

Vapour

The official E-Newsletter of the
Indian Society of Anaesthesiologists

HIGHLIGHTS

ISA Activities

Prehospital care in India: Current status and the way forward

Dr. Swati Jindal

Life-Link: The Transformative Power of Communication in Healthcare

Dr. Raksha Kundal

Role of Paramedics, the Emergency Medical Technicians

Dr. Neeru Sahni

GREEN CORRIDOR: Literally Bridging the GAP

Dr. Poonam Sachin Ghodki

Research in Prehospital Care

Dr. Ranganatha Praveen CS

Kaleidoscope

A tryst with.....

Dr. Jaichandran Vepary Venkatkrishnan



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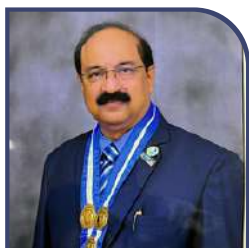
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EDITOR'S NOTE

Dear esteemed members,

Warm greetings from Indian Society of Anaesthesiologists (ISA)

National Headquarters!



The new year is here and it ushers in another series of issues of 'VAPOUR'. As every issue, this issue too brings in news of activities of various state and city branches of ISA. The activities depict the commitment and high morale of our ISA members and leaders in conducting academic meetings, doing public awareness activities and reminding members about maintaining their health. Our organisation, the ISA is the second largest body of Anaesthesiology in the world and it continues to grow. It is growing fast not only with respect to the number of its members, but also in terms of its activities at city branch, state and national levels. The growth of a body depends on team-work and we, the ISA members have to work as a team and project ourselves to the world as the most vibrant anaesthesia body.

This issue of VAPOUR is based on the theme 'Peripheral and prehospital support to tertiary care: Bridging the clinical gaps'. It has articles that provide information on the current status of prehospital care in India including communication and networking in prehospital care, training and status of paramedics in India, the green corridor, maternal health care in rural India and the scope for quality research in prehospital care in our nation.

Emergency care is one of the three pillars of universal health care. However, peripheral and prehospital emergency care in India is still in its infancy as compared to some other countries. The thickly populated metro cities which boast of state-of-the-art hospitals and medical tourism, often lack well-organised emergency medical services. Vehicles and persons sometimes speed past injured victims on the road without stopping by the victim. Often, the victims are rescued by fellow passers-by and they are transferred to the nearest government hospital in a taxi cab or autorikshaw without receiving any prehospital resuscitation. On the global scene and in the scientific world of journals and publication, we talk about prehospital plasma and fibrinogen administration, [1] but real life scenarios in our country are sometimes marked by the immediate non-availability of simple blood and blood products required for emergency transfusion in the hospital. Overcrowding in the emergency department (Casualty) is a common scene in our country mainly because of a demand-supply mismatch of health care resources.[2] The unpredictability of patient volume, presentation and acuity pose challenges in emergency health care delivery.[3]

Maternal mortality is considered as a key health indicator of a nation. But it is still high in India. The Government of India has designed initiatives such as the Pradhan Mantri Surakshit Matritva Abhiyan, the Janani Shishu Suraksha Karyakram, strengthening of 25,000 delivery points across the country, functionalisation of First Referral Units, operationalisation of services providing free transport from home to facility and back for pregnant women, Birth Microplanning, setting up of Birth Waiting

Homes and Outreach Camps in the geographically remote and tribal areas to improve maternal health.[4,5] However, the coverage of life-saving health interventions and practices remain low due to gaps in knowledge, policies and availability of resources. Access to health services is often dependent on a family's economic status and where it resides.[4] The United Nations Children's Fund (UNICEF), Ministry of Health and Family Welfare (MoHFW), Ministry of Women and Child Development (MWCD) of the Government of India are all working hard to improve maternal and paediatric care in rural India. However, there are reported instances of villagers and family members having carried their critically ill loved ones and pregnant women in 'palanquins'/'dolies' through thick forests in the dead of the night to a hospital 8-10 km away as no transport/ proper roads are available.[6,7] In some remote tribal regions, the nearest health clinic is jungles and rivers away and the people have to walk through hilly terrains and 'kaccha' (weak) roads to reach the facility.[8] In such areas, while getting hospital care is difficult, getting timely prehospital care is a dream.

The Dial '108' and '112' services are no doubt improving our prehospital services, but we need to improve further. We need to improve the training of paramedics, introduce drones, 5G, artificial intelligence and blockchain in emergency health care.[3,9] Of late, drones are being utilised for assisting rescuers, transporting blood and automated external defibrillators to remote places, locating and connecting to casualties in dangerous situations or unfavourable locations and triaging patients before they arrive at the health care setup.[10] Research on prehospital resuscitation is still not much of a priority in India. We need to improve on that too. Nevertheless, the challenges in the delivery of emergency health care are many and we need to improve on the time and quality of emergency medical care delivery.

As anaesthesiologists, we can contribute to the improvement in prehospital care by teaching basic life support to the common man, practising in the peripheral areas of India and using our lifesaving skills there, teaching paramedics, conducting research studies on resuscitation and taking up a career in air ambulances as described in the December 2023 issue of VAPOUR.[11] All of us can take lessons from the life of our very own anaesthesiologist, Padma Shri Dr. Maya Tandon and teach road safety awareness to our fellow citizens. Nevertheless, there are a lot of lessons to be learnt, lot of skills to be taught and a lot more to be practised.

Thank you and bye till we meet again with the February 2024 issue of 'VAPOUR'.
Long live ISA!

Dr Sukhminder Jit Singh Bajwa
Honorary Secretary, ISA National
Editor-in-Chief

'VAPOUR'

(The official newsletter of the ISA National)

References:

1. van den Brink DP, Kleinveld DJB, Sloos PH, Thomas KA, Stensballe J, Johansson PI, et al. Plasma as a resuscitation fluid for volume-depleted shock: Potential benefits and risks. *Transfusion* 2021; 61 Suppl 1:S301-S312.
2. Medicine Io. Crisis standards of Care: A systems Framework for Catastrophic Disaster Response: Volume 1: Introduction and CSC Framework. Hanfling D, Altevogt BM, Viswanathan K, Gostin LO, editors. Washington, DC: The National Academic Press; 2012.
3. Misra A, Yadav DC, Kole T. Emergency care in India beyond 75 years of independence-problems and solutions. *J Glob Health* 2023;13:03015.
4. Maternal health. UNICEF's concerted action to increase access to quality maternal health services. Available from <https://www.unicef.org/india/what-we-do/maternal-health>. (Last accessed on 21 Feb 2024)
5. Ministry of Health and Family Welfare. Initiatives for pregnant women. Available from <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1843841> (Last accessed on 21 Feb 2024)
6. Hans India. Pregnant woman gets primitive 'vehicle' ride to hospital through jungle in pitch dark. Available from <https://www.thehansindia.com/karnataka/pregnant-woman-gets-primitive-vehicle-ride-to-hospital-through-jungle-in-pitch-dark-751349> (Last accessed on 21 Feb 2024)
7. The New Indian Express. Pregnant woman carried in doli for 5km due to lack of proper road in Tirupattur. Available from <https://www.newindianexpress.com/states/tamil-nadu/2023/Oct/05/pregnant-woman-carried-in-doli-for-5-km-due-to-lack-of-proper-road-in-tirupattur-2620896.html> (Last accessed on 21 Feb 2024)
8. DownToEarth. Miles to go: In these tribal regions of Odisha, the nearest health clinic is jungles & rivers away. Available from <https://www.downtoearth.org.in/news/governance/miles-to-go-in-these-tribal-regions-of-odisha-the-nearest-health-clinic-is-jungles-rivers-away-88765> (Last accessed on 21 Feb 2024)
9. An interview with Dr. Prasad Rajhans on emergency medical services in India. *VAPOUR* 2023; 5(9):13-16.
10. Sanz-Martos S, López-Franco MD, Álvarez-García C, Granero-Moya N, López-Hens JM, Cámara-Anguila S, et al. Drone applications for emergency and urgent care: A systematic review. *Prehospital Disaster Med* 2022;37:502-8.
11. An interview with Dr. Shalini Nalwad. *VAPOUR* 2023; 5(9):19-29.

ISA NOTICE BOARD

CONFERENCE & CME CALENDER OF ISA (2024)

Conference/CME (Coming up)	Location	Organised by	Dates
UP ISA sponsored PG assembly	Jhansi	ISA Lucknow branch	12th to 16th March 2024
ISA sponsored CME	Hotel Hills, Mookondapalli, Hosur, Tamil Nadu	ISA Krishnagiri & Hosur	16th & 17th March 2024
ISA Delhi YUVACON 2024	Maulana Azad Medical College, New Delhi	ISA Delhi YUVA Wing	6th to 7th April 2024
ISACON TELANGANA	Mahaboobnagar	ISA Mahaboobnagar branch	5th to 7th July 2024
ISACON KARNATAKA 2024	JN Tata Auditorium Complex, Malleshwara, Bengaluru	ISA Bangalore Metro branch & Department of Anaesthesiology, BMCRI, Bangalore	9th to 11th August 2024
RAJISACON 2024	Jodhpur	Dr. SN Medical College, Jodhpur & ISA Jodhpur city branch	13th to 15th September 2024
ISACON North zone 2024	Jammu	Govt. Medical College, Jammu, Jammu & Kashmir (UT)	20th to 22nd September 2024
ISACON AP 2024	Tirupati	ISA Tirupati	26th to 28th September 2024
ISACON GUJARAT 2024	The Deltin, Daman	ISA Gujarat state branch	28th to 29th September 2024
UPCZ ISACON 2024	Jhansi, Uttar Pradesh	MLB Medical College, Jhansi & ISA Jhansi city branch	25th to 27th October 2024
71st ISACON 2024 (National Conference of ISA)	Samrat Ashok Convention Center, Patna	Patna Society of Anaesthesiologists (PSA)	20th to 24th November 2024

Note: The dates mentioned in the above table are tentative & as per information received.
The list of upcoming conferences will be updated in subsequent issues.

Indian Journal of Anaesthesia
The ISA-IJA REAP academic
webinar series (fortnightly),
every Thursday between 5pm
to 6pm is being conducted.

ISA National PG online classes

These are being conducted regularly every
Monday between 6.30 to 8pm. Experienced
PG teachers are taking PG oriented classes
including exam-oriented topics.

ISA academic webinar series
The ISA conducts Clinical
Practice oriented webinar
series (CLIP) and Clinical
Reasoning and Problem Solving
webinar series (CRISP) on
Thursdays between 6.30pm to
8.30pm.

ERRATUM

There was an error in the ISA Newsletter VAPOUR |Volume 5|Issue 9|December 2023 in the ISA NOTICE BOARD. It was mentioned that the upcoming ISACON Telangana 2024 is being organised by ISA Tirupati branch. This is incorrect and the correct information is that this conference is being organised by ISA Mahaboobnagar. The error is regretted.

Dr. Sukhminder Jit Singh Bajwa
Hon Secretary ISA National

Prehospital care in India: Current status and the way forward

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Prehospital care in India is characterised by wide disparities both in availability and quality of care. The provision of emergency care by hospitals as enshrined in the Indian constitution has not translated into a universally available and effective prehospital care.

There is a lack of infrastructure, public funding and trained personnel. Besides these obvious resource challenges, regulatory framework and robust legislation may also need to be strengthened. The ambit of emergency medical service (EMS) in India is different from more developed countries with infections and communicable diseases also needing attention besides non-communicable chronic diseases and trauma.

EMS in India is largely provided by ambulances. An estimated 30,000 ambulances provided by public sector, private sector or in partnership are running on Indian roads. The challenge in India is to transform these from mere transportation services to a system where actual medical care takes place besides transportation. Studies done in India have estimated the availability of Basic Life Support (BLS) trained personnel in 10 to 20% of ambulances. Basic equipment like the automated external defibrillator is lacking in more than 80%. Further, there is a lack of central command centre and prehospital notification to emergency departments of hospitals. Even when available, ambulances are used in a fraction of cases for transport of trauma patients. This has been attributed to lack of awareness, wariness about police procedures and the economic and other exigencies of life. [1,2] Many prehospital trauma

care training programmes are currently offered in India. Most of them are targeted towards physicians and available courses for non physicians suffer from lack of standardisation, limited availability and insufficient training. Capacity building of existing paramedics by structured training programmes is the need of the hour. Dedicated job creation for emergency medical technicians (EMTs) with performance based promotional ladder is paramount for such a system to be effective.

Effective EMS kick starts from the first responders. Targeted groups such as ambulance drivers, commercial drivers, fire persons and police personnel can be trained for scene management, rescue and stabilisation, and safe transport of patients. School students and teachers can be another target group for effective training. This can have a “multiplier effect” at the household level. It was shown in a study that trauma management training for community is effective, when provided in native languages featuring real life simulations and incorporating audiovisual means. For such a training to be effective, initial emphasis should be on learnable skills such control of haemorrhage and cervical spine injury management. [3]

An overlooked aspect of prehospital care is work place violence (WPV) experienced by EMTs. This leads to lack of trust and stressed decision-making leading to less favourable outcomes. A survey revealed that two in three EMTs experienced some form of WPV in the previous year of which 58% were physically assaulted.

The way forward is to strengthen skill training for instilling confidence and improved situational awareness in EMTs. Improved public awareness and robust support from law enforcement is essential to mitigate this significant problem. [4]

To conclude, the need of the hour is to evolve the prehospital care system into a fully integrated, technology driven and locally engaged system with the aim to achieve highest professional standards.

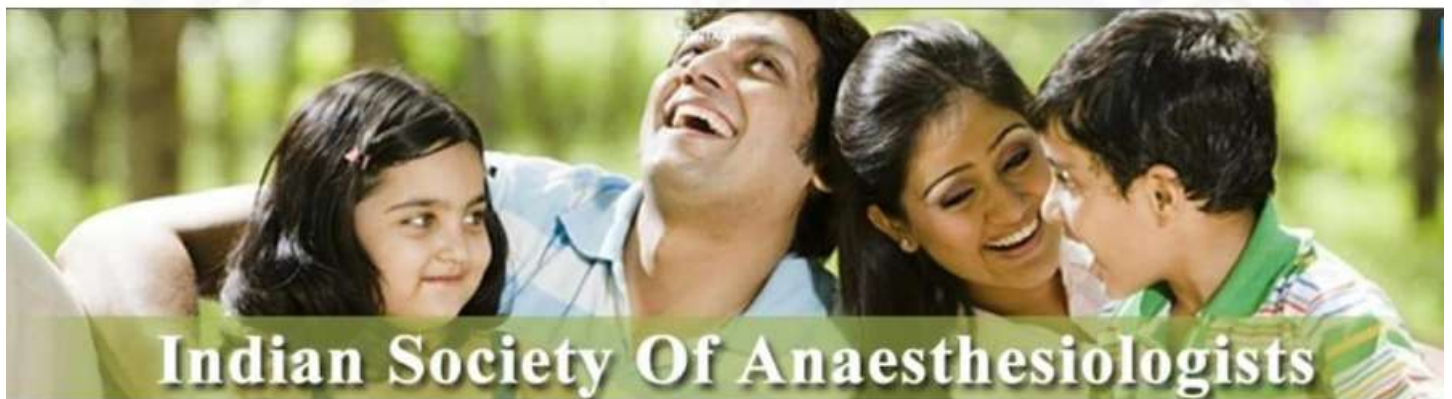
References:

1. Emergency and Injury Care at Secondary and Tertiary Level Centres In India. A Report Of Current Status on Country Level Assessment. Project Report Submitted To NITI Aayog, New Delhi, Government Of India, And Conducted By Department Of Emergency Medicine, JPNATC, AIIMS. Available from https://www.niti.gov.in/sites/default/files/2021-12/AIIMS_STUDY_1.pdf (Last accessed on 26Feb 2023)

2. Bhat R, Ravindra P, Sahu AK, Mathew R, Wilson W. Study of pre-hospital care of out of hospital cardiac arrest victims and their outcome in a tertiary care hospital in India. Indian Heart Journal 2021;73:446-50.

3. Aekka A, Abraham R, Hollis M, Boudiab E, Laput G, Purohit H, et al. Prehospital trauma care education for first responders in India. J Surg Res 2015;197:331-8.

4. Lindquist B, Koval K, Mahadevan A, Gennosa C, Leggio W, Niknam K, et al. Workplace violence among prehospital care providers in India: a cross-sectional study. BMJ Open 2019;9:e033404.



Indian Society Of Anaesthesiologists Family Benevolent Fund



Life-Link: The Transformative Power of Communication in Healthcare

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Jai Kishan, who suffered a road traffic accident, lost his upper limb because the primary caregiver placed a tourniquet in his upper arm to prevent bleeding from a crushed hand, which needed plastic surgery. Unfortunately, he did not communicate the time of tying the tourniquet while handing it over for transfer to tertiary care. The patient reached tertiary care after 4 hours; meanwhile, he suffered limb ischaemia.

There are many more such small as well as significant instances where the failure of communication deteriorates the prognosis of our patients. Effective communication between peripheral or pre-hospital settings and emergency medical services is critical for providing seamless, high-quality patient care.

It is critical to establish uniform communication methods for patient handovers. All medical personnel should be aware of and follow these guidelines to preserve uniformity. Communication must be concise and easy to comprehend, avoiding medical jargon. The focus should be on important information such as patient demographics, primary complaints, vital signs, current treatments, urgent actions and any other important information or procedure needed on the way.

Using technology helps pre-hospital and tertiary care teams communicate in real-time. Examples of this technology include secure chat platforms, electronic health records, and telemedicine systems. Furthermore, using pre-alert systems to notify tertiary care facilities of approaching critical patients enables the receiving team to prepare resources and staff for a prompt reaction.

It is imperative to provide regular training sessions on effective communication tactics that emphasise teamwork and information sharing for pre-hospital and tertiary care workers. Healthcare teams can discover areas for improvement and practice protocol by using simulated scenarios that resemble patient handovers. Workshops on communication can be organised for primary responders and patient-receiving teams at tertiary care hospitals.

Having key contact people on both sides guarantees coordination and communication, lowering misunderstandings and ensuring accountability. Promoting uniformity in documentation procedures among pre-hospital and tertiary care environments aids in keeping a precise record of patient data. Encourage teams to communicate continuously, updating one another on new developments, treatment plans, and frequently changing patient status.

Establishing feedback mechanisms that enable healthcare workers to offer valuable thoughts on communication procedures is imperative. The system is improved when communication tactics are routinely evaluated for efficacy and modified in response to input.

Effective communication is not solely the responsibility of medical personnel; patients must also provide correct medical information, express their concerns freely, and actively participate in the transfer process. It is crucial to understand and develop clear treatment plans, give permission to share information and engage family support. Prompt reporting of changes in condition, adherence to post-transfer instructions, and active involvement in decision-making help to a seamless transition.

Incorporating the patient and their family into the communication process and keeping them updated on treatment plans, expectations at the tertiary care hospital, and the transfer procedure are all part of maintaining a patient-centred approach. By implementing these methods, healthcare practitioners may create a robust communication framework, facilitate a smooth changeover, and improve patient outcomes.

Role of Paramedics, the Emergency Medical Technicians

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The term “paramedic” refers to a healthcare professional who is capable of giving emergency medical care to people who are injured or ill, typically outside the hospital setting. Most commonly, paramedics work in ambulances, as part of the emergency medical services (EMS). The scope of practice of a paramedic varies from country to country but the common goal is autonomous decision-making during the emergency care of patients. An Emergency Medical Technician (EMT) is expected to stabilise people with life-threatening emergencies/injuries and transport these patients to an appropriate level of care.

The Department of Emergency Medicine, JPNATC, AIIMS, with the financial support of NITI Aayog, Government of India conducted a study of emergency and trauma care services of 100 tertiary and secondary level hospitals to assess the status of emergency and trauma care.

The study reported that despite in-house ambulances in 91% of hospitals, trained paramedics needed to assist ambulance services were present only in 34%. A need to establish academic Emergency Medicine departments was felt to ensure education and skill development of paramedics. [1] India has two overlapping ambulance systems, the helpline number, 108 and 102 with more than 17000 ambulances. The ‘108’ emergency service is managed by Emergency Management and Research Institute (EMRI) which is a public private partnership model between state governments and EMRI.

The “108 Ambulance” aims at reaching the site within 20 minutes in urban areas and 40 minutes in rural areas. Trained human resources include the call centre staff, a driver and an EMT in every 12-hour shift. [2]

The global pandemic has further underlined the significance of EMTs in handling a medical crisis and has helped people recognise and appreciate their efforts. Their training and curriculum is very important as they are the first responders.

Education and courses: EMT courses are offered as certificate (2 to 12 months), diploma (1 to 3 years), undergraduate (3 to 4 years) or postgraduate courses (2 to 3 years). There is no set rule for the minimum pass percentage since individual colleges and universities have their criterion for admissions. In some institutions, the minimum eligibility for paramedic courses is a 10th pass or a 12th grader passing in subjects like Physics, Chemistry and Biology with an aggregate of 50% in each subject. All India Institute of Medical Sciences (AIIMS) conducts paramedical entrance exam for admission to paramedical courses in AIIMS colleges.

Centres in India: EMT course is offered by 86 colleges in India. There are 60 private-owned, 14 public/government owned and 1 public private owned that provide the EMT training in India. The state of Tamil Nadu has the most EMT colleges in India, followed by Maharashtra, Uttar Pradesh and Delhi/National Capital Region etc.

Uniformity in curriculum: The short-term training curriculum handbook for EMT-basic developed by Ministry of Health and Family Welfare in 2017 outlines the training content for the course. [3] It mentions that EMT-basic is an entry level post for an EMT who has been trained in intravenous cannulation, physical examination, oxygen therapy, spinal immobilisation, bleeding control, fracture management, airway maintenance, cardiopulmonary resuscitation and drug administration as per medical direction. At the end of the training, the candidate is certified to perform a list of activities ranging from responding to emergency call and assessing the patient to management of emergency situations like allergic reaction, poisoning, diabetes, cerebrovascular or respiratory emergency, in addition to management of bleeding, shock, injuries, obstetric as well as

paediatric emergencies. They are certified to manage mass casualties, planning transport to the appropriate nearest healthcare facility during which they follow complete documentation procedure and communicate health information.

The minimum entry requirement is graduation with basic understanding of biology, science, regional language and English. The curriculum defines thirteen learning and assessment modules in detail, namely foundation module, respond to emergency calls, size up the scene at the site, follow evidence-based protocol while managing patients, assessment of patient onsite and triage, managing emergencies (part I, II and III), managing trauma, managing infants, neonates and children, managing mass casualty incidents, managing patient transfers and following biomedical waste disposal protocols. Along with these modules, there is additional training of soft skills such as compassion, interpersonal skills, listening skills, strength, problem-solving skills and good communication skills.

Achieving efficiency in resource limited settings

Theoretical-Practical disjunction:

Despite a well-defined curriculum for the course, theoretical-practical disjunction is a real issue due to the disparity between what students learn in theoretical classes versus what is observed in practical life during the emergencies. The colleges and universities providing these courses should have access to proper practical facilities and hospital collaborations. Only then, the students will get adequate exposure to real-life pre-hospital scenarios, which will help them become self-reliant paramedics.

Financial assistance:

A very important aspect is the expenditure involved in educating oneself. These courses should be entitled to loan facilities to ensure that deserving candidates from lower-middle backgrounds can opt for these courses.

Revamping paramedical education requires efforts from both the government and universities to enable more and more students to enrol in these courses. Currently, India requires thousands of EMTs to cater to the increasing need in the health sector. Better facilities will ensure that the deserving candidates will not move abroad for better opportunities.

Breaking stereotypes:

Importantly, more women are actively participating in the unconventional roles, such as drivers and other paramedic staff on the move. The Pink Ambulance Service started in Delhi and now available in more cities, is one such example. Gradually, the pink ambulances driven by lady drivers and an all-female staff are breaking the stereotype of a male dominated profession.

References:

1. Emergency and injury care at secondary and tertiary level centres in India. A report of current status on country level assessment. Available from: https://www.niti.gov.in/sites/default/files/2021-12/AIIMS_STUDY_1.pdf [Accessed on 21st February, 2024]
2. National health systems resource centre, study of emergency response service- EMRI model 2009. Available from: https://nhsrcindia.org/sites/default/files/2021-02/Study_of_Emergency_ResponseService_EMRI_model.pdf [Accessed on 21st February, 2024]
3. Ministry of Health and Family Welfare 2017. Short term training curriculum handbook, Emergency Medical Technician- Basic. Available from: https://main.mohfw.gov.in/sites/default/files/Short%20Term%20Training%20Curriculum%20Handbook_EMT-B_1%20June%202017_1.pdf [Accessed on 21st February, 2024]

GREEN CORRIDOR: Literally Bridging the GAP

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Initially devised to aid transport in medical emergencies, the green corridor (GC) project now addresses to mainly accelerate the process of organ transportation. It requires intense collaboration between hospital and traffic departments to transport the vital organs from donor to recipient site in the shortest possible time. The organ preservation time varies for different organs and has been the rate limiting step for organ transplantation. The average preservation time for heart and lungs is the shortest (4 to 6 hours); while for liver and kidney, it is 12-15 hours and 24-48 hours respectively. The GC aims at catalysing the movement of harvested organs through demarcated and cleared out special road paths. With the activation of GC, all the red signals on the predetermined route are skipped or turned green manually by traffic department reducing the travel time and subsequently improving the success of transplantation.

The concept of GC was consolidated in India in the year 2014 in Chennai. Later, Surat became the first city to institute black and white notifications into the GC system that provides a ready made platform saving precious time. When a patient is declared brain dead, with family consent and as per the Zonal Transplant Coordination Centre (ZTCC) act, a recipient is looked for at the city, state and then national level. With the availability of GC; given the short preservation time of organs, GC escapes the traffic congestion and expedites the transport at a regional level. For long distance transfer of organs, air ambulance is employed.

A single patient can save many lives and GC ensures that the donated organs are preserved and transplanted in the right way without any wastage. The GC team comprises the transplant coordinators, traffic police department along with equal efforts from local cops.



Fig 1: Courtesy Ziqitza healthcare ltd

The role of the anaesthetist becomes very crucial when organ transplantation is done in such a manner. The induction of recipient comes later, what precedes is preparedness of the operation theatre staff, technicians, parents/guardians of the recipient and the recipient himself with regards to investigations and preoperative optimisation. All these procedures have to be facilitated bearing the medico legal facts in mind.

All the legal documents have to be scrutinised well. The induction of anaesthesia should be well coordinated with the organ retrieval team and then the ambulance on GC. Most of the times the transplant surgeon may want to do a bench surgery to ensure an anatomically viable organ before instituting it for transplant. Time becomes critical and every moment precious. Distances taking almost 45 minutes to cover can be overcome in less than 14 minutes in rush hours by creating the GC, as was done during a heart transplant in Chennai.

GC may not be sufficient to meet the requirement of organs but will certainly complement the organ donation campaigns like increased awareness, education and legislation.

Maternal health care in rural India

Dr. Parna Thakkar

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Senior consultant – Chief Neuroanaesthesia

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National Rural Health Mission (NRHM) was implemented in 2005 in India and since then the Maternal Mortality Ratio has reduced remarkably. In Indian scenario, there is significant inequality in the maternal health care offered and utilised based on factors like regional, geographic and various socioeconomic factors.[1]

The National Family Health Survey (2005 and 2015), revealed the existence of inequality in maternal health in the rural population primarily in antenatal care (ANC), skilled birth attendant (SBA) and postnatal care (PNC). Maternal healthcare is a great challenge to the public health system. Education, mass media exposure and awareness regarding maternal health care schemes available will bring down the morbidity and mortality resulting from pregnancy-related issues.

The third five-year plan (1961–66) recruited Auxiliary Nurse Midwives (ANMs) to provide ANC to rural women.

As per the General and Census Commissioner of India; 2018,[2] maternal mortality has declined significantly from 103 in 2017–19 and 130 in 2014–16 to 97 in 2018–20.

FACTORS AFFECTING MATERNAL HEALTH :

1) Education of the Mother:

It is one of the most important deciding factors in the utilisation of ANC in India. Indian data revealed that the educated mothers utilised ANC three times more than their counterparts.

2) Religion and caste:

These contribute significantly to the utilisation of ANC and postnatal services.

3) Socio-economic status: Poor women tend to utilise ANC less than the richer women.

4) Mass media exposure:

Awareness regarding maternal health care schemes plays an important role in reducing the maternal health care inequality.

5) Regional variation: Southern states utilised ANC care better than the other states.

Shortage of the doctors, medicines, poor infrastructure and facilities resulted in failure of NRHM (2005) in improving maternal health. Various schemes and policies for improving maternal health care should be implemented strictly. Special efforts should be made to bridge this gap by focusing, improving and working on the above factors.

References:

1) Ali B, Chauhan S. Inequalities in the utilization of maternal health Care in Rural India: Evidences from National Family Health Survey III & IV. BMC Public Health 2020; 20: 369.

2) Office of the Registrar General India. Special bulletin on maternal mortality in India 2018-20 sample registration system. Available from <https://censusindia.gov.in/> (Last accessed on 26 Feb 2024)

71st Annual Conference of Indian Society of Anaesthesiologists

20th 21st 22nd 23rd 24th November 2024
Venue: Samrat Ashok Convention Center, Patna

REGISTRATION TARIFF

Slabs	ISA Member			Non ISA Member			Indian Accompanying Person	Overseas Delegate	Overseas Accompanying Person
	Conf	Conf + CME	PG Conf + CME	Conf	Conf + CME	PG Conf + CME			
Regular 01st Mar to 31st Jul 2024	₹ 12500	₹ 14000	₹ 11000	₹ 25000	₹ 28000	₹ 21000	₹ 8500	\$ 160	\$ 130
Late 01st Aug to 31st Oct 2024	₹ 15500	₹ 17000	₹ 13000	₹ 31000	₹ 34000	₹ 24000	₹ 9500	\$ 190	\$ 150
Spot Registration 01 Nov onwards	₹ 18000	₹ 19500	₹ 15000	₹ 36000	₹ 39000	₹ 29000	₹ 11000	\$ 220	\$ 160

**above rates are inclusive of GST 18%.*

Conference Workshops

Workshop Name	Course Director	Fees	Date
Comprehensive Cardiac Life Support	Dr. SSC Chakra Rao	5000	19 th & 20 th Nov 2024
Hemodynamic Monitoring	Dr. J. V. Divatia	3000	20 th Nov 2024
Practitioners Module: Managing the Common Crisis	Dr. Sukhminder Jit Singh Bajwa	2500	20 th Nov 2024
Regional Anaesthesia	Dr. J Balavenkata Subramanian	3000	20 th Nov 2024
Research and Publication	Dr. Rakesh Garg	2500	20 th Nov 2024
Interventions in Chronic Pain	Dr. Murlidhar Joshi	3000	20 th Nov 2024
Airway Management	Dr. Sheila Nainan Myatra	3000	20 th Nov 2024
TIVA and TCI	Dr. G.D. Puri	3000	20 th Nov 2024
Mechanical Ventilation	Dr. Pradip K. Bhattacharya	3000	20 th Nov 2024
ITLS- Immediate Trauma Life Support	Dr. Kajal Jain	3000	20 th Nov 2024
Leadership and Communication Skills	Dr. P. L. Gautam	2500	20 th Nov 2024
Simulation Based Perioperative Crisis Management	Dr. Vivek Chakole	3000	20 th Nov 2024
POCUS	Dr. Pankaj Kundra	3000	20 th Nov 2024



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Finance Secretary
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**Secretary,
Reception Committee**
 Dr. Bibha

Role of research in prehospital care: Challenges, current status and future

Dr. Ranganatha Praveen C S

Additional Professor

Neuroanaesthesia and Critical care

SCTIMST, Trivandrum

ISA No. R3189



Why research-

Disparity in the outreach of emergency health services in terms of accessibility, facilities, availability of resources, geographical location, collaboration among hospitals - define quality research in the prehospital settings as a tool for assessment and betterment of patient care.[1] As time is life and time is brain in the situation of life threatening emergency, the role of prehospital care in improving patient outcome remains vital. The essential care provided in the prehospital settings during this scenario should be effective and evidence-based and clinical research here would be helpful in achieving this goal.

Constraints and challenges-

Conduct of the research in the prehospital setting is a herculean task and never easy due to various constraints. Limitations in resources and funding has resulted in the increased workload and burden on these emergency caregivers who cannot effectively participate in the data collection. This has resulted in incomplete and skewed data. Variation in the data and its non-uniformity has resulted in inconsistent results.[2] Ethical problems such as obtaining consent and patient privacy are of serious concerns for conducting effective research in this setting.

Prehospital emergency management is time limited and research in this setting has to occur within this short period which is really challenging as the main focus remains on the patient care over data collection.[2] In the backdrop of data on workplace violence to be 67% in the prehospital settings, research has to ensure patient safety by improving communication, training and use of advanced technology and equipment to improve the safety of health care providers and researchers.[3] Usually, the prehospital research group would be non-homogenous as they belong to varied emergency groups such as traumatic injury and cardiac arrests, with different socioeconomic status making these patients more diverse. All the above mentioned constraints can have a negative impact on data collection and its analysis.

Current status

Despite various challenges during prehospital emergency care, the researchers have managed to conduct randomised control trials and observational studies that have contributed in improvement of patient care and the development of new protocols.[2] Development of advanced trauma life support, fluid resuscitation, airway management (supraglottic airway devices, video-laryngoscope), cardiac arrest resuscitation,

tranexamic acid and tourniquet use to control haemorrhage in trauma, intra-nasal ketamine and fentanyl for pain are few of the examples. [2] The gap existing between best management and standard preoperative care was identified by observational studies and has helped in formulating further protocols.

Future prospects

- Standardisation of preoperative guidelines and protocols would ensure uniform management thereby minimising the heterogeneity of the data.
- More utility of telemedicine facility at pre-hospital settings after its successful use in stroke.
- Simulation based training for prehospital care givers and further research to know its effectiveness in prehospital management. [4]
- Artificial intelligence based technologies look promising.[2]

References :

1. Patiño A.M, Chen J, DeVos E.L, Lee J.A, Anderson K, Banks M, et al. Emergency medicine around the world: Analysis of the 2019 American College of emergency physicians international Ambassador country reports. J. Am. Coll. Emerg. Physicians Open 2022; 3: e12681.
2. Cimino J, Braun C. Clinical Research in Prehospital Care: Current and Future Challenges. Clin Pract 2023;13:1266–1285.
3. Lindquist B, Koval K, Mahadevan A, Gennosa C, Leggio W, Niknam K, et al. Workplace violence among prehospital care providers in India: a cross-sectional study. BMJ Open 2019; 9:e033404. doi:10.1136.
4. Söderholm H M, Andersson H, Hagiwara MA, Backlund P, Bergman J, Lundberg L, et al. Research challenges in prehospital care: the need for a simulation-based prehospital research laboratory. Adv Simul 2019; 13;4:3. doi: 10.1186/s41077-019-0090-0.

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ISA National Activities

Activities of ISA Jodhpur City Branch, Rajasthan

The Rajasthan Society of Anaesthesiologists with the Department of Anaesthesia, Dr. S N Medical College and ISA Jodhpur City branch had conducted an ISA sponsored workshop on Mechanical Ventilation at Dr. S N Medical College, Jodhpur on January 22, 2024. The workshop was attended by 60 delegates from various medical colleges of Rajasthan and was very well appreciated.



Activities of ISA Palanpur City Branch, Gujarat

On 7th Jan, 2024, the ISA Palanpur City Branch conducted a workshop on chest compression only life support (COLS), fiberoptic intubation and video laryngoscopy with hands on training. The event was conducted in Banas Medical College, Palanpur. Around 40 members from North Gujarat were trained during this event.



ISA ACTIVITIES

ISA Karad city branch

Anaesthesiologists of Karad Society of Anaesthesiologists (KSA) visited an orphanage on 27th January 2024. The KSA has “adopted” this orphanage for the medical needs and for the daily needs of the inmates as and when required. They also gave a first aid kit for the orphanage along with education instructions on how to use the kit. The owner couple (Guardians) were felicitated with an appreciation certificate and a memento.



The members also conducted a Compression Only Life Support activity at Social Club, Karad and also gave a First Aid Kit to the Organisers. It was accompanied by Know Your Anaesthetist Campaign, discussion on Causes of Cardiac Events and Fitness and Anaesthesia campaign and Conservation of the Environment

ISA ERODE city branch

Basic Life Support (BLS) skills Training Programme was conducted for individuals embarking on a pilgrimage to Palani by foot on January 6, 2024, at Thirukoil Mutt in Chennimalai. The programme, coordinated and led by the branch President, Dr Saravanakumar A and Secretary, Dr. Arunpandiyan V, saw the participation of approximately 60 individuals.



Kola poatti, Pongal Kondattam, Tug of War competition

along with new year celebration with cake cutting was conducted on 7th January 2024 followed by an inspiring address by Dr. Valli Sathyamoorthy, the Dean of Govt. Erode Medical College. This was followed by academic sessions.

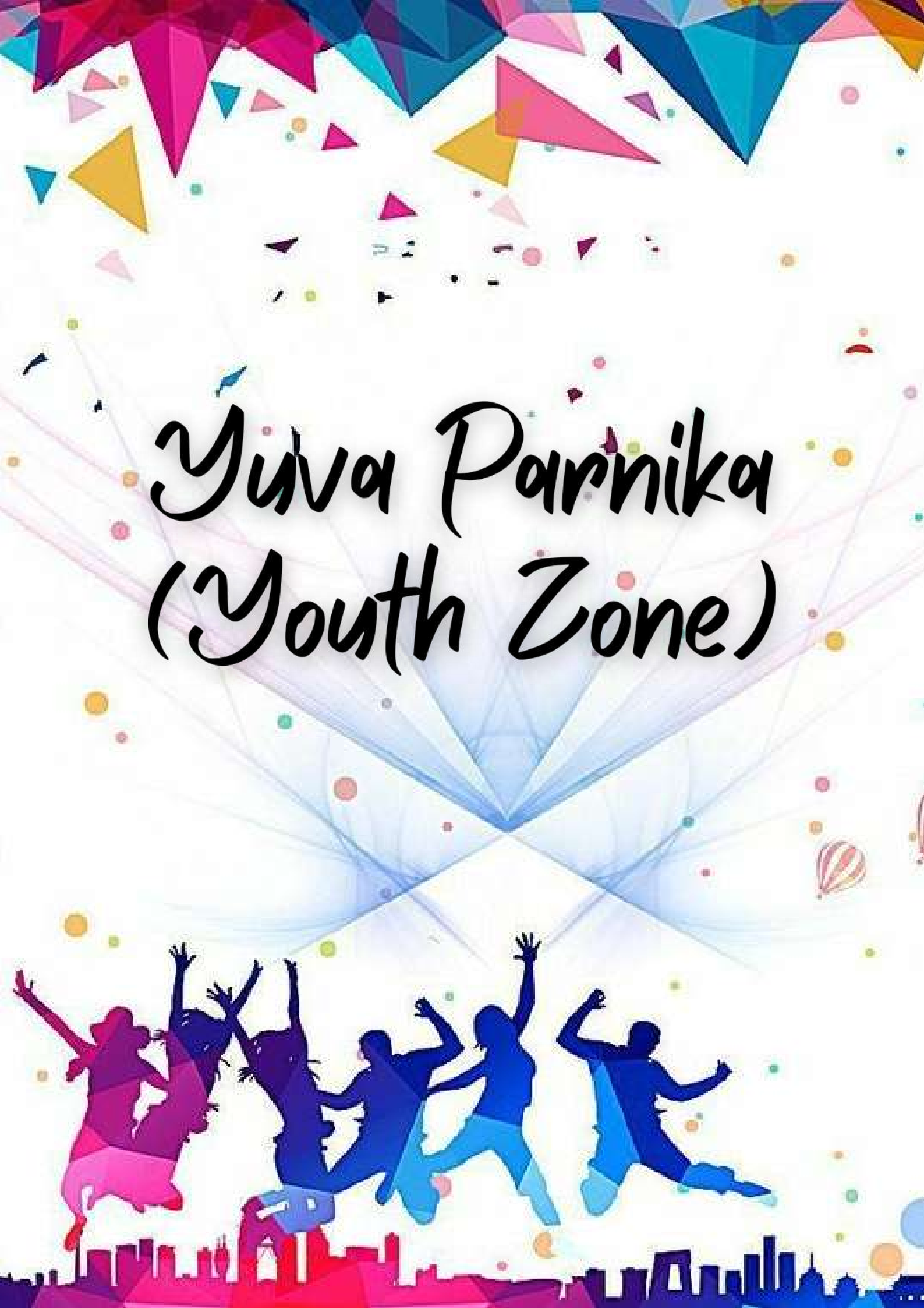
Dr. Kannan D enlightened everybody about "Segmental Spinal and Epidural." Dr. Nithiyanandhan delved into the 'Basics of Muscle Relaxants.'



ISA Miraj-Sangli branch activities

The branch conducted Badminton and Cricket matches. Badminton mixed single matches was conducted on 10th January 2024. The winner was Dr. Ajay Shinde and runner up was Dr. Sachin Kothvale. Cricket mixed matches were conducted on 14th January with 3 teams – Jitu Jigaarbaz, Ravi Rangers, Shiva Smashers under the captainship of Dr. Jitendra Dorkar, Dr. Ravikiran Thote, Dr. Shivanad Kore. There were 8 members in each team including one female. Family members (kids and spouses) were also involved which helped to improve member interaction and bonding. Winner team was Ravi Rangers and runner up was Jitu Jigarbaz. Shaheed Sangli Marathon was conducted on 7th January as usual in which many branch members participated. Dr. Vinayak Patil, Dr. Jitendra Dorkar, Dr. Sachin Kothavale participated in 21 km marathon. On 14th January 24, offline clinical meeting was conducted on Pain Management. Speakers included the following-1) Dr. Vasudha Jadhav (Branch President) – Introduction to Pain Clinic. 2) Dr. Sushil Tippanvarr – Back Pain and its Interventional Management. Totally, 35 branch members participated.





Yuva Parnika (Youth Zone)

Peripheral and prehospital support to tertiary care in our nation: The clinical gaps

Dr. Shashi

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ISA No. S7641/A**



INTRODUCTION

In India, the healthcare landscape is marked by a stark contrast between urban and rural areas, and between primary, secondary, and tertiary care facilities. The peripheral and prehospital support systems are crucial for a seamless transition to tertiary care, which is often located in urban centres. However, the clinical gaps within these systems pose significant challenges to healthcare delivery, especially in a country as vast and diverse as India.

PERIPHERAL HEALTHCARE FACILITIES

Peripheral healthcare facilities, including primary health centres (PHCs) and community health centres (CHCs) in rural and semi-urban areas, are the first points of contact for the majority of the population. These facilities are pivotal in the early detection of diseases and in providing primary care. However, they are often plagued by a myriad of issues such as inadequate infrastructure, shortage of medical staff, and limited access to essential medicines and diagnostic services.[1] This inadequacy not only hampers the quality of care provided at the grassroot level but also delays the identification and referral of cases that require specialised treatment available only at tertiary care centres.

PREHOSPITAL SUPPORT SYSTEM

The prehospital support system in India, which includes emergency response services like the '108' ambulance service, plays a vital role in patient care before reaching a hospital.

Despite significant improvements in recent years, this system still faces challenges such as uneven geographic coverage, especially in rural and remote areas, and a lack of standardised training for emergency medical technicians (EMTs).[2] These shortcomings can lead to critical delays and a lack of proper emergency medical care during the golden hour, directly impacting patient outcomes.

Another significant gap is the integration between peripheral facilities, prehospital services, and tertiary care centres. Often, there is a lack of effective communication and coordination, leading to fragmented care where vital patient information is lost in transition. This lack of continuity and coherence in care exacerbates the challenges faced by patients, particularly those requiring urgent medical attention.

Moreover, the disparity in healthcare access across different regions of India further exacerbates these clinical gaps. Rural and remote areas, in particular, face significant barriers due to the scarcity of healthcare facilities and professionals.[3] This geographical imbalance in healthcare resources results in delayed or foregone care for populations in these regions, increasing the burden of disease and mortality.

ADDRESSING THE GAPS

1. STRENGTHENING PERIPHERAL HEALTHCARE

Addressing these clinical gaps requires a comprehensive approach that includes policy

reform, infrastructure development, workforce enhancement, and technological advancements. Strengthening peripheral healthcare facilities is paramount. This can be achieved by upgrading infrastructure, ensuring a steady supply of essential medicines and diagnostic tools, and increasing the workforce, including doctors, nurses, and paramedical staff, through targeted recruitment and training programmes.[4]

2. IMPROVING PREHOSPITAL SUPPORT

Improving the prehospital support system is equally important. This involves expanding the coverage of emergency services to ensure that they are accessible even in the most remote areas. Additionally, standardising training programmes for EMTs and adopting best practices in emergency care can significantly improve the quality of prehospital care.[5]

3. DIGITAL HEALTH INITIATIVES

Digital health initiatives, such as the National Digital Health Mission (NDHM), can play a crucial role in bridging the communication gap between different levels of care. A unified digital health ecosystem can facilitate the seamless exchange of patient information, ensuring that healthcare providers have access to complete medical histories, which is crucial for informed decision-making and continuity of care.[6]

4. ADDRESSING REGIONAL DISPARITIES

Furthermore, addressing regional disparities in healthcare access is critical. Innovative solutions such as telemedicine, mobile health clinics, and community health programmes can help in extending healthcare services to underserved areas. Additionally, giving incentives to healthcare professionals for work in rural and remote areas can help in mitigating the workforce shortage in these regions.[7]

CONCLUSION

In conclusion, the clinical gaps in peripheral and prehospital support systems pose significant challenges to the delivery of tertiary care in India. However, through targeted interventions and reforms, it is possible to bridge these gaps. Strengthening infrastructure, enhancing the workforce, integrating healthcare systems,

and ensuring equitable access to healthcare are key strategies that can improve the overall efficiency and effectiveness of tertiary care delivery in India, ultimately leading to better health outcomes for the population.

References:

1. Balarajan Y, Selvaraj S, Subramanian SV. Health care and equity in India. *Lancet* 2011; 377(9764):505-15.
2. Sharma M, Brandler ES. Emergency medical services in India: the present and future. *Prehosp Disaster Med* 2014;29:307-10.
3. Rao M, Rao KD, Kumar AK, Chatterjee M, Sundararaman T. Human resources for Health in India. *Lancet* 2011; 377(9765):587-98.
4. Karan A, Negandhi H, Hussain S, Zapata T, Mairembam D, De Graeve H, et al. Size, composition and distribution of health workforce in India: why, and where to invest? *Hum Resour Health* 2021;19(1):39. doi: 10.1186/s12960-021-00575-2.
5. Joshipura MK, Shah HS, Patel PR, Divatia PA, Desai PM. Trauma care systems in India. *Injury* 2003;34:686-92.
6. Ministry of Health and Family Welfare, Government of India. National Digital Health Mission: Strategy Overview 2020. Available from https://www.niti.gov.in/sites/default/files/2023-02/ndhm_strategy_overview.pdf (Last accessed on 26 Feb 2023)
7. Anand S, Fan V. World Health Organization. The Health Workforce in India 2016. Available from <https://www.who.int/publications/i/item/9789241510523> (Last accessed on 26 Feb 2023)

CROSSWORD ON PRE-HOSPITAL CARE

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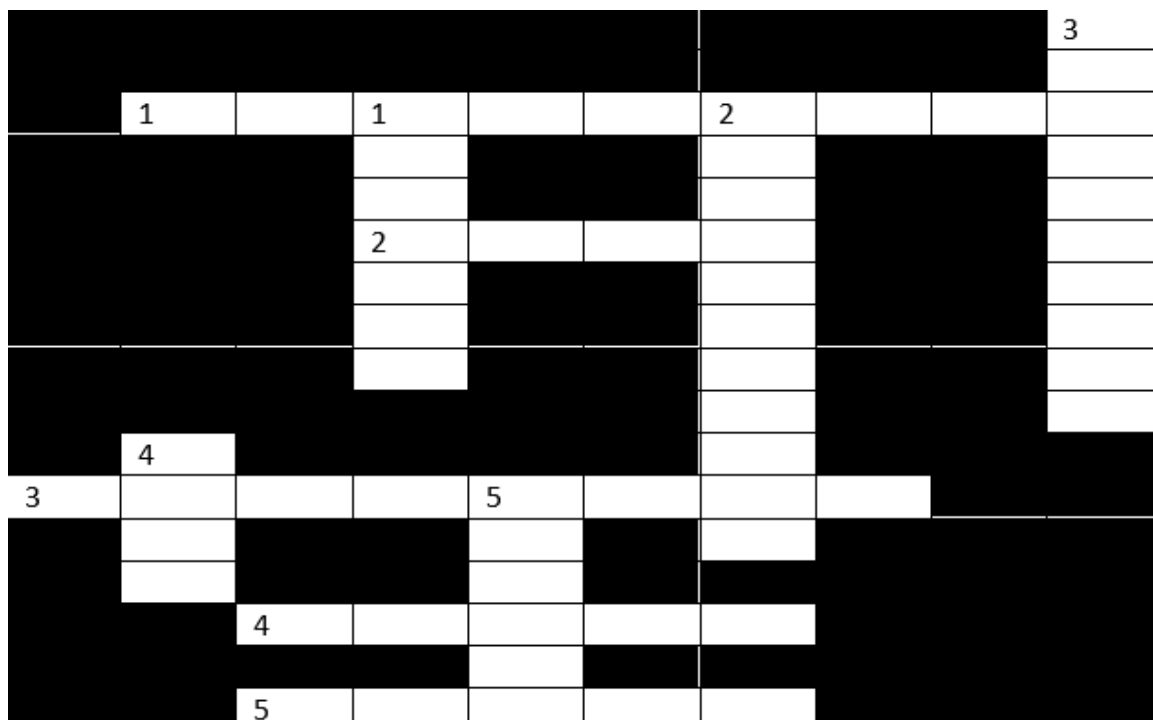


Across

1. _____(9) was first used for emergency transport in 1487 by Spanish forces during the siege of Malaga by Catholic monarch against Emirate of Granada. Civilian use soon followed.
2. How many links does Trauma chain of survival contain? (4)
3. _____(8) were a medical team in Vietnam war who could give intravenous fluids, relieve pain and stop bleeding on the front line, eventually to be called paramedics.
4. Which is the current edition of ATLS? (5)
5. Dominique Jean _____ is considered as the father of Emergency Medicine.(5)

Down

1. _____ university was responsible for the development of first kind of portable defibrillator. (7)
2. _____ Injury Scale(AIS) is an anatomical based coding system to classify and describe the severity of injury.(11)
3. 24/7 year round emergency care became known as the _____ plan as it was developed in 1961 at the hospital with the same name. (10)
4. First modern debrillator was demonstrated in 1947 by Dr. Paul _____ at Massachusetts's General Hospital.(4)
5. James Kenneth _____ was instrumental in the development of ATLS programme after his experiences in a private airplane crash in rural Nebraska.(6)



SOLUTION

									³ A
									L
	¹ A	M	¹ B	U	L	² A	N	C	E
			E			B			X
			L			B			A
			² F	O	U	R			N
			A			E			D
			S			V			R
			T			I			I
						A			A
	⁴ Z					T			
³ C	O	R	P	⁵ S	M	E	N		
	L			T		D			
	L			Y					
		⁴ T	E	N	T	H			
				E					
		⁵ L	A	R	R	Y			

Across

1. AMBULANCE was first used for emergency transport in 1487 by Spanish forces during the siege of Malaga by Catholic monarch against Emirate of Granada. Civilian use soon followed.
2. How many links does Trauma chain of survival contain? FOUR
3. CORPSMEN were a medical team in Vietnam war who could give intravenous fluids, relieve pain and stop bleeding on the front line, eventually to be called paramedics.
4. Which is the current edition of ATLS? TENTH
5. Domnique Jean LARRY is considered as the father of Emergency Medicine.

Down

1. BELFAST university was responsible for the development of first kind of portable defibrillator.
2. ABBREVIATED Injury Scale(AIS) is an anatomical based coding system to classify and describe the severity of injury.
3. 24/7 year round emergency care became known as the ALEXANDRIA plan as it was developed in 1961 at the hospital with the same name.
4. First modern debrillator was demonstrated in 1947 by Dr. Paul ZOLL at Massachusetts General Hospital.
5. James Kenneth STYNER was instrumental in the development of ATLS programme after his experiences in a private airplane crash in rural Nebraska.

Kaleidoscope

A tryst with.....

Dr. Jaichandran Vepary

Venkatkrishnan

'Short film' maker & violinist

Deputy Director, Department of Anaesthesiology,
Chairperson, Hospital Safety Committee,
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ISA No. J0665

By: Dr. Gauri Arora



Hello Dr. Venkatkrishnan! Warm Greetings from the editorial team of VAPOUR!

You have maintained a fine balance between your profession and your various hobbies. It would be interesting to know how you do that!

1) How did you get inspired to make short films?

Every year our Hospital Foundation day is celebrated in a grand manner by conducting competitive events like singing, dance and drama. In 2017, I was able to bring the whole epic blockbuster movie 'Bahubali' on stage lasting for 5 minutes only with 75 hospital employees. In 2018, I was able to put the entire climax scene of the famous movie 'Chandramukhi' onto the stage. Both were highly appreciated by the audience and both won the first place in the event. These events made me to realise that I have some hidden talents inside me i.e., I can create, write and direct scripts. I started reading books for writing screenplay like: 'The Foundations of Screenwriting' by Sud Field, 'Save the Cat' by Blake Snyder, 'Story' by Robert McKee etc. Then, in the year 2019, I wrote, directed and released a short film called "LOGO" which was around 19 minutes duration. It was basically about 'child abuse and its prevention'.

2) Your first film was on a very sensitive and important subject. Did you ever think of competing in short film festivals?

Soon after making the film, I submitted it to the International Short Film Festivals across the world. Some noticeable achievements of this film were: It got selected for screening at the International Cultural Artifact (ICA) film festival, 2019, Pune, 12th Jaipur International Film Festival 2020 (JIFF) and it was screened for the final round at the Next Gn International Film Festival 2019 Maharashtra, where it won the "Award of Excellence" (NISFF). The film was also awarded with "Special Festival Mention Award" for certificate of excellence at the 9th Mumbai Short International Film festival, Mumbai. Also, I got the opportunity to be involved as an Asst. Director for the Tamil feature film "Thaen" which has won around 40 National and International Film Festival awards.

3) Did you also act in your film?

I did a small cameo role in it.

4) Is there anyone from film background in the family?

No one

5) You play the violin also; were you formally trained to play it?

Yes, I am also a Carnatic violinist. I learnt it during my school days from Mr. Babu, who was a violinist for the famous Bharat Natyam dancer Padma Subrahmanyam. You can find my recordings in my YouTube channel https://youtube.com/@violin_doc?si=Dn_mCf702YljEryf

6) Have you ever thought of venturing into full film making?

Yes of course! As of now, I have around eight full bound scripts for making regional films. But right now, I am planning to focus mainly in script writing. Currently one of my medical crime thriller scripts is in the process of discussion for making into a feature film for the silver screen.

7) You are a certified Patient Safety Officer, how did you get interested in this field?

During the COVID period, I was involved in drafting the safety protocols for our Hospital. It was during this time that I realised the importance of patient safety protocols. I was appointed as the Chairperson for the Hospital Safety Committee (HSC). I did a Certified Professional in Patient Safety (CPPS) Course, Institute of Healthcare and Improvement, IHI, Boston. In this course, I learnt about the Just culture and importance of reporting near miss/ no harm events in an organisation. Following this, I introduced the Incident Reporting System and also recognized the staffs reporting the near miss / no harm events as 'Best Patient Safety Campaigner' at the HSC meeting held every month. We gave awards to 'Best Star Male/Female Safety Champion of the year', 'Best Department and Branch' etc.

to encourage reporting during the Hospital Safety Awareness Week Celebration. We have been following this system successfully for the last three years, owing to which, our hospital won the 'International Patient Safety Awards' for the last two consecutive years - 2023 & 2024, at the International Patient Safety Conference conducted by the Apollo Group of Hospitals.

8) You are holding two national patents, can you tell us something about it?

Since 2009, I have been working along with the Department of Electrical Engineering, IIT-M, and developed and hold TWO NATIONAL PATENTS for Simulators for practising regional ophthalmic blocks, the first of its kind, called 'Real Time View Mannequin for Needle Blocks' and 'Sub-Tenon's block Simulator'. I conduct regular workshop both national and international for many ophthalmologists as well as anaesthesiologists about the safe technique of administration of regional eye blocks. It won the 'BEST FREE PAPER AWARD' for three consecutive times at the 3rd, 4th and 5th World Congress of Ophthalmic Anaesthesia (WCOA) held at Turkey, India and Indonesia respectively. It also won the 'BEST INNOVATION 22' at the 14th International Conference of SAARC AA 2022 held at Kochi, India and also won the Runner up prize for "ISA NATIONAL BEST INNOVATION AWARD" at the Annual National ISACON 2022, Shillong, Meghalaya, India.

9) You are a busy anaesthesiologist working in the renowned eye care hospital 'Sankara Nethralaya', Chennai. How do you manage time in pursuing all your hobbies?

Every day begins with a planning schedule for the day. I exercise which gives me positive energy and gives me more confidence to complete the tasks for the day. I am a pet lover and spending time with my pet keeps my mind more relaxed and fresh always.

10) What message would you like to give to the young Anaesthesiologists?

Keep Thinking Positively

Look at Everything Positively &

Take Everything Positively.

Link for viewing the short film:

<https://www.youtube.com/watch?v=UddbCSJz6nc&t=511s>

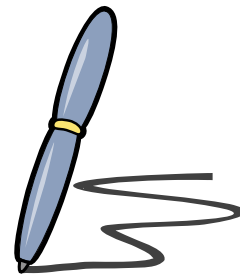
We all have heard the saying ‘Jack of all trades, master of none’, but your profile shows that you are actually ‘master of all’!

Thank You.

Editorial team, VAPOUR



INVITATION TO CONTRIBUTE



‘Vapour’, the official newsletter of the Indian Society of Anaesthesiologists invites contribution of articles originally written by ISA members (Life and associate). The articles can be in the form of interesting case reports for discussion, articles on topics of current clinical relevance, photo-essays, articles on medicolegal /health/ financial/extracurricular issues of interest to the anaesthesiologists. Original literary works such as poems, funny cartoons or paintings on topics of anaesthesia are also welcome. Information about extraordinary achievements /experiences of ISA members, book publication can be sent.

The articles should be brief and written in font Times New Roman 12-14 size and presented in Microsoft office word document (rtf/doc files). Plagiarism and violation of copyrights should be strictly avoided. The articles should be e-mailed to isanhqvapour@yahoo.com with a covering letter addressed to the Honorary Secretary ISA National.

Dr Sukhminder Jit Singh Bajwa

Honorary Secretary ISA National & Editor-in-Chief

VAPOUR

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