our efforts can make in the medical community.

As I and my team conclude our tenure, I want to take this moment to express my heartfelt gratitude to everyone who has been a part of this incredible journey, this has been a time of learning, growth, and collaboration, and I am truly honored to have had the privilege to lead this publication.

As we step into a new year, we look forward to exploring more innovations, addressing critical challenges, and celebrating the milestones that shape the future of healthcare. Together, we remain steadfast in our mission to inform, inspire, and impact the medical community.

Wishing you all a happy, healthy, and prosperous New Year!



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CEO OF INDUSEM



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Dr. Suman Rastogi
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Recent Updates

DIMEDCON2024 October 26th & 27th 2024 at Kasturba Medical College, Mangalore.



Under the aegis of Emergency Medicine Association (EMA) Karnataka, Academic College of Emergency Experts (ACEE) & INDUSEM, The Department of Emergency Medicine, Kasturba Medical College Mangalore in association with Centre for Disaster Medicine, Department of Emergency Medicine Kasturba Medical College Manipal and Center of Excellence for Disaster Management & Mitigation (CEDMM), Bengaluru organized DIMEDCON2024 on October 26th & 27th 2024 at Kasturba Medical College, Mangalore.

The national conference was one of the first in the field of Disaster medicine focusing on the theme “Resilience in the Face of Crisis: Advancing Disaster Medicine”. October 26th marked the beginning of the event with Preconference workshops and Disaster Mock exercise. The mock exercise featured a scenario of terrorist attack and bomb blast and subsequent mass causality incident. The mock exercise was led by Dr. Vijay Kumar (Assistant Professor Emergency Medicine, Kanachur Institute of Medical Sciences Mangalore). Workshops on Disaster Field triage, Disaster Tabletop Exercise, Lifts Moves & Extrications, Splinting & Hemorrhage Control and Personal Protective Equipment were also held.

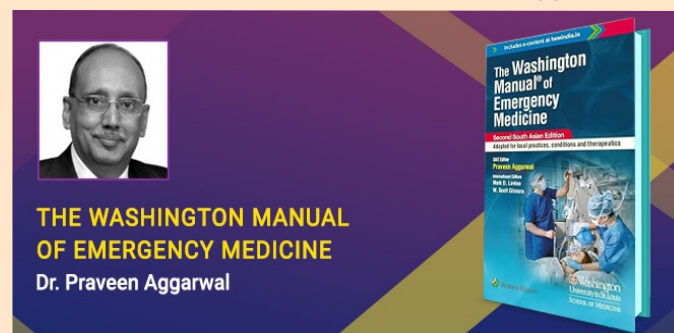
The workshops were led by Dr. Sanjan A (Assistant Professor EM, KMC Mangalore), Dr. Freston Marc Sirur (Associate Professor EM, KMC Manipal), Dr. Ashish Kishore, Dr. Vrinda Lath (Senior Residents from KMC Manipal and Dr. Nikhil Paul (Assistant Professor Emergency Medicine KMC Mangalore). The highlight of the day was the Quiz Program “VANGUARD” conducted by KMC Mangalore Emergency medicine Team. (Dr. Archu MJ, Dr. Keerthana Manoharan KK & Dr. Kripa Gopal, Senior Residents KMC Mangalore). There were also Poster presentation Competitions on the theme Disaster medicine.

DIMEDCON2024 was inaugurated by Sri. Amit Singh IPS, Deputy Inspector General of Police (DIGP), Karnataka State Police Force, Western Range Mangaluru.

Sri Pradeep KK, Technical Advisor, Biological Disaster & T, Government of Karnataka & Sri Sandeep Shivaram, Coordinator, Centre of Excellence in Disaster Mitigation & Management, Bengaluru were the guest of honor. The function was presided by the Dr. B Unnikrishnan, honorable dean of Kasturba Medical college Mangalore.

INDUSEM Leader Dr. Nikhil Paul, INDUSEM Award Winner Dr. Archu MJ & INDUSEM Leader Dr. Vivek Gopinathan led the splendid team under the patronage of Dr. Madhusudan Upadya, Professor & HOD, Emergency medicine, Kasturba Medical College Mangalore. “Over 300 Delegates participated in this Mega-Conclave focused on DISASTER PREP”. DIMEDCON is the DAIMOND of The INDUSEM Crown and will become the benchmark meeting for bringing Experts in Disaster Management together across India.

INDUSEM announces with Pride the Second South Asian Edition of The Washington Manual of Emergency Medicine Edited none other than our own Dr. Praveen Aggarwal.



“Auf wiedersehen” 2024 in Style by EM Kerala



EMKERALA 2024, was held at Jubilee Mission Medical College, Thrissur, from November 23 to 24, 2024. With robust participation from healthcare professionals, students, and experts, the event showcased innovations, academic excellence, and collaborative discussions that are shaping the future of emergency medicine in India. Distinguished leaders namely Dr. V. V. Unnikrishnan (Principal

of KUHS Academic College), Professor Dr. Sanjeev Bhoi (Director WHO collaborating centre for Emergency and Trauma, JPNATC), Dr. Mohammed Haneef M (Emergency Medicine Association India, South Zone Regional Secretary), Rev Fr. Renny Mundenkurian (Director, Jubilee Mission Medical College), Fr. Paul Chalissery (Assistant Director, Jubilee Mission Medical College), Dr. Benny Joseph Neelankavil (CEO, Jubilee Mission Medical College), Dr. Shibu C. Kallivalappil (Medical Superintendent, Jubilee Mission Medical College), Dr. Babu U Palatty (Head of the Department of Emergency Medicine), Dr. P.C. Rajeev (Organizing Chairman), and Dr. Appu Suseel (Organizing Secretary) championed this unique State level Conference of The Emergency Medicine Association of India Kerala Chapter.

“Over 300 Delegates participated in this Mega-Conclave focused on DISASTER PREP”. DIMEDCON is the DAIMOND of The INDUSEM Crown and will become the benchmark meeting for bringing Experts in Disaster Management together across India.

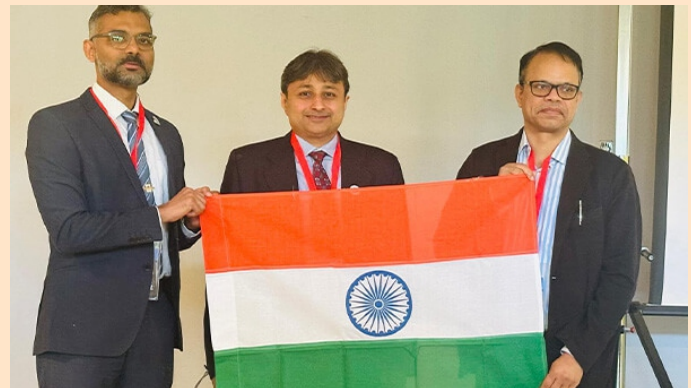
The Unspoken Epidemic: Financial Illiteracy Among Doctors

Despite their impressive educational backgrounds and high earning potential, many doctors struggle with financial literacy. This unspoken epidemic can have severe consequences, including debt, financial stress, and even bankruptcy. A recent study revealed that nearly 60% of physicians reported feeling financially illiterate, with many admitting to making costly financial mistakes. The reasons for this are multifaceted. Medical schools prioritize clinical training over financial education, leaving doctors ill-equipped to manage their finances. Additionally, the high-stress

nature of medical practice can lead to burnout, making it challenging for doctors to focus on their financial well-being. The consequences of financial illiteracy among doctors are far-reaching. Many struggle to manage their debt, including student loans and mortgages. Others fail to plan for retirement, leaving them vulnerable to financial uncertainty in their golden years. To address this issue, medical schools and professional organizations must prioritize financial education. Doctors must also take proactive steps to improve their financial literacy, such as seeking the advice of financial advisors or attending workshops on personal finance.

By acknowledging the epidemic of financial illiteracy among doctors and taking steps to address it, we can empower physicians to achieve financial stability and security, allowing them to focus on what matters most – providing exceptional patient care.

Dr. Vimal Krishnan Pillai took over as the Secretary General of The World Academic Council of Emergency Medicine for the Year 2025.






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The 11th World Academic Congress of Emergency Medicine
The 21st Annual All India Conference of Academic Emergency Medicine
The 8th Annual Emergency Pediatrics & Injuries Congress

THEME: TESTS, TREATMENTS, TECHNOLOGIES & TEACHINGS



VASUDHAIVA KUTUMBAKAM
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The World Leaders of Emergency Medicine assembling in India in BHARAT at Mangaluru, Karnataka