Celebrating 20 YEARS

TRAUMA & EMERGENCY
TEAMS
ACADEMIC MEDICINE SENTINEL

Proclaiming & Promoting Academic Leadership

Volume: 18 | Edition: 04 | Month : January - March 2025

Good bye 2024. Hello 2025!

The start of new year is a perfect opportunity to express gratitude, inspire positivity and strengthen connections with your colleagues. As we welcome 2025, it's time to celebrate past achievements, set new goals and look forward to an exciting year of collaboration and success.

Challenges make us stronger. Let's embrace them and aim high, work smart and celebrate each achievement along the way. Let's make 2025 the year we master the art of working hard and playing harder.

May 2025 bring us closer to our personal and professional dreams.

Here's to another year of great collaboration.

Wishing you all success, health and happiness in 2025. You deserve it all.

I take this opportunity to express thanks to Dr. Bikram and his whole team who left a legacy and hope that they will continue to extend their support to keep the flag flying.

Dr. A.P. Singh
Dean
SGRD University of Health Sciences
Sri Amritsar

Journey from Anaesthesia to Emergency Medicine

Dr Manuja

There's a time in our lives when we feel the need for change. Change from the medical specialty we had decided to pursue for our life. I for whom Anaesthesiology was the path to 'moksha' was in similar dilemma. Thinking about Anaesthesia & critical care or Emergency medicine was like standing on crossroads of life

Even with an experience of 15 years as a doctor, to me both seemed to be two sides of the same coin. I and all who know me was of opinion that I was totally nuts about Anaesthesia, but after exposure to Emergency medicine, I discovered I had found my calling after good 15 years. Resuscitation was the part which had fascinated me always and brought me to Anaesthesia. The thrill of working in emergency as an anaesthetist was enchanting. So for reassurance to others who are going through same, dilly dallying over their decision like… to be or not to be, it's OK to be.

Working as anaesthesiologist in casualty and in emergency OT was always where I enjoyed working the most. These experiences made me realize that working in emergency never seemed like work and I really enjoyed it more than my time spent shadowing the surgeons. The hum drum of Emergency, the critical moments, acute care and resuscitation, varied cases, leading a team and immediate gratification in patient care. It was difficult to make decision, leaving my cushioned life but then I realized that EM is what will keep me more fulfilled.

Looking back to my years as anaesthesiologist in ER, I thought of the spring in my walk while swiftly performing procedures in uncontrolled environment, all intubations, central line placement, a lumber puncture or even simple things like iv cannula insertion and others, all which were part of my anaesthesia training but seemed more fruitful in ER. On my journey to emergency medicine were procedures that were common to the anaesthesia practice but so essential in EM. trying to make as many differential diagnoses I could think of and then weave my way to the most likely one. This is the kind of work which can make time fly for me i.e. consistently working and thinking. This is a factor about Emergency medicine that I have come to realize and cherish. Time in EM is like learning new things everyday with qualities like reasoning encompassed really well on a daily basis.

And then , my growing love for medicine and pharmacology which somehow never appealed to me as a medical student. The affair which started during anaesthesia training is in full bloom now. “mere Kumbh ke mele mein bicchude hue sathi” These two seem to be my long lost love...

Though it was a rather need based decision to switch from anaesthesiology and critical care to EM but it proved to be my calling. I am glad to have made the transition and feel more secure than ever like after a match made in heaven, no

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

Chief Editor

Dr. A.P. Singh
Professor & Head
Department of Emergency Medicine
Dean
SGRD University of Health Sciences
Sri Amritsar

Chief Editor

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

EXECUTIVE EDITOR
Dr. Pooja Abbi
Associate Professor,
Department of Emergency Medicine,
SGRDIMSR, Amritsar

ASSOCIATE EDITOR
Dr. Manuja
Associate Professor,
Department of Emergency Medicine,
GGSMCH, Faridkot

matter how late into my life it was. I hope this will help to ease the concerns of other doctors who face a similar situation to mine, and I hope that you too can happily decide on your specialty before your time ends.

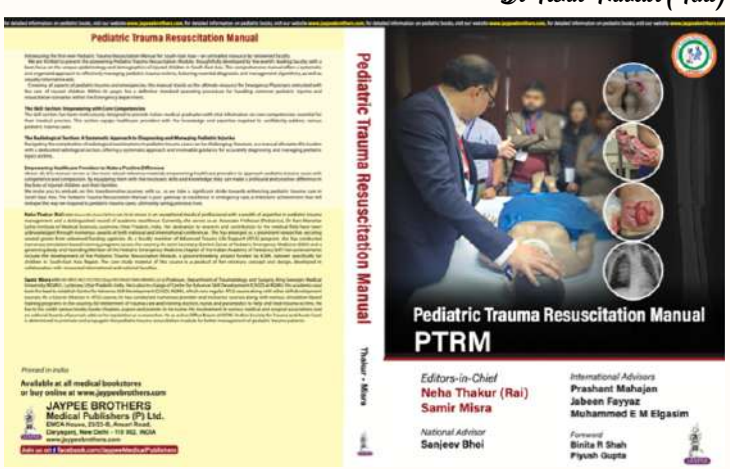
Well on this happy note I made a beginning. I knew it was going to be a real challenge to carve out a new academic department of emergency medicine from casualty but then I decided to take a bull by horns. And that's would a real Indian lady would do. After all I am from land of Rani Lakshmi Bai and Begum Hazrat Mahal.

And thats the end of my honeymoon period. Struggle to improve things like understaffing, lack of bed availability, transfer delays, lack of academics, poor team work, excessive working hours, attendants in absentia at time of making decisions, procurement of drugs and lab reports at times are more like a mirror maze at Hamleys. The real Mahabharat is now. Yes presently it's like going for a war every day. You will encounter attendants trying to perform rituals for their patient (believe me religious beliefs are a sensitive topic. After all “dua mein dawa se adhik asar hai”), being aggressive (empathy feels like taking a backseat is an understatement), But then this is not a full stop to my journey in emergency medicine. A small comma here and there but no full stop. for emergency medicine is the beginning of a patient's journey for treatment, journey to our future and “A journey well begun is already half done.” This proverb, I believe, aptly describes my own journey so far.

To provide some perspective on this journey towards, lets remember the story about “Samundar manthan”. To me it's a story about progress, of resilience, of development. If this is the ocean we will churn and get everything. If not 14 'ratnas' then at least policies and protocols for the patients, their right for treatment……

Revolutionizing Paediatric Trauma Care in India: A Simulation-Based Paediatrics Trauma and Resuscitation Module

Dr Neha Thakur (Rai)



Introduction: The need for paediatric trauma care in India is critical and multifaceted. India grapples with a high incidence of paediatric trauma cases, stemming from road traffic accidents, falls, and burns, disproportionately affecting children. Their unique anatomical and physiological characteristics demand specialized care. Access to paediatric trauma expertise remains limited in rural areas, exacerbating the challenge. Furthermore, paediatric trauma often leads to severe and preventable long-term consequences for children, affecting their prospects. Addressing this need is a moral obligation and essential for the nation's well-being and development. Enhancing paediatric trauma care through specialized training, expanded access to healthcare, and increased public awareness is imperative to safeguard the future of India's children and mitigate the economic burden associated with paediatric trauma.

The Paediatric Trauma Challenges in India: Paediatric trauma care in India faces many challenges that impede its effective delivery. Firstly, there's a glaring shortage of healthcare facilities and specialists with the requisite expertise in paediatric trauma management, especially in rural areas. This geographic disparity in access to care exacerbates the plight of injured children, often leading to delayed or inadequate treatment. Additionally, the lack of standardized protocols for pediatric trauma care and the absence of a comprehensive national trauma registry hinders efforts to gather essential data, track outcomes, and implement evidence-based practices. Furthermore, given India's diverse cultural and socioeconomic landscape, public awareness about paediatric trauma care remains limited, making it challenging to promote injury prevention and timely care-seeking behaviours among caregivers.

Another significant challenge is the inadequate allocation of resources and funding for paediatric trauma care infrastructure and training programs. The need for specialized equipment, pediatric-specific training, and dedicated paediatric trauma centres is often overlooked in healthcare planning and budget allocation. Moreover, the complex and evolving patterns of paediatric trauma in India, influenced by factors like rapid urbanization and changing lifestyles, demand continuous adaptation of trauma care protocols and strategies. Finally, addressing paediatric trauma necessitates a collaborative effort among various healthcare stakeholders. However, achieving effective coordination and

multidisciplinary teamwork remains a challenge, hindering the development of a comprehensive and seamless pediatric trauma care ecosystem in India.

Some of the challenges are:

- **Alarming Statistics:** India grapples with an alarmingly high incidence of pediatric trauma cases, burdening healthcare systems and society. [1,2,3]
- **Road Traffic Incidents:** Children in India are particularly vulnerable to road traffic accidents, resulting in severe and often life-threatening injuries. [4,5,6]
- **Falls and Burns:** Falls from heights and burn injuries are common among Indian children, significantly contributing to the paediatric trauma epidemic.[7,8,9]
- **Educational Gap:** Healthcare providers often lack specialized training in paediatric trauma management, leading to inadequate initial care and suboptimal outcomes.[7]

The Revolution Begins: Why a Paediatric Specific Simulation-Based Module is Essential: Simulation-based training in paediatric care holds immense importance in India for several compelling reasons. Firstly, it addresses the unique challenges and intricacies of providing healthcare to children with distinct anatomical and physiological differences from adults. These differences require specialized skills and knowledge, making simulation-based training essential to bridge the educational gap among healthcare providers. Secondly, paediatric patients often require high precision and gentleness in diagnosis and treatment. Simulated scenarios allow healthcare professionals to practice critical procedures in a controlled and risk-free environment, such as paediatric airway management, intravenous access, and medication administration. This builds competence and boosts healthcare providers' confidence, enhancing the quality of care delivered to paediatric patients.

Moreover, simulation-based training is precious in addressing the shortage of paediatric specialists and paediatric-specific healthcare infrastructure in many regions of India. It enables healthcare professionals, even those in remote areas, to gain exposure to many paediatric cases and develop expertise that can positively impact patient outcomes. This democratization of training helps ensure that children nationwide receive consistent, high-quality care. The simulation-based activity also encourages a culture of continuous learning and skill improvement among healthcare providers. Paediatric care is a dynamic field with evolving best practices and technologies. Regular simulation exercises and updates enable healthcare professionals to stay updated with the latest advancements, resulting in improved healthcare delivery and better patient outcomes.

In summary, simulation-based training in paediatric care is crucial for India to ensure that healthcare providers have the specialized skills and confidence needed to provide effective and compassionate care to children. It addresses the unique challenges of paediatric medicine and contributes to improving the overall quality of healthcare for the youngest members of society.

Key Components of this Revolutionary Module:

- **Cutting-Edge Simulation:** Advanced simulation techniques lie at the core of this revolutionary module. These techniques create immersive, true-to-life scenarios, empowering healthcare providers to practice crucial procedures like paediatric airway management, vascular access, and fracture stabilization in a risk-free environment.
- **Comprehensive Curriculum:** The module boasts a comprehensive curriculum, meticulously tailored to India's unique context. It delves deeply into paediatric trauma epidemiology, assessment, and the latest innovative management strategies, reflecting the evolving needs of the nation.
- **Collaborative Excellence:** Collaboration among healthcare professionals is central to this transformative approach. It fosters a holistic, practical approach to paediatric trauma care, recognizing that the best care results from a multidisciplinary effort.
- **Cultural Context:** This module champions cultural relevance. It customizes the training to address India's most prevalent trauma scenarios, such as road traffic accidents and falls and prioritizes culturally sensitive strategies for injury prevention.
- **Continuous Learning Culture:** A culture of continuous learning is vital. The module encourages ongoing professional development through regular workshops, refresher courses, and knowledge-sharing sessions, ensuring skills remain sharp and current.
- **Standardization for Excellence:** The development of standardized guidelines and protocols for pediatric trauma care ensures uniformity and quality across diverse healthcare facilities, revolutionizing the consistency of care.
- **Data-Driven Innovation:** The module places a premium on research initiatives that gather and analyze data on pediatric trauma cases. These data-driven insights drive evidence-based innovations in pediatric trauma care and prevention, ensuring that care continually evolves to meet the population's changing needs.

Conclusion: The Paediatrics Trauma and Trauma Resuscitation Module (PTRM), poised to be introduced in India, promises to be revolutionary in paediatric trauma care. This innovative module represents a paradigm shift in how we approach and address the unique challenges posed by paediatric trauma. Here's why PTRM is set to be a meaningful change:

Firstly, PTRM focuses on simulation-based training, a groundbreaking approach that allows healthcare providers to immerse themselves in realistic paediatric trauma scenarios without putting actual patients at risk. This revolutionary approach ensures that professionals gain hands-on experience in a controlled and safe environment, building their skills, competence, and confidence. This transformation from traditional classroom learning to immersive, practical training is set to elevate the standard of paediatric trauma care in India to unprecedented levels. Secondly, PTRM is comprehensive and tailored to the Indian context. It recognizes the distinctive trauma patterns prevalent in India, such as road traffic accidents and falls, and provides culturally relevant strategies

for injury prevention and care. This tailored approach ensures that healthcare providers are well-equipped to address the specific needs and challenges posed by paediatric trauma cases in India, contributing significantly to improved patient outcomes.

Furthermore, PTRM fosters a culture of continuous learning and collaboration among healthcare professionals. It encourages multidisciplinary teamwork and knowledge sharing, recognizing that the best care outcomes result from collective efforts. The module promotes a dynamic exchange of ideas, best practices, and the latest innovations in paediatric trauma care, driving continuous improvement in the field.

In conclusion, the Paediatrics Trauma and Trauma Resuscitation Module (PTRM) is poised to revolutionize paediatric trauma care in India through its simulation-based training, contextual relevance, and commitment to fostering a culture of collaboration and continuous learning among healthcare providers. It represents a transformative step toward ensuring that every child in India receives the highest standard of trauma care, saving lives, reducing long-term consequences, and securing a healthier future for the nation's children. PTRM is not just revolutionary; it's a visionary leap forward in paediatric trauma care.

References

- WHO fact sheets 2022 -Road Traffic injuries. Accessed January 25, 2023. Available from: https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries
- World Health Organization. Global status report on road safety 2018: Accessed January 25, 2023. Available from: WHO/NMH/NVI/18.20). World Health Organization. 2018
- National Road safety Policy. Government of India. Accessed January 25, 2023. Available from: https://morth.nic.in/national-road-safety-policy-1
- Rattan A, Joshi MK, Mishra B, et al. Profile of injuries in children: report from a level i trauma center. Indian Pediatr. 2021;58:553-5.
- Prabhakar AKP, Vincent D, George AS, et al. Pattern and outcome of unintentional pediatric trauma in the emergency department of a tertiary care hospital in South India. J Med Sci 2018;38:269-74.
- Estroff JM, Foglia RP, Fuchs JR. A comparison of accidental and nonaccidental trauma: it is worse than you think. J Emerg Med. 2015;48:274-9.
- Thakur NR, Jaiswal V, Singh A, et al. Epidemiology and pattern of injury of pediatric trauma patients in level I trauma centre of Northern India. Trauma. 2023 Aug (online. Available fro: https://doi.org/10.1177/14604086221111202
- Kundal VK, Debnath PR, Sen A. Epidemiology of pediatric trauma and its pattern in urban India: A tertiary care hospital-based experience. J Indian Assoc Pediatr Surg 2017;22:33-7.
- Prakash Raju KNJ, Jagdish S, Kumar GK, et al. Profile of pediatric trauma among the patients attending emergency department in a tertiary care hospital in South India. J Emerg Trauma Shock. 2020;13:62-67.

Beyond P-Values and P-Hacking: Putting Patients First in Research

Dr Ankit Kumar Sahu

Mark Twain famously said, “There are three kinds of lies: lies, damn lies, and statistics.” And he wasn't wrong—p-values are one of those statistics that can easily mislead if not understood properly. In our field, where decisions must be fast and accurate, it's tempting to see p-values as the Holy Grail of research—the bright line that separates meaningful breakthroughs from statistical fluff. But is that line as sharp as we think? And are we always crossing it ethically?

The Problem with P-Values as a Gateway: For years, we've been trained to worship at the altar of $p < 0.05$. If the p-value is smaller than 0.05, the research is “significant,” and we might consider applying its conclusions to our patients in the emergency department (ED). But here's the catch: p-values are just one piece of the puzzle, and often, they're the shiniest, most misunderstood piece. They don't tell us the size of an effect, how clinically important it is, or whether the results are reliable. Yet, many studies—and many of us—still treat p-values like a green light at a traffic intersection: significant = go, not significant = stop. What if I told you that p-values can sometimes flash “green” even when the road is closed?

P-Hacking: When Numbers Are Nudged: Enter p-hacking, the dark art of torturing your data until it confesses. Researchers (hopefully not us!) may tweak analyses, exclude inconvenient data, or test multiple hypotheses to squeeze out a $p < 0.05$. This practice often hides beneath the surface but can distort the truth of a study. Typical studies in emergency medicine analyse 4-5 primary outcomes—like mortality, ICU stay, ventilator days, complications, and cost. Even when all null hypotheses are true, there's still a decent chance that one outcome might show significance by random chance. It's like rolling a die: the odds of rolling a "6" are 16.7% per roll, but if you roll it five times, the chance of at least one "6" increases dramatically. Similarly, testing multiple hypotheses without proper corrections inflates the risk of false positives.

Six Misconceptions About P-Values:

1. P-values tell us if something is true.

   Contrary to popular belief, a p-value doesn't tell us if a hypothesis is true or false. It merely shows how inconsistent the data are with the null hypothesis. For example, if a study reports that a new trauma protocol reduces mortality ($p = 0.03$), it doesn't "prove" the protocol works—it just suggests we should investigate further.

2. $P < 0.05$ means the effect is big.

   Not at all. P-values don't measure the size of an effect. Imagine a fluid therapy study where ICU stays are reduced by 1 hour ($p = 0.02$). Sure, it's statistically significant, but is it worth reorganizing your ED over? Probably not.

3. P-values are independent of sample size.

   Larger samples make it easier to achieve small p-values, even for trivial effects. For instance, a multi-center study finds a 1 mmHg drop in blood pressure ($p < 0.01$). While statistically significant, such a tiny drop is hardly meaningful

in resuscitation.

4. Non-significant means no effect.

   Not necessarily. A non-significant p-value might just mean the study didn't have enough data (or "power") to detect an effect. For example, a triage intervention might show p = 0.06 for improving door-to-ECG times. While not "significant," the trend might still warrant further exploration.

5. P-values measure clinical relevance.

   Nope. Clinical relevance is determined by effect size and confidence intervals. A treatment that reduces stroke risk with an odds ratio (OR) of 0.8 but has a CI of 0.6–1.0 leaves us uncertain about its actual benefit, regardless of the p-value.

6. P-values alone are enough.

   Absolutely not. Transparent reporting of all outcomes, significant or not, is essential. For instance, if a study highlights reduced mortality (p = 0.03) but fails to mention increased complications (p = 0.07), we're not getting the full story.

Beyond P-Values: Effect Size, Confidence Intervals, and Transparency

Effect size tells us how big the impact is and whether it truly matters in practice. For example, if a sepsis protocol reduces mortality from 20% to 15%, this results in a 5% absolute reduction—saving 5 lives per 100 patients. This is clinically meaningful and easy to grasp. Compare that to another study reducing mortality from 0.2% to 0.1%. While statistically significant (risk difference = 0.1%), this translates to only one life saved per 1,000 patients—a far less compelling result. Effect size gives us the context we need to judge whether the intervention is worth adopting.

Confidence intervals (CIs) complement effect size by showing the range of plausible effects and the precision of the estimate. For instance, if a CPR intervention improves survival with an odds ratio (OR) of 1.5 (CI: 1.2–2.0), the narrow CI indicates that the benefits are likely real and consistent. On the other hand, if the same OR of 1.5 has a wide CI (1.0–3.0), the uncertainty about the true effect size suggests we should interpret the results with caution. Consider a study on early antibiotics for sepsis: if the risk difference (RD) is 3%, but the CI is -1% to 7%, the interval crosses zero. This implies uncertainty about whether the intervention helps, highlighting the importance of looking beyond p-values alone.

Transparency in reporting is equally essential. Selective reporting, where only significant outcomes are highlighted, can distort the true findings of a study. Journals like NEJM stress the importance of including all outcomes, whether significant or not. For example, a trial on a clot-busting drug might report reduced mortality (p = 0.03) but fail to mention increased bleeding events (p = 0.07). Without this full picture, we risk adopting treatments without fully understanding their risks and benefits. Transparent reporting ensures that we, as clinicians, make informed decisions for our patients.

Naman's ECG - Decoding the Heart

Dr Naman

15-01-2025, Raipur: In the fast-paced environment of the Emergency Department (ED), the electrocardiogram (ECG) serves as an invaluable tool for clinicians. Its significance extends beyond mere rhythm assessment; it is pivotal in diagnosing a spectrum of cardiovascular disorders, including myocardial infarction, arrhythmias, and even conditions like pulmonary embolism and electrolyte imbalances. Understanding the nuances of ECG interpretation can dramatically influence patient outcomes, making it essential for every emergency physician to master this skill.

The Importance of ECG in Emergency Medicine: ECG is often the first diagnostic test performed in patients presenting with chest pain or other cardiac symptoms. Rapid identification of life-threatening conditions such as ST-Elevation Myocardial Infarction (STEMI) can lead to timely interventions, significantly reducing morbidity and mortality rates. For instance, studies have shown that patients with atypical presentations, like epigastric discomfort without chest pain, can still exhibit critical ECG changes indicative of acute myocardial infarction (1). This underscores the necessity for thorough ECG training, which equips clinicians to recognize subtle yet significant changes that could otherwise lead to misdiagnosis.

Spectrum of Disorders Diagnosed by ECG: The ECG is capable of diagnosing a wide range of disorders:

- **Acute Coronary Syndromes:** Identifying STEMI and Non-ST-Elevation Myocardial Infarction (NSTEMI).
- **Arrhythmias:** Recognizing atrial fibrillation, ventricular tachycardia, and other dysrhythmias.
- **Electrolyte Imbalances:** Detecting changes due to hyperkalemia or hypocalcaemia.
- **Structural Heart Diseases:** Indications of left ventricular hypertrophy or right heart strain.
- **Syncope:** Various cardiac/extracardiac etiologies of syncope can be diagnosed on a simple 12-lead ECG (2)

Each of these conditions requires different management strategies, emphasizing the need for accurate and prompt ECG interpretation in the ED setting.

Best Practices for Learning ECG Interpretation: To enhance ECG skills among young doctors, a structured approach to learning is essential. Engage in workshops that provide practical experience with real-life cases. Leverage mobile applications and online platforms that offer interactive ECG quizzes and simulations. Review clinical cases that highlight various ECG findings and their implications on patient management. Most importantly, seek guidance from experienced colleagues who can provide insights into complex cases and common pitfalls.

Recent clinical studies have highlighted effective methods for teaching ECG interpretation to residents and physicians, emphasizing the importance of interactive and technology-enhanced learning. A systematic review indicated that computer-assisted instruction significantly improves ECG competence compared to traditional methods, suggesting that digital platforms can facilitate better engagement and retention of knowledge among learners (3). Additionally, gamification

has emerged as a promising approach, with studies showing that incorporating game-like elements into ECG training enhances motivation and learning outcomes, making the process more enjoyable and effective (4). This approach of gamified learning is adopted in the Annual Cardiovascular Emergencies Symposium (ACES) hosted by AIIMS Raipur each year. However, despite these advancements, there remain notable lacunae in knowledge; many medical professionals still struggle with basic ECG concepts due to insufficient exposure during training. Surveys reveal that while most institutions recognize the importance of ECG skills, formal instruction often consists of limited hours and relies heavily on lectures rather than hands-on practice (5). This gap underscores the need for a more robust curriculum that integrates diverse teaching methodologies and emphasizes practical experience in ECG interpretation.

In future editions of the TEAMS newsletter, this column will serve as a dedicated resource for discussing ECG pearls and pitfalls among emergency medicine practitioners. Each instalment will delve into specific ECG findings, explore clinical correlations, and provide practical tips for interpretation. By breaking down complex concepts into digestible insights, I aim to empower residents, physicians, and administrators with the confidence and skills needed to make informed decisions in high-pressure situations. This ongoing dialogue will not only enrich our understanding of cardiovascular emergencies but also foster a culture of continuous learning within the emergency medicine community.

References

- Gupta A, et al. Significance of ECG in Acute Myocardial Infarction Diagnosis in Absence of Chest Pain at Emergency Department. 2024.
- Sweeney M, et al. Management of syncope in the Emergency Department: a European prospective cohort study (SEED). 2023.
- Hsu YJ, et al. Is computer-assisted instruction more effective than other educational methods in achieving ECG competence among medical students and residents? Protocol for a systematic review and meta-analysis. 2017.
- Kwon JH, et al. The Development of Visual Expertise in ECG Interpretation: An Eye-Tracking Augmented Re Situ Interview Approach. 2020
- O'Brien KE, Cannarozzi ML, Torre DM, Mechaber AJ, Durning SJ. Training and assessment of ECG interpretation skills: results from the 2005 CDIM survey. Teach Learn Med. 2009 Apr-Jun;21(2):111-5.

PMJAY and Emergency Medicine: Coverage & Implementation Challenges

Dr Ajay Ambalakkatte

The Pradhan Mantri Jan Arogya Yojana (PMJAY) is a health insurance scheme aimed at providing cashless medical care for catastrophic illnesses requiring hospitalization. This report outlines the procedures related to emergency medicine covered under PMJAY, the challenges in implementing these procedures, and the solutions to overcome these hurdles.

The Pradhan Mantri Jan Arogya Yojana (PMJAY) provides health insurance coverage for various emergency medical procedures. These include:

- **Emergency Room Packages:** Short-stay care.
- Trauma Management: Treatment for multiple injuries.
- Burns Management: Care for severe burns.
- General Medicine & Surgery: Immediate medical and surgical interventions.
- Critical Care: Non-intensive and intensive care services.

Challenges in Implementation

Eligibility Hurdles:

- **Limited Specialist Recognition:** The Standard Treatment Guidelines (STGs) often list specific or broad specialties as the primary qualification for many emergency procedures, despite MD Emergency Medicine being eligible for the same. Example: Thrombolysis for stroke requires MBBS, while for myocardial infarction (MI), it requires MD/DNB Medicine as minimum primary qualification.

  Proposed Solution:

  ☑ Raise Awareness among policymakers, healthcare administrators, and other relevant stakeholders about the scope of practice and expertise of MD Emergency Medicine physicians.

  ☑ Emergency Medicine organizations should advocate for the inclusion of MD Emergency Medicine as an eligible qualification in the STGs

Admission Number Requirement:

- Delayed Access to Benefits: Patients typically need an admission number to access PMJAY benefits.

  Proposed Solutions:

  ☑ Assign admission numbers to all emergency patients, regardless of admission status, especially in hospitals with long wait times.

  ☑ Utilize the Emergency Treatment Information (ETI) system to create admission numbers and initiate pre-authorization within 24 hours.

Lack of Patient Documentation:

- Verification Delays: Verifying PMJAY eligibility often requires patient documentation.

  Proposed Solutions:

  ☑ Strengthen Aadhar card linkages with PMJAY to minimize documentation requirements.

  ☑ Immediate medical management in emergencies is allowed, with documentation to be submitted within 24 hours.

The Indian Constitution, through Article 21, recognizes the fundamental right to health as an integral part of the right to life. While public health insurance schemes represent a significant step towards fulfilling this constitutional mandate, their current structure and implementation fall short of fully realizing the potential to ensure accessible and equitable healthcare.

Understanding Non-Traumatic Shoulder Pain: A Systematic Approach for Emergency Clinicians

Dr Rajiv Singala

Non-traumatic shoulder pain presents a unique diagnostic challenge in emergency medicine requiring a methodical approach to distinguish between benign musculoskeletal condition and life-threatening pathologies. While most cases stem from common conditions like rotator cuff disorders or adhesive capsulitis, emergency physicians must remain vigilant for more serious underlying causes. The key to accurate diagnosis begins with a thorough history taking process. Particular attention should be paid to the onset, character, and location pain, along with associated symptoms. Red flags such as unexplained weight loss, fever, o night pain warrant immediate attention as they may indicate infection, malignancy, o referred cardiac pain. Physical examination follows a structured sequence: inspection for obvious deformities or asymmetry, careful palpation for tenderness and warmth, an assessment of both active and passive range of motion. Special tests targeting specify pathologies – including the empty can test for rotator cuff pathology and Hawkins-Kenned test for impingement syndrome – help narrow the differential diagnosis. Emergent physicians should maintain a broad differential diagnosis framework categorized into the main groups: local shoulder pathologies, referred pain sources, and systemic causes. Loc conditions include rotator cuff disorders and adhesive capsulitis, while referred pain ma originate from cervical radiculopathy or even cardiac conditions. Systemic causes, though le common, include infections and inflammatory arthritides. Most importantly, emergency physicians must recognize when shoulder pain requires immediate intervention vers outpatient follow-up. Life-threatening conditions such as acute coronary syndrome presenting as shoulder pain, septic arthritis, or malignancy require prompt recognition a management. Meanwhile, more common musculoskeletal conditions can often be managed conservatively with appropriate follow-up care. This systematic approach ensures efficient evaluation while minimizing the risk of missing critical diagnoses in the emergency department setting.

Wellbeing at EM games

Dr Murtuza Ghiya

In the inaugural EM games 1.0 , the team combined Sim and Sono wars. In between this rather earnest battle, we were able to add small elements of Well-being. First we organized a wellbeing quiz; scientific, yet focused on physician wellbeing rather than patient care. Below is an example of a quiz question. The winners were given a water bottle to remind themselves to hydrate well, even during busy shifts, as well hydrated brains are more alert and make better clinical decisions (not to mention, more cheerful too).

According to BMJ article what percentage of doctors report that covid has affected their mental health?

- 10%
- 40%
- 70%
- 5%

During the break (while judges were tallying the score) we organized a fun game for the audience. Boys vs Girls. 1 from each team was made to play a chord on the guitar. Based on number of correct notes, they were given points for the 6 strings. Not surprising, when it comes to precision, the girls team won!! We hope this has paved way for many to reconnect with their hobbies and also keep their own wellbeing in mind.

Twinkle, Twinkle, little start!

Dr Nisha

The concept of Pediatric Emergency (PE) physician is in its infantile form in India after having made the laborious journey from the womb of Pediatrics and being adopted by the Emergency Department (ED). PE physician is the Krishna to Yashoda of quintessential Emergency Departments in our health care institutions. It has only recently gained recognition as a subspeciality from Pediatrics in India and, much like other mainstream disciplinary lineages such as anaesthetists, orthopedics and general surgeons working exclusively in the ED, it had its challenges. Along with a heavy dose of denial, came the many roadblocks, such as skepticism and identity crisis. However, the persistence, perseverance and passion of this hybrid breed of ED workforce must not be underestimated. Recently, it has been acknowledged and hailed by the erstwhile pediatric intensive care enthusiasts and academic pediatric associations such as the Indian Academy of Pediatrics (IAP). The testament to its existence and success is the launch of a dedicated Doctorate of Medicine (DM) and fellowship programs in Pediatric Emergency Medicine (PEM) running in many centers in India. There is a renewed focus and clamour towards this new speciality, which has historically witnessed much neglect. Despite the barriers, it has groomed itself well, incorporating unique academic programs and fostering collaborative associations with global agencies such as EMA, INDUSEM, and FACEE-PEM. These agencies have worked tirelessly to bridge the care gaps and promote a culture of inclusion rather than divisive entitlements. Nevertheless, as

they say in shahi Urdu, “der aaye durust aaye”, changes may be slow, but they are coming for sure.

As it so happens, I also belong to a new mutant strain of cross-disciplinary practitioners of acute care who found an opportune time and place to deliver their services in the ED. Being a pediatric intensivist with additional accreditation in PEM, I quickly realised that I have the unique opportunity for golden hour interventions that can save and transform lives while regulating the flow across all subsections of pediatric care. This confluence of pediatric acute care training with the concept of ergonomics in ER and the resulting improvement in the care delivery systems in a modern-day ED is a serendipitous achievement. Here, I delve into my unique experiences of dabbling into the Jumanji world of a high-voltage ED in a tertiary care set-up of northeast India and spreading the joy of pediatrics and the twinkle of a pediatrician into this unique recipe.

On a lighter note, here are my ten takeaways on having a PE physician on board the ED ship.

- **Pro-calculus-mathematical** - calculations are to an adult practitioner what an appendix is to the human body. It's vestigial but painful if it wants to be. Pediatricians are those humans who have retained these rudimentary skills of mental math as they need to constantly derive and appropriate every medication or piece of equipment to the size of the body it's meant to go into. While the physicians in the ED are attuned to empirical high doses, pediatricians are more restrained with aliquoted precise dosing within milligrams and micrograms. Having a blend of aggression with precision in the ED might enhance safety in adult management and promptness in pediatric management. Considering the big impact of small interventions, it is essential to have a pediatrician's more precise and guarded approach to prevent any undue harm or medication error. Hence, commitment and collaboration between these two systems can reduce the workload and optimise its functioning.
- **Patience for patients** - can be a valuable asset in a high-voltage ED environment where tempers run short on both ends of the line. Patients tend to be aggressive and demanding, and physicians are juggling too much simultaneously. A howling, crying infant who is challenging to examine and requiring a lot of time-consuming attention or an irritable young child requiring the simplest of interventions can strain the resources of the ED. Having a PE specialist can significantly reduce the time for procedures, decision-making, and effective triaging of children, thus sparing the resources that can be utilised elsewhere. It can also attune the ED systems to be child-friendly.
- **Basic instincts** - Appearances can be deceptive. Young children are nonverbal and often present with nonspecific symptoms and signs. Pediatricians usually have to decode their symptoms with the help of their parents' software. So, if the parents are observant or literate, you may have a fruitful history. If not, as is usually the case, you are on your own. Unfortunately, this is a skill set that no AI-based system can even close to simulating. It takes years of practice and trial and error to develop a pediatrician's instinct to accurately assess the child's condition's acuity based on the look, cry, or other intangible features. Of course, there are objective assessment methods like PEWS, Triage systems and alert mechanisms, but nothing can replace the instincts of a pediatrician when handling a sick toddler or child.
- **Focus** - A pediatrician's hearing apparatus has an inbuilt noise-cancelling mechanism. It can optimally function even in a high-decibel atmosphere. Just like people with a specific sensory impairment having an augmented sensory awareness in other domains, pediatricians have cultivated this supernatural ability to see and hear what other non-pediatric colleagues cannot, whether it is an ejection systolic murmur in an infant with tachycardia or the finest of crepitations in a moving crying child.
- **Skillophelia - Deft in skills** - Give them the most invisible and tiniest veins in an unimagined body part, and they shall conquer. The mundane task of vascular access in adults becomes a group adventure in a fighting struggling child with difficulty in accessing veins through their cute adiposity and an unexpected physical strength in resisting the most essential procedures. Putting intravascular access in a child is a significant rate-limiting step if the providers are unaccustomed to the practical challenges and tactile skills required to secure vascular access.
- **Talk the walk** - Effective communication with caregivers and counselling is a large part of providing pediatric care rather than treatment. Some of the highly challenging scenarios in this age include breaking bad news of a child's death or handling the social aftermath of discovering non-accidental injuries or sexual abuse. Communication is a blind spot in our Indian system of healthcare. It is neither taught in a structured format nor practiced. Even though the CBME has incorporated it, it is far from having transformative potential in the healthcare education system. This is also an Achilles heel of an overcrowded Trauma and Emergency department. Since pediatric training mandates counselling and communication skills, many of these competencies can be valuable for reducing incidents of violence against healthcare professionals in the ED.
- **Holistic care model** - the presence of an PE physician can shift the focus from an individualistic approach to that of the entire sociocultural milieu of the pediatric patient. For instance, there can be significant regional-cultural variability in clinical presentations with specific patterns of injuries such as accidents, burns, near-drowning, and home treatments that alter the course of snake bite victims. The parents, specifically mother and child, are often treated as a unit, sharing the same bed and the same hospital environment. So, the modern-day ED is a family ED that is flexible and accommodates all ages' needs instead of rigid and regimental.
- **Tolerance** - pediatricians have a high degree of tolerance. The usual body fluids such as vomitus, milk, urine, or faeces cannot faze a pediatrician from handling or assessing the child in the ED. They neither smell any trouble nor have a distaste for these common

- accompaniments of handling tiny infants and toddlers.
- **Teamwork makes dreams work** - Finally, when all specialities bring unique experiences and skill sets to the ED tables, residents can imbibe and emulate their teachers, promoting a unique understanding and broader conceptual knowledge than each speciality individually. It is a bundle of care that is far more effective and progressive than the conventional casualty mindset. It is this hidden curriculum that will shape future Emergency medicine leaders and academicians. ED is an arena that is open to all and welcomes all interventions that cut across specialities with the sole intention of saving as many lives as possible.
- **Hands-on versus hands-off approach** - From the earlier hands-off approach, of essentially that of a traffic policeman in the ED simply diverting the patients to other departments, they have now transformed themselves into a participatory and hands-on approach.

Having spent a year in the ED as a PE physician, I have noticed a significant improvement in ownership in pediatric care, greater vigilance in nursing care and a newfound confidence in managing children in the ED. It is a matter of pride and satisfaction for me when I see the status updates of ED nurses and residents filled with joyful filters and selfies playing with recovered toddlers. It is this sense of camaraderie, ownership and joy that pediatrics has brought to the high-strung ED environment, but there are still miles to go before we sleep.

Toxic Talks – Changing Trends in The Toxiclogical Landscape

Dr Linu Sekhar

Over the past few years, India has witnessed a change in the incidence pattern of acute poisoning. There has been a drastic reduction in the number of pesticide ingestions, and an increase in polypharmacy as well as club drug overdosages. This may be partly due to the recent legislative measures introduced which limits the free availability of highly toxic agricultural chemicals to the public. A change in trend of addictive behaviour of the younger generation, focusing more on club drugs usage is another reason for the same. The matter of concern here is that when patients overdose on polypharmacy / club drugs, since their clinical course is very complex, effective diagnosis and management becomes extremely challenging. The availability of appropriate blood investigations as well as effective antidotes is a big challenge which India is facing currently.

A probable solution for the same would-be establishment of more acute toxicology units in emergency departments as well as more poison control centres across the length and breadth of our country. These poison control centres provide round the clock services to clinicians attending toxicology cases as well as patients who have a history of toxicological ingestion and will direct patients as well as first responders as to which acute toxicological unit the patient may be taken for further management. The cooperation between existing acute toxicology units and existing poison control centres can also be strengthened by roping in some apex body to control all the existing and newly proposed poison information centres.

Eastern Lantern

Dr. Shirshendu Dhar

Lantern, which is a Beacon of Light, is a small source of light but at times when dark becomes deeper this small source of light can enlighten the whole world. Likewise, the East Zone of Emergency Medicine Association (EMA) of India comprising of beautiful seven sisters of North East India, the land of Rosogolla i.e. West Bengal and the land of Jagannath, Odisha is now enlightens emergency medicine in the Eastern zone of India.

As the sun rises in the east, Arunachal Pradesh also taken the lead in establishing emergency medicine with mentorship of AIIMS Delhi under the leadership of Dr. Moji Jini, director of TRIHMS, Naharlagun. Emergency Medicine department of TRIHMS is also the first in northeastern region to signed mou with INDUSEM for uplifting the department and its research. Guwahati Medical college is carrying beacon of emergency medicine for a good amount of time till date under the leadership of Dr. D.K Sharma.

Dr. Nisha Toteja is the female lioness carrying paediatric emergency medicine programme on her bold shoulders in AIIMS Guwahati and a leading women leader of Emergency Medicine Association of India, Eastern zone. Her efforts in organzing virtual Pep talk in paediatric emergency medicine in 2023-24 was blockbuster hit among residents. Like light disperse its rays, Dr. Siddharth Mishra from the institute of KIMS, Odisha also spreading the rays of emergency medicine and is an active part of STEM, a module which gives the residents the real essence of emergency medicine.

Like the famous Statue of Liberty, carrying the symbol of freedom and hope, being the regional secretary of beautiful Eastern zone of EMA, Agartala Government Medical College of Tripura has taken the beacon of light to its height by organizing EM EAST 1.0, the first emergency medicine conference of northeast India in Agartala, Tripura, the land “where culture meets nature”. The lantern bearer i.e. EMA PURAB has successfully organized the conference from 12th to 13th January 2025 which was themed to empower emergency medicine and its providers attended by both regional and national faculties and successfully trained doctors, residents, paramedics and other health care providers in specialized training programmes like POCUS, trauma life support, cardiology corner – ECG boot camp etc.

The lands of rising sun, the lands of cleanest waterfalls, the land of Rhinos the land of Tripureswari and Maa Durga and the land of temples also taken pledge to spread the efforts made by INDUSEM and its CEO Dr. Sagar Galwankar sir in making the speciality of global standards in eastern region of India and has a promising future ahead. We cordially invite everyone to “PURAB” to explore the nature and to expand the footprint of emergency medicine in this part of the nation Bharat.

Journal of Emergencies, Trauma, and Shock (JETS) 2024 Summary

Dr Vivek Chouhan

The Journal of Emergencies, Trauma, and Shock (JETS) has reached an exciting milestone, celebrating its 18th year as a leader in advancing research, education, and knowledge dissemination in Emergency Medicine, Trauma, and Shock Resuscitation. As the official journal of INDUSEM, the World Academic Council of Emergency Medicine, and the OPUS12 Network, JETS bridges the gap between basic science, clinical medicine, and global health to promote translational research. Since 2010, it has consistently published four issues annually, providing a platform for impactful scholarship.

Abstracting and Indexing

JETS is widely accessible and recognized through prestigious indexing platforms such as DOAJ, PubMed Central, SCOPUS, and Web of Science. It is also registered with renowned abstracting partners like Google Scholar, ProQuest, and EBSCO. With an **Impact Factor of 1.2**, as reported in the 2023 Journal Citation Reports® (Clarivate Analytics, 2024), the journal continues to uphold its standard of excellence.

2024 Article Submissions and Highlights

JETS received an impressive **160 submissions** across various article types in 2024. Of these, 29% were accepted, while **21% remain under review**, demonstrating the journal's commitment to a thorough and selective evaluation process.

- Case Reports saw significant interest, with 38 submissions, although only 13% were accepted, reflecting the journal's high standards.
- Among the 80 Original Articles, only 19% were accepted, underscoring the journal's rigorous focus on high-quality, innovative research.

Looking Ahead

The 2024 submissions reflect a dynamic and competitive academic environment where JETS remains at the forefront of publishing cutting-edge research and fostering intellectual discussions in emergency medicine and trauma care. With its wide reach and consistent focus on quality, JETS is set to continue shaping the future of global health scholarship.

Twists of Tastes of Amritsar

Dr Pooja Abbi

When in Amritsar, do as the amritsaris do and go treat yourself to the authentic kulchas available at Kulcha Ashoke (A-Block). The golden crispy tandoori outer crust dipped into the flavourful spiced channa creates a delightful symphony of textures and flavours. To top it off have a sweet refreshing lassi from gian di lassi (katra sher Singh) which is a perfect balance of richness and freshness . No visit to Amritsar is complete without trying its most celebrated dish, the legendary Amritsari fish from Bubby. The fish boasts a flaky, melt-in-your-mouth texture, enveloped in a golden, crispy crust that is nothing short of perfection. If you are in the mood to grab a quick bite like bun

tikki or papri chaat Brijwasi is the place to be. For a quick pocket friendly sweet treat cream roll at modern bakery or A one Kulfa on queens road. To satisfy those craving and if you have a sweet tooth make your way to Ramesh Sharma sweets on Lawrence road, the mini gulab jamuns are sweet morsels of deliciousness and jalebis are irresistible. In these frosty winters Kadak chai is a non negotiable indulgence and Giani tea stall on cooper road is a perfect fit. Amritsar indeed is a food lovers paradise.

Creamy Polenta Recipe

Servings: 4 Prep

Time: 5 minutes

Cook Time: 30 minutes

Dr Arin Choudhury

Ingredients

1 cup cornmeal or polenta

4 cups water

or a mix of water and milk for extra creaminess

1 teaspoon salt

2 tablespoons butter (optional)

1/2 cup grated Parmesan cheese (optional)

Fresh herbs (optional, for garnish)

Instructions

Boil the Liquid: In a medium saucepan, bring 4 cups of water (or water and milk mixture) to a boil. Add the salt.

Add the Polenta: Gradually pour in the cornmeal while whisking continuously to prevent lumps.

Cook the Polenta: Reduce the heat to low and simmer. Stir frequently with a wooden spoon or whisk to prevent sticking. Cook for 25–30 minutes, or until the polenta thickens and pulls away from the sides of the pan.

Finish with Butter and Cheese: Stir in butter for richness and Parmesan cheese for extra flavor. Adjust salt to taste.

Serve: Spoon the polenta onto plates or bowls. Try pairing it with roasted broccoli, Brussels sprouts, tomatoes, cauliflower, with grilled mixed vegetables or zucchini with sautéed mushrooms in olive oil or butter add on top of it.

*please note if you don't have corn then Sattu is prepared from roasted chickpea flour rest of the process remain same.

Lohri and Makar Sankranti: Festivals of Warmth and Joy

These vibrant festivals celebrate the bounty of the harvest season and bid farewell to the chilly winter nights. On Lohri eve, the sky is aglow with the warm light of bonfires, as friends and family gather 'round to sing traditional Punjabi folk songs and rejoice in the festive spirit. The sweet treats of gachak and reori are a must-have on this special day.

Makar Sankranti marks the beginning of the month of Magh, as per the Nanakshahi calendar, and is a time for revelry and merriment. One of the most iconic traditions during this time is kite flying, which brings people of all ages together under the warm winter sun. The thrill of watching colorful kites soar high in the sky is an experience like no other! These festivals are a testament to the rich cultural heritage of our communities, and we're thrilled to celebrate them with love, laughter, and warmth!

Together We Rise, Together We Shine!

Let the constitution give us power and make us unique, united and undivided. Let's use the strength of unity to make India unstoppable.

Happy Republic Day 2025!