Jawaharlal Institute of Postgraduate Medical Education and Research
(An Institute of National Importance Under the Ministry of Health and Family Welfare, Government of India)

Meducon 2026

Commemorating the Golden Jubilee of
National Teacher Training Centre (NTTC), JIPMER

Souvenir

1st – 4th April 2026

Theme

Catalysing Change in Medical Education:
Engaging with Critical Issues

Jointly organized by
Department of Medical Education, JIPMER
&
Alumni Association of NTTC JIPMER (AANJ)
Puducherry, India.

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Conference Messages

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सदस्य
Dr. Vinod K. Paul
MEMBER

सत्यमेव जयते

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March 27, 2026

MESSAGE

It gives me immense pleasure to convey my warmest greetings to the Department of Medical Education and the Alumni Association of NTTC, JIPMER, on the occasion of MEDUCON 2026.

JIPMER has long been a beacon of excellence in medical care, but its contribution to the *science of teaching* through the National Teacher Training Centre (NTTC) is perhaps its most far-reaching legacy. As the NTTC celebrates its Golden Jubilee, we are reminded that the quality of a nation's healthcare is fundamentally determined by the quality of its medical educators.

India is currently in a transformative journey. We have achieved unprecedented scale in medical education, but our journey toward Viksit Bharat @ 2047 demands a relentless focus on quality and innovation. Our vision is to establish India as a Vishwa-Guru - not just by the number of doctors we produce, but by the global standards we set in clinical competence, ethical practice, and digital health integration.

The theme of this conference correctly identifies that the future belongs to those who can bridge traditional bedside clinical skills with emerging technologies like Artificial Intelligence and Digital Technology. We must nurture a generation of "physician-innovators" who are globally competitive yet deeply rooted in the spirit of service to the last mile of our country.

I congratulate the organising committee for creating this platform for alumni and faculty to deliberate on these critical themes. I am confident that the deliberations at MEDUCON 2026 will provide a roadmap for redefining medical pedagogy for the 21st century.

I wish the conference and the publication of this Souvenir every success.

(Vinod Paul)
MD PhD, FAMS, FNASc, FASc, FNA
Former Professor and
Head, Department of Pediatrics
All India Institute of Medical Sciences

जवाहरलाल स्नातकोत्तर आयुर्विज्ञान शिक्षा एवं अनुसंधान संस्थान
(स्वास्थ्य और परिवार कल्याण मंत्रालय, भारत सरकार के तहत राष्ट्रीय महत्व का संस्थान)
धनवंतरी नगर, पुदुच्चेरी, भारत
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(An Institution of National Importance under Ministry of Health & Family Welfare, Government of India)
Dhanvantari Nagar, Puducherry, India

डॉ. चित्रा सरकार
MD, FRCPath, FASc, FNASc, FNAMS, FNA
अध्यक्ष

Dr. Chitra Sarkar
MD, FRCPath, FASc, FNASc, FNAMS, FNA
President

Message

It gives me immense pleasure to extend my warmest greetings to the faculty, delegates, and alumni gathered for MEDUCON 2026. This year's conference holds a special place in our hearts as we celebrate the Golden Jubilee of the National Teacher Training Centre (NTTC) at JIPMER.

For five decades, the NTTC has been the vanguard of medical education in India, shaping the "teachers of teachers" and instilling a culture of academic excellence that resonates across the globe. This 50-year milestone is not merely a reflection on a storied past, but a springboard into a future where technology and empathy must coexist in our healing spaces.

The theme of this conference, hosted jointly by the Department of Medical Education and the Alumni Association of NTTC, highlights our commitment to evolving the medical curriculum to meet the challenges of the 21st century. As we integrate artificial intelligence, digital health, and scientific advances into our courses, we must ensure that the core values - dedication, integrity, and patient-centric care - remain our guiding principles.

I congratulate the organising team for bringing together such a distinguished galaxy of experts. To our alumni, welcome home; your successes are the greatest testament to the NTTC's legacy. To the delegates, I wish you a week of profound learning and inspiration.

May this souvenir serve as a cherished chronicle of our journey and a blueprint for the next fifty years of excellence.

Chitra Sarkar

(Dr. Chitra Sarkar)

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Dr. Vir Singh Negi
MBBS, MD, DM, PGDHHM,
FRCP (London), FACR, FAMS, FIMSA, FICP
Director

Message

It gives me immense pride to extend my warmest greetings on the historic occasion of the Golden Jubilee of the National Teacher Training Centre (NTTC) at JIPMER. For five decades, the NTTC has been a beacon of excellence, pioneering medical education technology and faculty development across the nation.

To commemorate this landmark 50-year journey, JIPMER is proud to host MEDUCON 2026, an International Conference on Medical Education. This event is not merely a celebration of our past achievements but a strategic forum to shape the future of global healthcare education. As we transition into an era of competency-based learning and digital innovation, the role of educators as catalysts for change has never been more vital.

This souvenir and abstract book encapsulate the intellectual rigor and diverse perspectives of participants from across the globe. I congratulate the Department of Medical Education and the organising team for their meticulous planning in bringing this vision to life.

I am confident that the deliberations at MEDUCON 2026 will inspire transformative ideas and foster lasting collaborations. I wish all the delegates a rewarding experience and the conference a resounding success.

(Dr. V.S. Negi)

जवाहरलाल स्नातकोत्तर आयुर्विज्ञान शिक्षा एवं अनुसंधान संस्थान (जिपमेर)
(स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का संस्थान)
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Dean (Academic)
Professor (Senior Scale) - Department of Surgery

March 23, 2026

Message from the Dean (Academic)

Dear Esteemed Participants and Colleagues,

I extend my warm welcome to all of you at the "MEDUCON-2026" organised by our department of Medical Education and the Alumni Association of National Teacher Training Centre (NTTC) JIPMER. This is an occasion with profound sense of purpose for all of us and we mentors will be grooming the next generation of medical professionals to grow as a responsible medical professionals.

It is a privilege to witness the Golden Jubilee of the NTTC at JIPMER. Since its inception in 1976, the NTTC has remained at the forefront of pedagogical innovation, transforming medical faculty into visionary educators and shaping the academic landscape of our country. The launch of this MEDUCON is a fitting tribute to this 50-year legacy of excellence. As we navigate the complexities of modern medical curricula and competency-based assessments, this international conference serves as a vital platform for academic exchange. It brings together global experts to deliberate on the evolving role of technology, ethics, and learner-centered education in healthcare.

This abstract book reflects the high calibre of research and the collective commitment of our fraternity toward academic rigor. I commend the organising committee for their tireless efforts in curating a program that thoughtfully balances tradition with future-ready educational strategies.

I once again extend a warm welcome to all delegates and speakers. May the discussions held during these days lead to actionable insights that further advance and elevate the standards of medical education globally. I am confident that MEDUCON-2026 will be a transformative experience.

Yours sincerely,

Vikram Kate

जवाहरलाल स्नातकोत्तर आयुर्विज्ञान शिक्षा एवं अनुसंधान संस्थान (जिपमेर)
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आचार्य (शल्यचिकित्सा विभाग)

Dr. D. KADAMBARI
Dean (Research)
Professor (Department of Surgery)

March 26, 2026

Message from the Dean (Research)

It is a privilege to share this message for the souvenir of our conference dedicated to **Critical Issues in Medical Education**. As we gather to deliberate on the future of our profession, we find ourselves at a pivotal crossroads where traditional excellence must meet the demands of a rapidly shifting global and national healthcare landscape.

The "critical issues" we face today—ranging from the integration of transformative technology to the ethical complexities of clinical assessment—require more than just incremental changes. They demand a fundamental re-evaluation of how we align training with societal relevance. Our mission is to bridge the gap between ambitious policy and the practical realities on the ground, ensuring that the momentum of reform leads to competent, empathetic, and research-oriented physicians.

In pursuit of the **Viksit Bharat** vision, research must remain the bedrock of our educational strategies. It is through rigorous inquiry that we address the "failure to fail" in assessments, refine our curricula, and ensure that our students are active contributors to medical science. By fostering a culture that values the evidence generated by robust research, be it in education or healthcare practice, we empower our faculty and students to lead the global healthcare dialogue.

I commend the organizing committee for selecting a theme that is both timely and essential. I am confident that the insights shared during this conference will leave a lasting impact on our institutional practices and the broader landscape of medical training.

Yours sincerely,

Dr. Kadambari D

भारत सरकार / GOVERNMENT OF INDIA
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सं. / No.

दिनांक / Date:
20.03.2026

Department of Medical Education

Message of the Head of Department of Medical Education and President of AANJ

It gives me great pleasure to extend a warm welcome to all delegates, faculty and participants to MEDUCON 2026, organized by the Department of Medical Education (DME), JIPMER in association with the Alumni Association of NTTC JIPMER as part of the Golden Jubilee celebrations of the National Teacher Training Centre (NTTC).

Since 1975, the NTTC, now the DME, has led health professions education in India through faculty development, curriculum innovation, educational research and learner-centred teaching. Several visionary leaders have sculpted this Department and set high standards. I take this opportunity to offer my salutations to all my predecessors. From the day I joined, I have recognized the responsibility of sustaining and advancing this legacy. A diverse group of individuals have contributed to the growth and evolution of the DME, which has consistently benefited from a scholarly and committed team of resource faculty passionate about health professions education. Such achievements would not have been possible without their dedication. The DME has guided institutions in establishing Medical Education Units and strengthening faculty development in health professions education, while supporting regional and national capacity building and promoting professional development among faculty and students.

I also commend the consistent support extended by the AANJ in strengthening the activities of the DME, particularly during MEDUCON. Five editions of MEDUCON have been successfully organized with their valuable support.

The Golden Jubilee marks not only a celebration of our rich legacy but also an opportunity to reflect on our journey and envision the future of medical education. MEDUCON 2026 has been thoughtfully designed to include a diverse range of academic activities and will serve as a vibrant platform for educators, educational researchers, policymakers and students to exchange ideas and explore emerging trends and innovations in medical education. Forum such as MEDUCON play a crucial role in shaping future-ready educators and strengthening academic leadership.

I take this opportunity to express my sincere gratitude to the members of the organizing committee and participants for their valuable contributions. I am confident that this conference will provide enriching experiences, meaningful interactions and lasting professional connections.

I wish MEDUCON 2026 a grand success and hope that all participants have a rewarding and memorable experience.

With warm regards,

Dr. Z. Zayapragassarazan
Professor & Head
Department of Medical Education
President-AANJ
JIPMER

Message from the Organising Secretary

It is a distinct honour to address you as the Organising Secretary for MEDUCON 2026. This year's conference carries a profound historical significance as we gather to celebrate the Golden Jubilee (1976–2026) of the National Teacher Training Centre (NTTC) at JIPMER. For five decades, the Centre has been the heartbeat of medical pedagogy in India, and this souvenir serves as a tribute to that enduring legacy of excellence.

The theme of the conference is "Catalysing change in medical education: engaging with critical issues". The scientific agenda for MEDUCON 2026 has been meticulously designed to identify the critical issues, understand them and translate knowledge into action.

We are privileged to host a galaxy of international and national experts, 250 delegates from all over the country. Their insights, combined with the vibrant research presented by our delegates, create a fertile ground for the collaborative growth that defines JIPMER's mission. We have received about 70 research abstracts and about 15 scientific sessions apart from research paper presentations.

This souvenir is a chronicle of our collective journey. It reflects the tireless efforts of the organising committee, the visionary guidance of our leadership, and the unwavering support of the JIPMER Alumni Association.

As we commemorate 50 years of the NTTC, let us use this platform to not only honour our past but to leap forward into a future where medical education is more responsive, compassionate, and globally competitive.

I wish you all a deeply engaging and intellectually stimulating conference experience.

Dr. Sitanshu Sekhar Kar
Professor of PSM & OIC of JISPH,
Organising Secretary
MEDUCON 2026

MEDUCON 2026 Organising Committee	
Patrons	Dr. Chitra Sarkar, President, JIPMER Dr. Vir Singh Negi, Director, JIPMER Dr. Vikram Kate, Dean Academic, JIPMER
Organising Chairman	Z Zayapragassarazan President AANJ
Organising Secretary	Sitanshu Sekhar Kar
Joint Organising Secretary	Mahalakshmy T
Registration and Certificate	Nivedita Nanda D Dhanasekarin
Reception & Stage Management	Latha Chaturvedula Sree Rekha J D Dhanasekarin
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Scientific Committee	Kadambari D Subathra A Mahalakshmy T Nanda Kishore Maroju Bobby Zachraiah Madhusudhanan P Aditya Anweshak Roy
Felicitation of past Faculty of NTTC	Vikas Menon Dinesh Kumar V
Preconference workshop	Medha R Sree Rekha J Aditya
Finance Committee	Sivaraman G Nivedita Nanda Anweshak Roy
Accommodation & Transport	Abhishekh B Rajalakshmi R
Catering & Refreshment	Latha Chaturvedula Ram Sankar P
Technical Committee	Madhusudhanan P Aditya and Anweshak Roy
Printing TN CME Credits	Manikandan S Vivekanandan M Sree Rekha J R Vasudevan
Social Media, Advertisement, Publicity	Dinesh Kumar V D Dhanasekarin
Mural	Nanda Kishore Maroju

DEPARTMENT OF MEDICAL EDUCATION

The National Teacher Training Centre (NTTC) at the Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER) in Puducherry was the first centre established by the Ministry of Health and Family Welfare, Government of India in 1975, with the assistance of the World Health Organization (WHO), to promote the training of health professionals in educational science and technology, including educational planning and research. This initiative aimed to promote the training of health professionals in educational science and technology, apply systematic educational planning to medical education and conduct educational research. The first National Course on Educational Science for Teachers of Health Professionals (NCESTHP) was held in March 1976. This course is popularly known as NTTC Course. Encouraged by the activities of the NTTC at JIPMER, the Ministry of Health and Family Welfare established three more centres-one each at the Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, Institute of Medical Sciences, Banaras Hindu University, Varanasi and Maulana Azad Medical College, New Delhi. The National Teacher Training Centre at JIPMER, popularly called 'the mother NTTC', is the only National Teacher Training Centre in India that continues to function and conduct the NTTC Course twice a year without interruption with the financial support provided by the JIPMER administration.

With a commitment to meet the fast-growing demand for national educational capacity building in medical education, the Department of Medical Education (DME) was established at JIPMER in 1994 with a mission to promote excellence in faculty development for quality medical education and professionalism. This led to the merger of NTTC with the DME. The DME continued to conduct the NTTC Course twice a year.

The following are the objectives of the Department of Medical Education:

- to conduct capacity building and faculty development programmes at the institute, regional and national levels.
- to serve as a central department for conducting foundation courses, orientation courses and other academic training for students and residents of JIPMER.
- to monitor the institute's teaching, learning and assessment processes under the directions of the Dean (Academic) and ensure scholarship in teaching and learning (through observation, feedback, analysis, action plan, implementation, etc.).
- to recommend policies and provide educational solutions to ensure standards in teaching-learning, assessment and evaluation and student support services.
- to support the Dean (Academic) for periodic review of curriculum.
- to provide teaching assistance in imparting educational science for students of medical, nursing and allied health sciences.
- to provide educational consultancy to the administration in selecting students and in the organization of their learning experience.
- to provide technical and soft-skills training for students, residents and faculty.
- to support research in medical education.
- to provide training and consultancy services to other health universities and medical institutions on academic leadership.
- to establish local, regional, national and international collaboration for capacity building.
- to document/maintain a database to facilitate the accreditation process.

The scope of the Department of Medical Education (DME) is not limited to the above, for the Department of Medical Education has multi-fold roles to play in a medical college in coordination/association with the academic head of the institution. The DME has been acclaimed as the pioneer in medical teacher training, which was established to promote training of health professionals in educational science and technology, apply systematic educational planning to medical education, and conduct educational research.

The DME functions with a full-time faculty qualified in education technology and with adequate infrastructure, including a skill lab and a supporting workforce. Faculty members from the preclinical, paraclinical, medical, and surgical disciplines of JIPMER serve as resource persons for the NTTC Course and for the other programmes organized by the Department of medical education. With the

coordination and support of the resource faculty, the DME conducts annual programmes such as Training Course on Medical Education for Senior Residents, Interns Orientation Programme on Quality Care, Postgraduate Orientation Programme on Research Methodology (for first-year and final-year postgraduates) and Foundation Course for first year MBBS students. The Department academically supports the Nursing College by deputing its faculty to teach Nursing Education Paper for MSc (Nursing) students every year since 2010.

The DME and its resource faculty are involved in conducting action research in various areas of medical education, including curriculum development. The Department supports the Dean (Academic) in collecting feedback from the MBBS students and faculty about their teaching-learning experiences. The DME provided its expertise to the Dean's office in revamping the MBBS curriculum in 2017. The DME was entrusted with providing strategies for implementing new MBBS curriculum for JIPMER Puducherry and JIPMER Karaikal. The Tamil Language Learning Programme organized by the DME was well received and has immensely helped the faculty members and residents learn the local language which is vital for doctor-patient communication. The skills lab in the DME provides hand-on training for the faculty, students and residents in simulation-based education for developing clinical and decision-making skills. The DME has immensely contributed to the corporate activities of JIPMER, including JIPMER Quality Council, SMART JIPMER Programme, JIPMER Help Groups and any other educational assignments assigned by the Director, JIPMER from time to time.

The DME has been conducting the longest running flagship programme 'National Course on Educational Science for Teachers of Health Professionals' since 1976, making it the largest capacity building centre in India. This training have also benefited medical teachers from Bangladesh, Nepal, Mongolia and Afghanistan. It also conducts offsite medical education training programmes for the faculty of mentee institutions-AIIMS Bhopal and AIIMS Patna. In addition, the Department has undertaken offsite medical education training programmes at AIIMS Rishikesh, AIIMS Bhubaneshwar, AIIMS Kalyani and AIIMS Bibinagar. The Department is committed to national capacity building in Medical Education by conducting Faculty Development Programs and as of March 2022, the DME conducted 88 onsite, 2 online (during COVID‐19), 8 offsite national courses and trained 2286 teachers of health professionals across the country.
The National Medical Council (NMC) has recognized the Department of Medical Education as an NMC Regional Centre for Faculty Development Programmes in Medical Education since June 2015 for training faculty members from eighteen medical colleges across Puducherry and Tamil Nadu. To date the JIPMER NMC Regional Centre has trained a total of 916 in Revised Basic Course Workshop (RBCW) in Medical Education Technologies, Attitude Ethics and Communication Module (AETCOM), Curriculum Implementation Support Program (CISP), Basic Course in Medical Education (BCME) and Advance Course in Medical Education (ACME). Subsequently, the NMC has recognized the Department of Medical Education as an NMC Nodal Centre for Medical Education Technology in Medical Education with effect from February 2023.

The DME has an ATLS Educator certified by the American College of Surgeons who periodically conducts the ATLS Instructor Courses in JIPMER and other regional centres in India. The DME also provides guidance and consultancy services to Institutes of National Importance and the colleges affiliated under JIPMER NMC Regional Centre to set up Medical Education Units (MEUs) and in conducting faculty training programmes.

The COVID-19 pandemic has disrupted medical education and healthcare systems globally. The DME responded to the challenges posed by COVID-19 effectively through online education. The 83rd and 84th NCESTHP and other institutional programmes including short workshops were organized fully online. The sessions were designed and delivered both in asynchronous and synchronous mode, and the contents were organised appropriately for transaction on digital platforms using various digital tools judiciously.

Early History of Educational Faculty Development Initiative Through NTTC, JIPMER: WHO Global Initiative 1965 onwards

Prof DK Srinivasa, and Prof BV. Adkoli (postscript by Prof KR Sethuraman)

WHO initiative: An expert committee of the World Health Organization (WHO) in 1965 brought out a report on, "The training of teachers of medical schools with special regard to developing countries". The committee suggested three levels of training:

Educational specialists: Medical and other health professionals who have obtained training in education, or professional educators familiarized with health profession.

Educational Leaders: Medical and other health professionals who would acquire sufficient knowledge of educational science to integrate into programs of study in institutions.

Educational Practitioners: Medical and other health professionals whose training would be limited to primarily improving their competence as classroom teachers or clinical teachers.

With these aims and as a part of global initiative for teacher training WHO designated in 1969 Centre for Medical Educational Development, University of Illinois College of Medicine, Chicago, and Department of Medical Education, University of Southern California, Los Angeles in US, as International Regional office Teacher Training Centres (IRTTC), headed by Dr. George Miller and Dr. Steve Abrahamson, respectively. These Centres trained educational specialists and leaders for the six Regional Teacher Training Centres (RTTCs) that were established. In South East Asian Region, University of Peradeniya in Sri Lanka and Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, were designated as RTTCs. These RTTCs with support from IRTTCs trained national level educational leaders for establishing National Teacher Training Centres (NTTC). The major aim of NTTCs was to train teachers from medical colleges in their respective countries who would establish medical education units in their colleges.

Progress in India: The faculty development began in India during 1976. Its progress may be categorized into four initiatives, viz., contribution made by (i) NTTCs, (ii) Medical Education units (MEUs), (iii) Consortium of Medical Institutions for Reform of Medical Education and (iv) FAIMER (Foundation for Advancement in International Medical Education and Research, Philadelphia).

Role of NTTCs: In India the first NTTC was established at Jawaharlal Institute of Medical Education and Research, (JIPMER), Pondicherry. First National Course on Teacher Training was held in March 1976, with support from WHO. Encouraged by the activities of the NTTC at JIPMER, Ministry of Health and Family Welfare, Government of India established three more centers, one each at Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, Institute of Medical Sciences, Banaras Hindu University, Varanasi, and Maulana Azad Medical College, New Delhi. NTTC activities included 6-10 day courses for medical college teachers on different facets of educational science and technology. These courses helped introduction of a number of innovations in various medical colleges. NTTCs encouraged and supported starting of medical education units in other colleges.

NTTCs could be credited to have groomed the initial set of educational leaders and educational practitioners during 1980's-1990's and augured the future growth of faculty development. Ministry of Health and Family Welfare, Government of India stopped financial grant in 1992-93. The NTTCs were forced to discontinue national courses due to lack of funds.

Postscript: However NTTC at JIPMER survived thanks to the support by Institutional budget. And NTTC at JIPMER, was upgraded in 2002-'03 as Department of Medical Education (DME), and Prof KR Sethuraman was the first head of the department. DME is still continuing the National Course twice a year in a 6-day format.

Reference:

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My Journey with NTTC:
Memories of Senior Faculty of NTTC

Dr. D. K. Srinivasa

Former Dean, JIPMER and Founding Member of JIPMER NTTC

It is very heartening to note that the "Mother NTTC" set up at JIPMER by the WHO in 1975-'76, has sustained for 50 yrs! It was a bold step by Prof DB Bisht, the Principal of JIPMER in 1975, to lead a 3-member team from JIPMER to represent India in WHO workshop on Medical Education held at the Regional Teacher Training Centre at Peradeniya, Sri Lanka. Under WHO sponsorship, the first NTTC was set up at JIPMER in 1975. The first national workshop was held in March 1976.

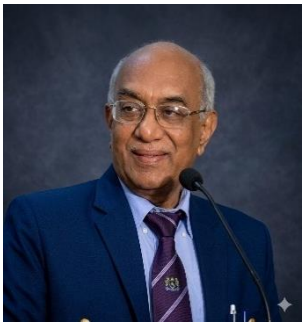
I was fortunate to join the first course, which used to be for 2-weeks, when WHO-sponsored experts used to conduct the initial courses. I was nominated as the Project Officer by Prof Bisht. Faculty staff today will not believe that we, the early entrants into Medical Education, had to face dismissive comments and derisive looks.

However, in the last 5 decades, Medical Education in India has flourished and is well established at present. Several centres of excellence have come up. It gives me a lot of satisfaction that every Medical college now has a Medical Education Unit, which was one of the goals of NTTC.

I understand that Golden Jubilee is marked by a series of webinars, to be followed by the MEDUCON-2026 Conference in April 2026. Let me offer my best wishes for the coming event.

Emeritus Prof. Dr. K.R. Sethuraman. (NTTC Faculty 1986 to 2006)

Reflections on my memorable journey in NTTC and the Department of Medical Education (1986-2006)



My Entry into NTTC

My first entry into the portals of NTTC in September 1986 was rather sudden and unexpected, as I received an official directive at 9.30 am to report ASAP to join the 19th National Course of NTTC. I missed the ice-breaker session and had to hurriedly do the pretest before joining the other 23 participants. The seating and the way sessions were conducted were a totally new learning experience for me, which I figured out much later to be the andragogy model for conducting a hands-on workshop.

Next month I was inducted as a resource person of NTTC. Since veterans, viz., Professors DK Srinivasa, SC Mitra, Asha Oumachigui, AJ Veliath, Sibal, CH Shashindran, DP Thombre, N Ananthakrishnan & PH Ananthanarayanan were already taking care of all the sessions, I had to explore newer areas, such as Computer-assisted learning, Adult-learning principles, Resource Management for Educators, and Ethics for educators to make myself useful.

The Survival Crisis of NTTC in 1992-93

Since the 1970s, the Govt of India has been allocating some funds in the Plan-Budget to support the four NTTCs, viz., at JIPMER (the 'mother NTTC'); PGIMER, Chandigarh; MAMC, New Delhi; and BHU, Varanasi. The grant was discontinued in the Eighth 5-year plan in 1992-93, leading to the closure of the fully sponsored 10-day workshops conducted till then. At JIPMER, we skipped one national course until the JIPMER director, who is also the Project Director of NTTC, allocated some survival funds to resume the course. We, at NTTC, JIPMER, were the only centre to continue the National courses beyond 1993, and have sustained it till today. The various directors of JIPMER deserve our appreciation for their support in fostering Medical Education.

Handouts to "Blue book" metamorphosis

From March 1976, when the first National course was started, the handouts used to be cyclostyled and distributed; later in the '80s, they were photocopied. In 1994, we planned to compile the handouts in to a printed manual; the problem was how to finance it and make it a sustainable proposition.

Fortunately, one of the WHO grants to conduct a series of faculty development programmes on "Mass casualty and disaster preparedness" gave us the funds to print 500 copies of the first edition of the manual in A5 (pocket size). To enable NTTC to collect funds for further reprints, we thought of setting up "NTTC Alumni Association," collect a life-membership fee of Rs. 100 (later it was Rs 200) and issue the manual as welcome gift to each member. This master stroke got NTTC 100% enrolment by the participants as NTTC alumni, and also enough funds to plan for a second and improved edition of the manual well known as the "Blue Book" that was published in 2000, when Professor PH Ananthanarayanan was the director of JIPMER.

NTTC Looks Beyond the National Course

During the 5-year plan period of 1986 to '91, the Govt of India launched "ROME-II" initiative, which stood for reorienting medical education through inquiry-driven 'bottom-up' approach to reforms in medical education. AIIMS was the coordinator, JIPMER, CMC-Vellore, and BHU, Varanasi were the core members to go ahead with ROME-II reforms in medical education in a phased manner. In the end of Phase-1 meeting held in New Delhi in 1991, our director, Prof. S. Chandrasekar, stressed the need to go for curriculum revision, instead of relying on the inquiry-driven modular approach, which only led to piece-meal reforms. This was seriously taken up during the second phase (1991-'95) and paved the way for the revised MBBS curriculum of 1997.

During 1991 to '96, NTTC, JIPMER was designated as a "WHO collaborating Centre for Disaster Preparedness and Response; we undertook various WHO sponsored training workshops on Disaster Preparedness and Response; Mass Casualty management; Workshops for Nursing Skills Update. In 1993, NTTC launched the 3-day Interns' Orientation Programme (IOP); in 1994, the PG Orientation Programme; and in 1996, the PG Orientation to Research Methods.

All these additional efforts needed resource persons. In addition to the 10 in Education core group, NTTC enjoyed the part-time support from more than 30 resource persons.

My Stint as the Project Officer, NTTC (1996 – 2006)

Among the NTTC faculty, I was the only senior who was not a departmental head. Therefore, my seniors decided to make me the Project officer when Prof DK Srinivasa superannuated in 1995-96. I felt I needed to get a formal qualification in educational science, and completed PG-Diploma in Higher Education (IGNOU) in 1997. Subsequently, we revised the 10-day course to cover more topics, moving from 19 to 26 to accommodate the newer developments.

NTTC published 2 more manuals: i) a 'Gray Manual' on the art and science of conducting 'NTTC style' workshops, and ii) a compilation of the 'Innovations in Medical Education' implemented by various departments teaching MBBS and PG courses. In addition, there were 6-monthly NTTC Bulletins, which carried editorials, special articles and reports of educational Projects done by the alumni. They were available in the former version of JIPMER web portal.

NTTC Alumni Meets (MECON and MEDUCON)

The first Medical Education meeting of NTTC alumni and others called MECON was held on 14th and 15th of October 1995. The chief guest was the Lt Governor of Pondicherry, Hon'ble Rajendra Kumari Bajpai, who released the first edition of the NTTC Manual on Medical Education. The alumni felt that MECON could be held once in 2 to 3 years. It is matter of pride for all those associated with NTTC that the alumni meetings are still being held every 2 to 3 years.

Personal Academic Journey (2006 to '26)

The 20-year stint in NTTC, and 10 years as its busy project officer, organising several training programmes with various teams, gave me the confidence to take up the challenge of deanship at AIMST University in Malaysia. This was set up by the Malaysian Indian diaspora, who claim that this is the only University in the world set up by Indian diaspora (others only built temples) and earnestly sought our help and assistance in making it an institution of quality. I took voluntary retirement after staying in the alma mater for 40 years and 25 years as a JIPMER faculty to go there in time to get ready for final accreditation of MBBS, and a big shift to a modern 'Chakra design' campus. We could do a lot of reforms in the system-based integrated MBBS curriculum.

After 7 years in Malaysia as a dean, I got the opportunity to be the Vice Chancellor of a private health sciences Varsity for 5.5 years, during which period, it moved from the bottom 10 percentile to the top 10 percentile. My personal dreams of guiding doctoral level research in Education, and of launching PG diploma, and Master level courses in Health Professions Education were fulfilled there. I am grateful to still be attached as an 'Emeritus Professor for Life' to Malaysia and as the 'Endowed Chair' of the Institute of Health Professions Education, the seeds for which were sown by me in 2014 along with 5 other former colleagues at NTTC.

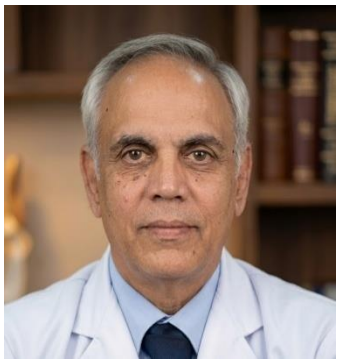
And the memorable journey, which began in September 1986 at NTTC still goes on creating a new cohort of Master trainers in Health Professions Education (MHPE).

Dr N. Ananthakrishnan

Emeritus Professor, Surgery and Health Professions Education, Sri Balaji Vidyapeeth, Pondicherry.

March 27th, 2026

Reminiscences regarding the NTTC



It is matter of great pride to me that the erstwhile National Teacher's Training centre, currently the Department of Medical Education, JIPMER is celebrating its Golden Jubilee this year. I joined JIPMER the year after NTTC was founded in 1976. I was lucky enough to be selected as a participant a couple of years later for the National Course and even more fortunate to be recruited to the faculty of NTTC the year after. The 27 years I spent as a faculty in the NTTC were the golden years of my teaching career where I had the privilege of serving as a faculty for over fifty National Courses.

Soon we entered new territories like joining the Consortium of Institutions for a relook at the MBBS Curriculum, the disaster management training workshops, the workshops for postgraduates on pedagogy and so on. The work of the consortium led to the 1997 curriculum of the MBBS program. My work with NTTC was also responsible for being appointed as the Chairman of the Postgraduate Working group for drawing up a new curriculum for postgraduate programs under the MCI.

The association with the NTTC and the workshops were totally enjoyable moments of learning pedagogy step by step and having an opportunity to disseminate the principles to other teachers – 25 to thirty teachers per course for over fifty National Courses. Lasting friendships developed between all of us in the faculty under the mentorship of giants such as Prof. DK Srinivas, Prof. SC Mitra, Prof. DP Thombre, Prof. RN Sibal, Prof. AJ Veliath and others. I was lucky enough to interact with Peter Blizzard from Australia, as a visiting faculty to the NTTC, from whom I first learnt the importance of the Affective Domain. I also developed unique bonds and friendships with over 1500 teachers from all parts of the country who attended the NTTC during my period there. We were original examples of learning by doing as per the much later theory proposed by DAVID KOLB.

In fact, the infection of the pedagogy virus, led to a lasting florid infection which led to Prof. KR Sethuraman, Prof KA Narayan and myself to start in stages, the Academy of Health Professions Education and development (AHEAD), the Centre for HPE (CHPE) and finally the Institute of Health Professions Education (IHPE) at Sri Balaji Vidyapeeth, Pondicherry, which is now running the MHPE program in a unique Heutagogy mode and has several teachers doing their PhD.

We wish the NTTC, JIPMER, greater and greater glory in future.

Dr. Balachandra Adkoli

NTTC, JIPMER – My Kalpavruksha, the wish-fulfilling Tree

October 1985 was the month I entered the corridors of NTTC, JIPMER as a fresh faculty member. Coming from a non-medical background, I had no clue regarding my job responsibilities and my role as a full time faculty of NTTC. It was like jumping into the pool, without knowledge of swimming! Thanks to the support given senior faculty then, Drs SC Mitra, DK Srinivasa, Thombre, Veliath, Geetha, Shashindran, Sibal, the two Ananths, Ananthakrishnan & Ananthanarayanan, Vijayan Pillai, besides Dr OP Bhargav, then Director of JIPMER, I could sail smoothly on the sea of medical education.

From disbursing the group work and cyclostyled handouts, I could handle my session independently. I could also add a session on question paper setting including a role play. The hot discussions during highly interactive sessions, more than that, the fun and frolic and social interaction we used to have in the evenings at the old JIPMER guest house served as a double engine to hone my skills in faculty development. In addition, a small seedling of research was also sprouted in the form of ICMR project on the 'Place of Primary Health in medical education'. Dr Vishnu Bhat and I collaborated to work on a project dealing with growth and development of school children. Indeed, NTTC served as a nursery for my own growth and development.

Having worked for seven years, I was hand-picked by AIIMS, New Delhi, in 1991 to take charge of their newly established K L Wig Centre of Medical Education, popularly called KL Wig CMET. It is open secret that this promotion was mainly based on the credentials of NTTC.

AIIMS gave me immense scope, few challenges and more opportunities for enhancing my scholarship. A three month's British Council Fellowship at Dundee Institute of Technology, UK prepared the ground for pursuing master's degree in medical education (M Med Ed) from the University of Dundee, UK. At the same time, I could also pursue Ph D from Annamalai University, Tamil Nadu as an external candidate.

On the job front, I could play diverse roles in AIIMS as Administrator of a comprehensive media production facility, organizer of in-house, national and international workshops, member of several expert committees, resource person for several State Govt projects sponsored by WHO-SEARO and World Bank. I could also participate in the workshops conducted by MCI, DCI, Nursing Association, ICMR, PHFI besides, several professional associations.

Some unexpected developments took place during my tenure at AIIMS. During 1991-1995, WHO sponsored an important multi-centric project called "Inquiry Driven Strategies for curricular reforms in medical education". This was implemented by forming a Consortium of four leading institutes viz., AIIMS New Delhi, JIPMER, Pondicherry, CMC Vellore and IMS, BHU, Varanasi. Since this project was coordinated by AIIMS, I could play a key role under Dr Usha Nayar, then Professor in charge of CMET. JIPMER had contributed profusely to this project. The recommendations made by the Consortium laid the template for drafting the MCI Undergraduate Regulations of 1997.

The second development was the establishment of FAIMER regional institutes in India. Dr Rita Sood and I became a part of the FAIMER Faculty of CMC Ludhiana since its inception in 2006. Collaboration with FAIMER leaders such as Bill Burdick, Page Morahan and Janet Grant paved the way for organizing the first national conference on medical education NCME 2007 at AIIMS, under the leadership of Dr Rita Sood. This event became a springboard for the establishment of Academy for Health Professions Educators (AHPE) which is a significant milestone in faculty development.

The third development was the establishment of ATLS India under the leadership of Dr SC Misra, the then Director of AIIMS and Founder of Trauma Centre in the year 2010. I got the opportunity to serve as an Educator for running the advanced Instructor courses in several centers across India and overseas.

Subsequently Dr Zayapragassarazanne has chipped in this mission. Application of microteaching forms the core of these courses.

During 2008-2010, I was lucky to get a sabbatical from AIIMS, to serve as a faculty member of the newly established Medical Education Unit of the University of Dammam, Kingdom of Saudi Arabia. A major part of the job was to do computerized item analysis, for which I was trained in NTTC. This assignment was both academically satisfying and financially rewarding.

Post retirement from AIIMS (2012-2014), an interesting assignment was waiting for me. I was appointed as the first Content Manager of the National Health Portal of the MOHFW, Govt of India. Working with content experts from the medical as well as the AYUSH stream and liaising with the technical team demanded an interprofessional approach, which was quite challenging. Here also, the skill in working with interdisciplinary faculty, which I learnt from NTTC, came for help.

In the last leg of my career too, the NTTC connection was evident. In 2015, I was invited by Prof KR Sethuraman, then Vice Chancellor of Sri Balaji Vidyapeeth, Deemed to be University, Pondicherry, to join as Professor and Director of Centre for Health Professions Education (CHPE). It was indeed a reunion with NTTC colleagues, Prof N. Ananthakrishnan, Dr K.A. Narayan, and many other JIPMERITES in a new private setup. We had before us, the challenge of starting new, innovative, interdisciplinary programs based on the Choice Based Credit System (CBCS) for getting accredited by the NAAC under the UGC pattern. We had to meet the stringent criteria of accreditation which emphasized research, publication and Intellectual Proprietary Rights (IPR) activities including copy rights, and patents, which were not easy to achieve for a new University with limited enrollment. However, with the kind of bon-homie we had developed during NTTC regime, besides, strong support from the management, faculty and staff, the activities rolled out in rocket speed - Launching of Postgraduate Diploma (PGDHPE), M Phil, and MHPE besides Ph D Programs, Faculty Development Programs (FDP) across the institutes, research and publication besides IPR activities culminating in much coveted accreditation Grade A++ thus creating a new history.

Reflecting on my journey of four decades, the NTTC empowered me to explore all forms of scholarship, through faculty development -the scholarship of teaching, by way of training thousands of teachers; scholarship of research through publications (100+); the scholarship of application in the form of copyrights, and consultancy activities; scholarship of integration by bringing together all HPE besides, YOGA and Music therapy (in SBV). Today, we have a large community of scholars and leaders in medical education who can carry forward our legacy.

Overall, it was an overwhelming success mixed with a few failures, which are obvious for any human being. My success can be largely attributed to luck and divine intervention throughout my career. A lot of things happened on their own and I just happened to be there, in right time and in the right place. Secondly, the credit must go to my seniors and mentors, late Dr SC Mithra, Dr DK Srinivasa, Dr N Ananthakrishnan and Dr KR Sethuraman for hand holding me; hundreds of colleagues for walking with me; juniors and my family for their unconditional support. I attribute my failures to my lack of expertise in medical education, lack of long term vision and focus leading to complacency, and lack of attention to details. My friendly critics also say that I am too flexible and too much dependent on others.

In the end, what NTTC means to me? To me, NTTC is indeed, a Kalpavṛukṣha which literally means *"the wish-fulfilling tree"* of Indian mythology, symbolizing abundance, fulfilment, and the harmony between desire and righteousness. It is said that Kalpavṛukṣha gives everything to fulfil human aspirations – *dharma* (righteous living), *artha* (wealth and prosperity), *kāma* (desire), and ultimately *mokṣa* (liberation), provided there is purity of intention and discipline, not mere asking. NTTC has given me a righteous living, a decent money & pension, fulfillment of all material desires, and finally freedom from all responsibilities, which is Jeevan-Mukti.

Dr. K.S.V.K. Subba Rao

Cardiothoracic and Vascular surgeon & Former Director – JIPMER (2004-2012)

It is a profound honour and privilege for me to participate in this landmark event - **JIPMER MEDUCON 2026** and reconnect with my colleagues who have shaped generations of educators through their training initiatives and workshops. The National Teacher Training Centre (NTTC) at JIPMER is a national pioneer, having led the professionalisation of medical education in India. I am fortunate to witness the birth of NTTC at JIPMER. I joined this institution as a Registrar in Surgery in 1973 and became a lecturer in Thoracic Surgery in 1976. During this period, a few faculty members, including Dr S.C. Mitra, Dr A.J. Veliath, and Dr R.N. Sibal, attended a workshop in Srilanka for specialised faculty training for the upcoming NTTC. Following their return, during Dr. D.B. Bisht's tenure as Principal, the inaugural workshop was launched with the participation of international faculty. This marked the beginning of a regular schedule, with the Government of India funding 10-day workshops held twice annually. The participants were selected by the project officer with the approval of the Project Director, who is the Director of JIPMER. Mostly, outsiders were given a chance and only 2 or 3 from JIPMER, especially when some outside participants dropped out. I was very keen to participate, mostly because of curiosity rather than to become a great teacher. I was given the least preference since I belong to the superspeciality department and am not involved in UG teaching. Anyway, I was selected in 1988 for the 23rd course, if I remember right. Later, as God proposed, I became project director and got an opportunity to select the project officers as well as faculty leave alone participants. In the years that followed, my involvement in medical education expanded through external workshops at institutions like AIIMS and professional development sessions tailored for senior leadership, including Deans and Directors.

I have attended several Inaugural and Valedictory functions apart from social get-togethers, which were held in the evening of the first day. I remember from Dr S.C. Mithra, Dr D.K. Srinivasa, Dr K.R. Sethuraman, Dr Santoshkumar, Dr Geethanjali and Dr Kadambari as Project officers during my tenure at JIPMER. Later, the Department of Medical Education was started along with NTTC, and most of us have emotional bonds with NTTC, though it is for developing medical education, starting with training teachers and other medical and health professionals. JIPMER has produced several stalwarts in medical education, and Dr K. R. Sethuraman stands tall and became synonymous with Pedagogy or Medical education, not to reduce the stature of others like Dr N. Ananthakrishnan, Dr Asha Oumachugi, Dr Santoshkumar, Dr Gitanjali, Dr Vishnu Bhat and several others. Beyond its origins and historical milestones, the development of medical education during this period warrants specific mention. I should also have to say a few words about medical education apart from the genesis and history. Long before the formal introduction of Competency-based medical education (CBME) and Attitude, Ethics and Communication (AETCOM) by the National Medical Commission, NTTC was already integrating evidence-based medicine, simulation-based teaching, objective assessments, and ethical, empathetic patient care into its core curriculum. These foundational efforts have elevated our medical graduates to global standards of clinical excellence. Throughout my career, I have remained a passionate educator with my roots developing from NTTC, mentoring over 25 CTVS postgraduates who now hold distinguished academic positions worldwide. I extend my heartiest congratulations to the Department of Medical Education and the NTTC Alumni Association for organising the Golden Jubilee Conference. My best wishes to the organising team for a resounding success.

Dr. Santosh Kumar

Former Head, Department of Medical Education, JIPMER.

How do I become a trustworthy teacher?

(1). I respect all students equally and unconditionally without categorising them as good or bad.

(2) I help all students to become self-learners and self-assessors.

(3) I praise the efforts and hard work of all students without praising their talents.

(4) If students make mistakes, I only assess their mistakes for correction without judging them.

Best wishes.

Santosh Kumar

Dr. B. Vishnu Bhat

Former Director, JIPMER NTTC, JIPMER: Shaping Educators, Inspiring Excellence

I joined Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER) as a faculty member in the Department of Pediatrics in 1983, after 14 years of rigorous training. In 1985, I had the privilege of being selected for the prestigious National Teachers Training Course (NTTC), and by 1987, I was inducted as a faculty member. At that time, the NTTC faculty comprised of just eleven members, and it was both an honour and a joy to be part of such a distinguished and committed group.

The National Training Centre was established at JIPMER in 1975, with the support of the World Health Organization and the Ministry of Health and Family Welfare, Government of India. The early faculty members received training abroad, while subsequent members were trained locally alongside participants from across India and even from other countries. Initially, the program was fully funded to support participants, but over time, it transitioned into a self-financed model under JIPMER.

What set the NTTC apart was its uniqueness in approach and spirit. Punctuality, discipline, and vibrant interactions among participants and faculty created an enriching learning environment. The program fostered not only academic growth but also camaraderie. Evening social gatherings added warmth and strengthened personal and professional bonds.

"Education is not the filling of a pail, but the lighting of a fire." – William Butler Yeats

Initially conducted over two weeks, the course was later streamlined to seven days without compromising its depth. A key component of the program was the development of a medical education research protocol. Participants engaged in critical discussions with peers and faculty before obtaining approval. Impressively, many went on to complete their projects and publish their findings in reputed journals.

The course emphasized the scientific principles of teaching and learning, enabling participants to refine their skills and adapt them to their own institutional settings. Innovative teaching methods—including role-plays, simulations, and interactive games—were employed to reinforce key concepts while keeping participants actively engaged throughout the intensive sessions.

Each day featured group discussions, presentations, and structured feedback from peers and faculty. Faculty meetings were held daily to review proceedings and plan subsequent sessions. Rapporteurs presented comprehensive summaries of the day's activities, incorporating participant feedback. This iterative process ensured continuous improvement in course delivery, even though the session themes remained consistent.

While participants often appeared fatigued during the initial days due to the demanding schedule, they invariably completed the program with a sense of fulfilment and accomplishment.

Beyond the national courses, NTTC also conducted short training programs for junior faculty and residents, addressing specific educational needs. The unit remained active throughout the year and eventually evolved into a well-established department within JIPMER.

"The art of teaching is the art of assisting discovery." – Mark Van Doren

I personally gained from the center both as a participant and faculty. I was requested to deliver Dr.Rita Sood memorial oration of MEU-India. I was also bestowed the 'Lifetime Achievement Award' by MEU-India.

In conclusion, learning transcends the mere transmission of knowledge. It is the empathetic, personalized delivery of content that truly transforms education. NTTC, JIPMER stands as a beacon of this philosophy—nurturing educators who, in turn, inspire generations.

"A good teacher can inspire hope, ignite the imagination, and instil a love of learning." – Brad Henry

Dr. R. Krishnan

It is with immense pleasure that I wish MEDUCON 2026 every success in this Golden Jubilee celebration. JIPMER has had a major influence on me during my formative years as a specialist Pathologist. My training during the National Teacher Training Course in the year 2000 played a significant part in that. Subsequently, it was humbling to be inducted as a faculty member in the programme in 2004, which was an even greater experience. It was a privilege for me, as it was for my compatriots Dr. Kadambari, Dr. Latha, Dr. Basu, and others, to work with stalwarts like Dr. K R Sethuraman, Dr. Anantha Krishnan, Dr. Shasheendran, Dr. K A Narayan, Dr. Santosh Kumar, Dr. Bhat, and many other faculty members, as well as participants, and learn first-hand. The lessons from those years have guided me all along, and I am often thinking about them during interactions with students. When I went on and obtained a Graduate Certificate in Tertiary Education here in Australia, I was able to see that the nationwide impact emanating from little Pondicherry was of a global standard, but way more grounded.

It is heartening to see that NTTC is being ably steered by the "fresh blood infusion" as Dr. KRS was fond of referring to new faculty members. My best wishes to all the participants and faculty members during this programme, as well as future courses.

I have attached some of my own cherished memorabilia from NTTC, the last pic is of the 'Golden batch!'.

NATIONAL TEACHER TRAINING CENTRE
JIPMER, PONDICHERRY

50th National Course on Educational Science
21st Feb - 2nd March 2005

PARTICIPANTS & FACULTY

Top Row (Standing) (L-R)

Drs.T.M. Subba Rao, M. Balamurugan, John Chritudhas Lalji, G.C. Sahoo, Santosh Kumar, J. Kabalimurthy, Ranjit Sukumar, P. Narayanan, Sumit Kumar Roy, Ashwath Narayana, Murali Krishna Reddy, B. Vishnu Bhat, R. Krishnan, M.G. Sridhar

Middle Row (Standing) (L-R)

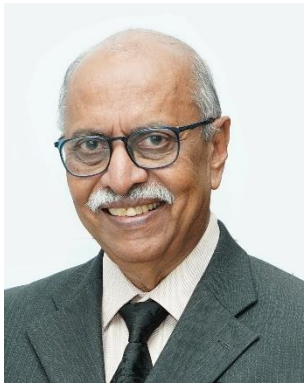
Drs.Kumaran @ Ramesh Colbert, R. Jayaprakash, B.H. Natesh, R. Nathan, B. Mohanty, B. Ramesh, Sateesh S. Jigjini, N. Anathakrishnan, M.S. Vinutha Shankar, Latika Sahoo, Anupama Gupta, Latha Chaturvedula, C.H.Shashindran, K.A. Narayan

Bottom Row (Sitting) (L-R)

Drs.Roseline Fatima William, R. Shakila, B. Premalatha, Raji Sharma, Bharathi, K.S.V.K. Subba Rao, K.R. Sethuraman, Sudeshni Mirza, Indira V. Ingole, Mariette D'Souza, D. Kadambari

Dr. K. A. Narayan

From National Centre to Institute – My journey in Health Professions Education



I was formally inducted into the field of medical education in 1986 when I attended the 20th National Course. Thanks to the tutelage of Dr. D K Srinivas, who was also my mentor in Community Medicine, I had a high pre-test score. That left me and the faculty anxious that I should not score lower in the post test. Luckily that did not happen.

Subsequently, I was involved as a faculty for workshops for post graduates before being inducted into the NTTC, full time, in 1996 after Dr. Srinivas retired. It was a humbling experience rubbing shoulders with my teachers, Dr. Asha, Dr. Sashindran, Dr. Ananthakrisnan, and Dr Sethuraman, and others.

Induction into NTTC

Thrown into the deep end immediately, I was assigned to conduct the "fish bowl" session. I finished rather quickly and felt quite pleased with myself—until the post-session faculty meeting revealed that I had missed the crucial group dynamics component. That was my first lesson in NTTC.

I soon got my bearings and became confident in conducting the various session of the 10 day programme. NTTC also gave an opportunity to explore other areas like Disaster management, Hospital waste management, Integrated Disaster management, Health Systems management, and Essential Drugs for Tamil Nadu Health Systems, giving an opportunity to explore new training methods such as simulation exercises. The development of simulation exercises for mass casualty and cyclone was particularly interesting.

During a workshop at ISRO Bangalore with Dr. Sethuraman, we met a Secretary from the Department of Science and Technology who had previously worked with the Government of Pondicherry. In casual conversation, we learned that the Government of India was seeking institutions to implement a telemedicine programme. We quickly submitted a proposal, and soon NTTC was equipped to make its foray into telemedicine. Academic exchanges followed with institutions in the Andaman & Nicobar Islands, Ladakh, and the Amrita Institute. We even conducted a training-of-trainers programme for Tamil Nadu Medical University via telemedicine.

Malaysia: A New Challenge

In 2006 after taking voluntary retirement, I went to the AIMST University, Sungai Petani, Malaysia. It was a new challenge with a system based curriculum with no national template to replicate. The faculty from different countries were unfamiliar with the demands of the curriculum.

Clinical training was conducted in government hospitals, where doctors served as part-time teachers without pedagogical training. This scenario required not only implementing curricular elements but also training both institute and hospital faculty. The foundation laid at NTTC proved invaluable. As Deputy Dean, I trained faculty, implemented the curriculum, established a state-of-the-art clinical skills laboratory, and successfully completed the first accreditation process.

Return to India

I returned to India and Pondicherry in 2013 and joined the Mahatma Gandhi Medical College and Research Institute under the Sri Balaji Vidyapeeth, where Prof Sethuraman had joined as Vice Chancellor and Prof N Ananthakrisnan was Dean of Faculty. Being a deemed to be University and with Prof Sethuraman at the helm of affairs, we could computerise the exam system and bring in changes in the pattern of evaluation such as unitary marking, thus making the system more reliable.

There was a nascent group of dental educators wanting pedagogy training. We trained them and helped set up a Dental Education Unit. That motivated us to formulate a one-year postgraduate, an MPhil, and PhD programme. Given these, a Centre for Health Professions Education was Established and in 2021 it was upgraded to an Institute offering a two-year Masters programme in Health Professions Education. Being a hybrid face-to-face and online programme, it opened it to national and international audiences. I was appointed as the first Director – a true culmination of a fantastic journey.

Dr. M. G. Sridhar

It is my gratifying privilege to reminisce about the National Teachers Training Centre and Medical Education training programmes conducted at JIPMER Pondicherry, during its Golden Jubilee year.

I have met several faculty members all over the country who look back fondly at the training received at the NTTC workshops, acknowledging it as the point of inflection and initiation in their lives. In fact, the National Teachers Training Centre at JIPMER was a trailblazer and the growth of formal Medical Educational Science in the Country paralleled that of NTTC. This centre has provided several stalwarts of medical educational science to the country and has done yeoman service to the cause of medical education in India. Kudos to JIPMER and the NTTC team for training medical teachers for 50 years now. Keep up the good work !

My first brush with the concepts of medical educational science came while I attended a three-day workshop as a Postgraduate student at JIPMER in 1985. The related 'jargon' was always in the air across departments on the campus. The importance of making medical education student-centric and the understanding that a teacher is to strive to be an exemplary facilitator dawned upon us very early.

As faculty members of JIPMER, we attended several workshops including the ten-day workshop that was a national talking point. Being nominated to the NTTC faculty team was indeed an honour. It opened new vistas of understanding various perspectives during interactions with faculty members from various medical institutes in India and abroad, especially with WHO experts in the field.

The camaraderie in the resource faculty team was exceptional. Faculty of various disciplines exhibiting their pristine passion of applying the best practices of education was on display. Some of them were 'walking encyclopaedias'. There was so much to learn from trainee faculty members who had come from far and wide. Sessions were highly interactive, held in the best democratic traditions. I was privileged to work alongside a truly remarkable team.

My training at NTTC JIPMER kept me in good stead during my five- year deputation stint at BPKIHS, Dharan where we had introduced a partial S.P.I.C.E model of MBBS curriculum. As Head of Health Professions Education, among the many facets of medical education, the importance of integration of learning concepts and 360° feedback in Medical education became evident.

The CBME model introduced by MCI/NMC across medical colleges since 2019, has come a 'whiff of fresh air' as it is better focused with clarity and transparency. Yet, integration is not evident in most teaching-learning practices to this day. It may be prudent to formulate an integrated curriculum for at least the basic medical sciences as the first step.

JIPMER can be the central hub for driving innovation, particularly through the adoption of new technologies, pedagogical shifts, and the creation of specialized, collaborative environments.

Dr. Gitanjali Batmanabane

Pro Vice-Chancellor (Medical Sciences), GITAM Deemed to be University, Vishakapatnam

Former Director, AIIMS, Bhubaneswar

My journey with NTTC: From Faculty Development to Institutional Transformation

My journey in medical education has been both deeply personal and professionally fulfilling, shaped by years of engagement with faculty development and institutional growth. I had the privilege of being a core member of NTTC at JIPMER for many years, and later served as the Head of the Department of Medical Education from 2013 to 2016. Those years were particularly formative, as they allowed me to contribute meaningfully to building systems that would support generations of medical educators. I still recall the satisfaction of seeing the present Department of Medical Education take shape at the JIPMER Academic Centre from securing the necessary funds to finally having a dedicated space for academic deliberations. Its inauguration by Professor T.S. Ravikumar remains a memorable milestone. Around the same time, as the Founder Convenor of the MCI Regional Centre for Faculty Development Programmes established in 2015, I found myself increasingly drawn to the challenge of designing structured, meaningful training for faculty. The many workshops we conducted at the Department of Medical Education on workplace-based assessment, formulating MCQs and question paper setting were not just teaching sessions, but opportunities for shared learning and reflection. Travelling with the NTTC team to institutions like AIIMS Patna, AIIMS Rishikesh, and AIIMS Bhopal further enriched this journey, as we engaged with enthusiastic faculty across the country. Conducting a dedicated course at JIPMER for faculty from the newer AIIMS was particularly rewarding, as it reinforced my belief in the importance of collaboration and standardization in medical education.

When I took over as Director of AIIMS Bhubaneswar in 2016, I carried these experiences with me, along with a clear vision of what a modern medical institution could become. My focus was not only on expanding academic programs but on nurturing an ecosystem where education, innovation, and patient care could thrive together.

Looking back, what stands out to me is not just the milestones achieved, but the people, collaborations, and shared aspirations that made them possible.

Dr. Aparna Agrawal

Evolution of an Educator: From Workshop Participant to Facilitator

I always held a special reverence for the NTTC faculty when I joined JIPMER; I was truly in awe of them. At that time, they were an elite group of teachers—all well-respected, admired for their teaching skills, and each a doyen in their own department. So, when I got the opportunity to register for the 10-day NTTC workshop in 1996, I grabbed it.

It was a stimulating experience—so refreshing and enriching! For the first time, I realized that being a good teacher was not only about delivering quality classes, lectures, or sessions, but also about the responsibility of setting a good paper and being an unbiased evaluator. The session on MCQ writing and item analysis especially fascinated me.

The workshop significantly improved my teaching skills, particularly in MCQ and OSCE writing. I developed a love for creating MCQs, and from writing them regularly for the National Board of Examinations, I eventually graduated to becoming a coordinator for their MCQ and OSCE workshops. I owe this progression to the foundation laid by NTTC and the sessions led by Dr. Ananthakrishnan.

While I knew my bedside clinics were popular among undergraduates—often with more students attending than were actually assigned to the sub-batch—I never thought of myself as being good enough to become a faculty member at NTTC. It was a big and very pleasant surprise when Dr. K.R. Sethuraman subtly asked me to apply for the post of NTTC facilitator when vacancies arose. I was hesitant, as many senior faculty from various departments were eyeing these positions, but as destiny would have it, I soon became a part of that teaching elite.

I learned a great deal during my initial two years of "grooming". I remember the intense analysis at the end of each day, where we would dissect every session—the good parts, the areas requiring improvement, and even how to handle difficult participants. The senior faculty were always there to back us and provide support whenever things got challenging.

Leaving NTTC was one of the many things I missed about JIPMER when I transferred to LHMC Delhi in 2010. However, thanks to Dr. Atul Murari, the then Director of LHMC and an ex-JIPMERite, and Dr. Anil Gurtoo, who revived the Medical Education Unit (MEU) at LHMC, I was soon inducted as a faculty member there as well.

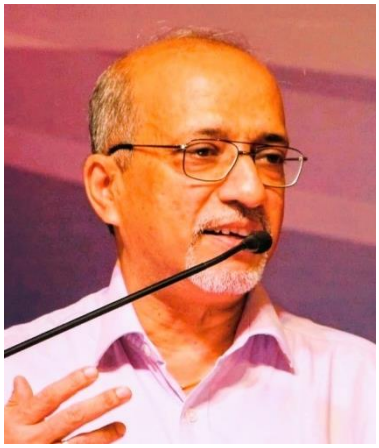
I eventually became a Core Curriculum Committee member at LHMC and had the opportunity to work with the NMC in various capacities. This included serving as a PG Expert Group Member, contributing to the team that prepared the competency-based guidelines, revising the Minimum Standard Requirements for General Medicine, and finally serving as the convenor of the Expert Group for the revision of the MD General Medicine curriculum.

Furthermore, thanks to Dr. Kadambari, I was invited to provide expert comments on the draft revision of Standards for Medical Education by the World Federation for Medical Education (WFME). I also owe thanks to Dr. Gitanjali, who made me a member of the Board of Studies for Undergraduates at AIIMS, Bhubaneswar.

I credit NTTC, JIPMER for these achievements and would like to thank my teachers there for guiding my journey in the field of Medical Education.

Dr. Debdatta Basu

Within and beyond Pasteur Theatre – The national course and my path in medical education in JIPMER



I joined JIPMER in 1995 and attended the 40th National Course of NTTC in 1998. The ten-day course was an eye opener in many ways where I learnt how to teach, assess, and administer the entire process of medical education. Sixteen years (2006 to 2022), as faculty member of NTTC and Dept of Medical Education, have been a journey in evolution, revolution, and transformation.

Apart from domains, objectives, Miller's pyramid, formative and summative assessment, and curriculum development, here is a brief list of the many things that I learnt, during these 32 odd courses that I took part in during my stint at NTTC, JIPMER.

The sessions during the national course taught me that the best way to make a class productive is not to lecture during a lecture – create conversations, not a one-way flow of information. Lectures are a very powerful tool for education, and good lectures make long-lasting memories.

The group activities, such as fish bowl, Chinese whisper, and OSPE/OSCE sessions taught me that one needs to encourage small group learning, enabling one-on-one engagement with students. It is also important to place information within context during sessions like practical classes, tutorials or ward postings to make learning more relatable, and therefore, easier to understand and remember.

I also learnt how to balance tradition with innovation thanks to these courses. Incorporating technology even before the boom of the digital age, such as using glass slides to demonstrate photomicrographs or wires to demonstrate ECG and protein electrophoresis patterns. In subsequent years, sessions on Computer Assisted Learning and introduction to PowerPoint taught me to embrace technology to enhance my teaching but not to make it my only tool.

The high standards maintained during the course – punctuality and the importance of good feedback -- told me to never lower the standards. To always keep the bar attainable while pushing it higher as students make progress.

It is important to be open to criticism. The rigorous attention to the review/preview meetings to improve our methods, with a balance of both critique and encouragement, was where I learnt the most.

"Prashna Raj" and the domineering external examiner during the mock viva, foregrounded the importance of fair assessment. It is important to remember that exam scores are not the be-all and end-all of learning. As teachers, we must take time to prepare quality questions and an equal amount of time to assess them. To teach well, we must make an attempt to find "what the students know and use it to fill in the gaps in what they don't."

The graffiti board with all the fun facts helped me realise that we must learn from the past, share our experiences of the present, and build a legacy that continues in the future.

The microteaching session and Avante Après game taught me to be receptive of the students' voice and their perspectives all through the process of education. Only then can we improve and customise the teaching learning process for them.

UNCLE taught me that learning is much beyond the textbooks, classroom and workspace. Movies, games, puzzles, quizzes are also ways to learn and grow.

I also honed my skills at organising workshops and conferences and learnt the importance of team building, how to take all your colleagues and staff members along in every exercise. Everyone has a story to tell and everyone contributes to the process of education.

I remember fondly how, during the farewell dinners, the senior-most faculty would patiently serve each and every person before filling his own plate. That taught me to be humane and kind.

The list is endless and my learning, thus infinite. At the end of the day, I have learnt that education means building concepts from scratch - Facts are ethereal – concepts get internalised and last a lifetime. I have also learnt that teaching and learning are reciprocal and that new knowledge and understanding can grow out of these shared experiences … when teachers facilitate reciprocal teaching and learning roles in their classrooms, students' achievement improves.

My gratitude and respect to all my teachers in NTTC, JIPMER – Drs. Ananthakrishnan, Sethuraman, Asha, Veliath, Narasimhan, Shashindran, Narayanan, Bhat, Santosh Kumar, Gitanjali, Sridhar, Mariette and Aparna and amongst my colleagues Krishnan, Kadambari, Latha, Bobby, Sitanshu, Nanda Kishore, Vikas, Manikandan, and Zayapragassarazan - you have all helped me adapt, engage and mind the gap.

(A big thanks to Sreyoshi, my daughter, the master linguist and editor, for her contribution in writing this tale of mine)

Program Schedule

MEDUCON 2026

Catalysing change in medical education: Engaging with Critical Issues

Dates: 1st – 4th April 2026

Venue: APJ Abdul Kalam Auditorium, JIPMER, Puducherry

Scientific Programme

1.4.2026	Day 1 Forenoon 1.4.2026 Preconference Workshops	Speaker/ Facilitators
09:00-12:30	From concept to concrete - Getting comfortable with medical education research Venue: Simulation lab,3rd Floor, JIPMER Academic Centre	Kevin Eva
09:00-12:30	Workplace-based assessments in PGME Venue: Board room, APJ Auditorium	John Norcini
09:00-12:30	Designing a contextual curriculum Venue: First floor Multipurpose Hall, APJ Auditorium	Janet Grant & Anand Zachariah
09:00-12:30	AI in medical education Venue: NTTC Hall 1, 4th floor, JIPMER Academic Centre	Magnus Boman
09:00-12:30	Developing a programme of assessment Venue: NTTC Hall 2, 4th floor, JIPMER Academic Centre	Shital Bhandary
09:00-12:30	An Introduction to Longitudinal Qualitative Research in Education Venue: Ground floor Multipurpose Hall, APJ Auditorium	Amol Dongre
09:00-12:30	Developing clinical reasoning skills among the nursing fraternity Venue: Multipurpose Hall, College of Nursing	MJ Kumari
1.4.2026	**Day 1 Afternoon: Conference** **Laying the Foundation – Identifying the critical issues in Medical Education**	**Speaker/ Facilitators**
14:00-14:30	Talk I: The Evolving Landscape of Medical Education: Global Trends and Local Imperatives	Gitanjali B
14:30-15:00	Talk II: How Health System Realities Shape Medical Education?	Thomas Chacko
15:00-16:30	Plenary I: Accreditation and Global Standard Setting in Medical Education (UAE, Nepal & India)	Biji Thomas (UAE) Subhranshu Sekhar Kar (UAE) Shital Bhandary (Nepal) Anathakrishnan N (India)
16.30-17.00	Tea Break	
17.00-18.00	Inauguration and felicitation of Past NTTC faculty	
18.00-19.00	Cultural Program	

2.4.2026	Day 2 Conference Deep Dive into the Critical issues – Understanding them	Speaker/ Facilitators
09:00-09:30	Talk III: Seamless transition from school to professional education	Anand Zachariah
09:30-10:00	Talk IV: New Education Policy (NEP): Strategy-Tactics-Action continuum in HPE	K R Sethuraman
10:00-10:45	Perspective: Is it time to reduce the duration of the MBBS course?	Debdatta Basu, Kadambari D
10:45-11:15	Tea break	
11:15-11:45	Talk V: Why we need systems of assessment in Medical Education?	John Norcini
11:45-12:15	Talk VI: Researching what matters in Medical Education	Kevin Eva
12:15-12:45	In conversation with Prof. Janet Grant, The Politics of Medical Education	Gitanjali B
12:45-14:00	Lunch break	
14:00-17:00	**Parallel session** 1. Workplace-Based Assessment Methods 2. Choice-Based Credit System: A key performance indicator of NEP 3. Strengthening Nursing Education in recent times	Shital Bhandary Shivasakthy Manivaskaran MJ Kumari

3.4.2026	Day 3 Conference Translating Knowledge into Action and Future Gazing	Speaker/ Facilitators
09:00-09:30	Talk VII: Integrating Digital Health and AI into Medical Training: Opportunities and Ethical Considerations	Magnus Boman
10:00-10:45	Debate I: Is virtual medical school the future of medical education?	Janet Grant vs Anathakrishnan N
10:45-11:15	Tea break	
11:15-11:45	Talk VIII: Leadership and Advocacy in Medical Education: Driving Systemic Change	Ravikumar TS
11:45-12:30	Debate II: Accreditation – Tick box or transformative?	Sudha Ramalingam vs Mahalakshmi VN
12:30-13:00	Talk IX: Are current medical education systems equipped to train doctors for effective primary care roles?	Sundararaman T
13:00-14:00	Lunch break	
14.00-15.30	**Group discussions** 1. Integration of AI and technology in medical education 2. Reforming the medical curriculum for relevance 3. What research is needed to address the critical issues in medical education 4. Resolving the crisis in medical education assessment policy and practice	Magnus Boman Janet Grant Kevin Eva John Norcini
15:30 onwards	**Poster Round**	Judges

4.4.2026	Day 4 conference Presentations and Ideas	
09:00-11:00	**Oral Presentations**	Judges and Chairpersons
11:00-11:30	Tea break	
11:30-12:15	**Pitch your ideas** (4x10 min) Innovative solutions to common problems Innovative research ideas on critical issues	Volunteers
12:15 onwards	Valedictory	
	General Body Meeting followed by Lunch	Alumni members

Pre-Conference Workshops

Pre-Conference Workshop

I. From concept to concrete - Getting comfortable with medical education research

Dr. Kevin Eva

Associate Director and Scientist in the Centre for Health Education Scholarship.

Professor and Director of Educational Research and Scholarship in the Department of Medicine at Columbia University.

This interactive workshop will be structured to mimic the research process chronologically. We will begin by discussing how to develop a research question that is informative and compelling. We will then talk through rhetorical devices for convincing others in health professional education that they, too, should be interested in the project. Finally, the facilitator will offer tips and tricks learned during his two decades as an editor regarding how to increase the likelihood of publication success.

We will not talk through specific research design issues because there is danger in jumping to design or data collection prematurely (before the phenomenon to be studied is clearly thought through with immersion in relevant literature). In fact, the modal reason for papers being rejected is a lack of argumentation as to why scholars beyond the institution from which the data were collected should care about the findings. Extended time will be saved for open discussion about the needs of participants regarding how to have a successful research career, with a focus predominantly on laying strong foundations. Participants with experience in the field, however, are encouraged to bring questions and examples from their own scholarly pursuits.

II. Workplace-based Assessment in PGME

John Norcini

Research Professor in the Department of Psychiatry at Upstate Medical University and a Fellow of Presence (a Centre at Stanford Medical School)

The goal of this workshop is to familiarize the participants with the commonly used methods of workplace-based assessment. It will highlight the importance of formative assessment in learning, review some of the research on the methods, and describe some of the current research on feedback to trainees. Active participation will be encouraged throughout, and small group activities will focus on developing a faculty consensus on assessment standards and using the methods to provide effective feedback to trainees.

III. Designing a contextual curriculum

Janet Grant

Educational psychologist and Director of CenMEDIC (the Centre for Medical Education in Context)

Anand Zachariah

Senior Professor, Department of Medicine at Christian Medical College, Vellore

This interactive workshop will enable participants to consider their own circumstances in relation to curriculum derivation, design, implementation and renewal. We will discuss:

- How differences in curricula happen
- The definition of curriculum
- Why curriculum is important
- Curriculum models
- What the components of a curriculum are
- Where curriculum ideas come from
- Why context matters
- How context affects implementation of the Indian national curriculum
- What a contextual curriculum is and how to contextualise your curriculum.

The workshop will take into account the current CBME curriculum in India and will consider each point in relation to that. Participants will achieve both a practical and theoretical understanding of curriculum.

References

Grant, J. (2019) Principles of curriculum design. In: Swanwick, T., Forrest, K. and O'Brien, B.C. (eds) Understanding Medical Education. Evidence, Theory and Practice. 3rd edition. Wiley Blackwell, Oxford.

Grant, J., Abdelrahman, M. and Zachariah, A. (2013) Chapter 2. Oxford Textbook of Medical Education. Ed: K Walsh. Oxford University Press, Oxford.

Grant ,J. and Grant L. (2026) The Contradictions of Medical Education: A Political View from Practice. Springer, Cham.

IV. AI in Medical Education

Magnus Boman

Professor of Artificial Intelligence in Health at Karolinska Institute, Stockholm, Sweden

Educational institutions operate within a trade-off of constraint and opportunity, and AI has become a clear illustration of this in recent years. Medical schools provide an insightful context to explore this challenge, being one of the most highly regulated forms of tertiary education. As a result, when changes to a medical curriculum are enacted, there is a tendency for them to be viewed via a reactive lens of 'how can I adapt the curriculum to remain compliant with regulatory needs' rather than a more pro-active 'how best can I integrate this new educational idea/technology in a way that will best leverage its strengths'.

This has been compounded by the fact that many of these educational leaders do not come from backgrounds that are familiar with machine-learning science and therefore are unaware of the historical, philosophical and technological background events that have shaped this discipline over the past half-century. This has led to an inconsistent, ad hoc response from educational leaders on the topic, many of which could be classified as reactive or, at worst, paralytic while waiting for regulators and policy makers higher up the chain of command to provide decisions on how to proceed. So far, many universities have put work into an AI policy, trying to capture everything that might go wrong inside one document. With considerable nervousness to handle formal duties like examination, this has meant that most of these policies now look very similar; not because they have converged to something sensible, but more because of fear of missing out. I will demonstrate how efficient, forward planning of AI use in educational and innovation activities will facilitate synergy between human and machine intelligence in educational experiences and provide an example of how this can be achieved. I will explore how our personal experience and knowledge of a topic can influence our disposition towards it. Finally, I will try to re-frame the discussion of AI, constructing a clear vision for how AI offers fantastic possibilities for enhancing education, in ways that human intelligence alone would not have been able to achieve.

V. Developing a program of assessment

Shital Bhandary

Associate Professor, PAHS, Nepal

This pre-conference workshop will focus on developing a program of assessment systems for competency-based post-graduate medical education programs. Key discussions and examples will centre on assessing core competencies, utilizing formative assessments with feedback mechanisms. It will explore how quantitative (scores), qualitative (narratives), and summative assessment data – if available – are mapped and stored within the programmatic assessment system.

The workshop will also cover practical application of established workplace-based formative assessment tools, including Mini-CEX, DOPS, CbD, EbD, MSF, learning logs, reflections, and Entrustable Professional Activities (EPAs) within the educational program. The role of these tools and EPAs in the assessment system will be a key focus of this workshop. Furthermore, it will share and discuss the use of a global rating scale for core competency completion and EPA certification, with an emphasis on local validation. A focused discussion will be dedicated to utilizing the program of assessment system for competency completion and entrustment/certification by the competency committees.

The main objective of this pre-conference workshop is to share, discuss, and evaluate The Nepalese program of assessment system as a prototype for local implementation.

Key words: Program of assessment, formative assessment, feedback, work-place based assessment, score, and narratives, competency completion and certification.

VI. An Introduction to Longitudinal Qualitative Research in Education

Amol Dongre

Professor of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry

Kadambari Dharanipragada

Dean (Research) and Professor of Surgery, Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry

Educational processes such as identity formation, learner transitions, socialization into disciplines, and development of competencies unfold over time. However, much of qualitative research in health professions education (HPE) relies on cross-sectional designs that provide only a "snapshot" of experiences. Such approaches may overlook the dynamic, evolving, and context-dependent nature of complex educational phenomena. Longitudinal qualitative research (LQR) offers a powerful methodological lens to examine continuity and change, enabling researchers to explore how meanings, relationships, and practices develop across time.

This three-hour interactive workshop provides an introductory overview of the conceptual foundations and practical applications of longitudinal qualitative methods in HPE research. Participants will be introduced to the key features, assumptions, and design considerations unique to LQR, with emphasis on studying temporal processes and change. Through guided discussions and small-group exercises, participants will learn to identify research questions suited for longitudinal designs within their own contexts, reframe conventional qualitative questions into longitudinal ones, and examine strategies for data collection and analysis that account for time and transformation.

VII Next-Generation Nursing Pedagogy: Teaching for Clinical Judgment

1. Dr. M.J. Kumari, Professor cum Principal (Ag.), College of Nursing, JIPMER, Puducherry
2. Dr. Vasantha Kalyani. C, Professor &Principal, Palliative Care Nurse College of Nursing, AIIMS, Deoghar
3. Dr. Lakshmi Ramamoorthy, Assistant Professor, College of Nursing, JIPMER, Puducherry
4. Dr. Rajeswari R, Vice Principal cum IQAC Co-ordinator, Indirani College of Nursing, Puducherry.
5. Dr. Porkodi Rabindran, Tutor, College of Nursing, JIPMER, Puducherry
6. Dr. Kavitha. R. R., Tutor, College of Nursing, JIPMER, Puducherry
7. Dr. Jeeva S, Lecturer, College of Nursing, NIMHANS, Bengaluru
8. Dr. C. Rajeswari, Lecturer, College of Nursing, NIMHANS, Bengaluru.

This workshop, "Next-Generation Nursing Pedagogy: Teaching for Clinical Judgment," has been conceptualized to address this critical educational need by providing nursing faculty with evidence-based frameworks, innovative teaching strategies, and practical assessment tools aligned with the current best practices in nursing education. Inadequate clinical judgment is a major contributor to adverse patient outcomes, medication errors, delayed interventions, and compromised patient safety. By strengthening the faculty's capacity to teach clinical judgment, this workshop indirectly contributes to improved quality of nursing care and enhanced patient safety outcomes. By transforming teaching approaches from skill-focused to judgment-focused pedagogy, the workshop contributes to the preparation of future-ready nurses capable of critical thinking, clinical reasoning, ethical decision-making, and reflective practice in complex healthcare environments.

General Objective: To enhance the knowledge, skills, and pedagogical competence of faculty in teaching, facilitating, and assessing clinical judgment among students using next generation evidence-based educational strategies.

Specific Objectives: At the end of the workshop, the participants will be able to:

1. Differentiating clinical judgment from critical thinking, clinical reasoning, and psychomotor skill performance in nursing education.
2. Next-generation pedagogical strategies should be applied to facilitate the development of clinical judgment in classroom, simulation, and clinical teaching environments.
3. Structured tools and rubrics should be used to assess students' clinical judgment objectively and consistently.
4. Develop clinical judgment-focused assessment items, including case-based questions and workplace-based assessments.
5. Formulate an action plan to implement at least one innovative teaching and assessment strategy for clinical judgment in their teaching practices.

Overall Learning Outcomes: Upon completion of the workshop, faculty members will be better equipped to intentionally teach and assess clinical judgment, thereby improving student preparedness for complex clinical situations and enhancing patient safety and quality of care.

Conference Sessions

The Evolving Landscape of Medical Education: Global Trends and Local Imperatives

Gitanjali Batmanabane,
Pro Vice-Chancellor (Medical Sciences), GITAM Deemed to be University, Visakhapatnam

Medical education has undergone a profound transformation over the past century. Early medical curricula were relatively limited in scope, focusing primarily on disciplines such as anatomy, materia medica, laboratory sciences, and midwifery. Over time, the expansion of biomedical knowledge, advances in technology, and changing societal expectations have increased the complexity of undergraduate medical training. Despite these changes, the foundational structure of modern medical education continues to be influenced by reforms introduced more than a century ago. The principles articulated in the Flexner Report still shape the basic framework of medical training across much ofi the world. In India, reforms in medical education have often followed developments in the Global North, particularly in the United States and the United Kingdom. Educational innovations such as problem-based learning, flipped classrooms, competency-based medical education (CBME), Objective Structured Clinical/Practical Examinations (OSCE/OSPE), multiple-choice-based assessments, and early clinical exposure have been introduced largely in response to regulatory directives or international trends. While these changes have modernised aspects of teaching and assessment, their adoption has often been partial and contextually restrained. In many instances, the underlying ecosystem that supports these educational models in other countries, such as student selection processes, pre-medical training, flexible progression pathways, and robust workplace-based assessment systems, has not been fully replicated. Consequently, elements such as Entrustable Professional Activities (EPAs), AETCOM module, and CBME frameworks have been implemented without the structural flexibility or assessment rigour that characterises their use.

At the same time, several local imperatives remain insufficiently addressed. These include the characteristics of school-level preparation of students entering medical colleges, the growing misalignment between undergraduate training and postgraduate entrance examinations, and the persistent need for physicians capable of delivering effective primary care in underserved and rural regions. Historically, medical training in India produced doctors who could function with limited diagnostic infrastructure and respond to the health needs of communities beyond tertiary centres. Re-examining how such contextual relevance can be integrated into modern medical education is an important challenge. This presentation will examine global trends shaping medical education while critically reflecting on how these models have been interpreted and implemented in India. It will argue that meaningful reform requires not only adopting global innovations but also aligning them with local educational realities, healthcare needs, and societal priorities.

How healthcare system realities shape medical education

Thomas V Chacko

Professor Emeritus Community Medicine & Medical Education,

Believers Church Medical College, Thiruvalla, Kerala

The Lancet Commissions Report (2010) highlighted the need to produce Health professionals for a new century by transforming education to strengthen health systems in an interdependent world. It summarised changes in curricula in terms of three generations of curricular reforms starting from Informative to Formative to Transformative curriculum.

The Informative curricula produced Experts and the Formative ones produced Professionals and both of these two focussed on health care of individual with clinical expertise for care of patients but the Transformative curricular learning experiences are aimed at producing Leaders as change agents with systems-levels competence needed to help health systems overcome the challenges like aging populations, escalating costs, fragmented care, high pace of technology advancement including use of AI and deliver integrated patient-centred and technology-driven processes with interprofessional collaborating care teams within the health systems.

How the above healthcare system realities have shaped medical education in the global north or should shape them in the developing countries preparing students so that they can navigate the complex environments where they practice is presented.

Accreditation and Global Standard Setting in Medical Education - India

N. Ananthakrishnan
Emeritus Professor of Surgery and Health Professions Education
Sri Balaji Vidyapeeth, Pondicherry.

There are two functioning systems of accreditation in India; one is the Accreditation by the National Accreditation and Assessment Council and second is the accreditation and ranking by the National Institutional Ranking Framework. NAAC accreditation is done five yearly and NIRF is done annually. WFME Accreditation pertains only to accreditation of regulatory agencies and not individual institutions.

NAAC: Under these criteria Institutions which are involved in Health Professions Education (HPE) have the option of applying under two different categories. If more than 60% of their institutional focus and departments is on HPE, they can apply under the medical category. If it is less than 60%, they have an option of applying under the overall framework or the medical category.

NAAC has 7 criteria with 35 key indicators. A total of 125 metrics are used for accreditation and ranking of which 44 (35%) are qualitative and 81 (65%) are quantitative. The seven domains under which assessment is done shown below with marks for each indicator. These will be converted to CGPA based on the weightage for each metric shown in the manual.

Quality Indicators for NAAC:

1. Curricular Aspects – 150 marks
2. Teaching, learning and resources – 200 marks
3. Research, Innovation and Extension – 250 marks
4. Infrastructure and learning resources – 100 marks
5. Student support and progression – 100 marks
6. Governance, leadership and management – 100 marks
7. Institutional values and Best practices – 100 marks

At the end of the process, institutions are ranked from C to A++ based on the CGPA scores. There are many issues with NAAC accreditation predominantly involving the fact that there are no specific stream specific guidelines, such as different weightage of different metrics in different educational streams like HPE, Engineering etc. leading to unfairness of evaluation since all metrics do not apply evenly to different streams of work. These will be discussed in detail during the presentation NIRF: As regarding NIRF, HPE institutes can opt for different ranking framework under categories like medical, dental, overall etc. Ranking is done under five parameters.

These are as follows:

1. Teaching learning and resources – marks 100 (weightage 0.30),
2. Research and Professional Practice – 100 (Weightage 0.30)
3. Graduation outcome – 100 marks weightage 0.20)
4. Outreach and inclusivity – marks 100 (weightage 0.10) and
5. Perception of Peers and Employers – marks 100 (weightage 0.10).

The presentation will focus on the constituent metrics under these five parameters and how some of them adversely affect Higher Educational Institutions under the Health Professions Education Stream because of the nature of their functioning.

A new ranking system is being evolved by Government of India and is under discussion with stakeholders. Many of the errors and difficulties with the previous system have been corrected. The guidelines are yet to be notified. Important features of the new proposed system will be discussed.

The take home message from the presentation is to focus on issues with the current accreditation procedures in India with their inherent issues which take away from the fairness of the procedure itself. While Accreditation is desirable in order to ensure quality it is marred by many factors in India such as lack of transparency, inclusion of metrics which do not fit all streams of education, lack of stream specific manuals, presence of qualitative metrics with likely subjectivity, process which penalizes the institutions in several metrics for deficiency in one and including metrics which are beyond institutional control and are under regulatory control

Accreditation and Global Standard Setting in Medical Education - UAE

Biji Thomas

Acting Dean & Professor of Surgery, RAK College of Medical Sciences, RAK Medical & Health Sciences University, UAE

This plenary presentation will examine accreditation and global standard setting in medical education within the United Arab Emirates (UAE), using Ras Al Khaimah Medical and Health Sciences University (RAKMHSU) as a case example. The session will contextualize the UAE's regulatory and accreditation landscape, highlighting alignment with international benchmarks, robust quality assurance systems, and outcome-driven institutional governance.

The presentation will briefly introduce RAKMHSU's academic structure, mission, and strategic positioning within the regional and global medical education ecosystem. Particular emphasis will be placed on the university's structured implementation of Interprofessional Education (IPE), designed to cultivate collaborative practice competencies across medicine, dentistry, pharmacy, and nursing in accordance with internationally recognized competency frameworks. A focused overview of the Outcome-Based Education Framework (OBEF) guidelines implemented in the UAE will be provided, outlining their implications for curriculum design, constructive alignment, competency mapping, programmatic assessment, and continuous quality enhancement. The session will further discuss best practices in outcomes-based education, including clearly articulated graduate attributes, vertical and horizontal curriculum integration, blueprint-driven assessments, and longitudinal competency tracking, stakeholder-informed curriculum review, and data-driven quality improvement. The presentation will highlight how RAKMHSU operationalizes these principles through structured curriculum mapping, measurable performance indicators, digital learning analytics, simulation-enhanced training—including Metaverse-based immersive environments—and systematic benchmarking against global standards. It will also illustrate how the UAE's regulatory clarity, national qualification frameworks, and emphasis on measurable learning outcomes position the country as a leader in operationalizing outcomes-based education at scale. The session will conclude by reflecting on accreditation not merely as a compliance exercise but as a strategic driver of innovation, accountability, global comparability, and excellence in contemporary medical education.

Accreditation and Global Standard Setting in Medical Education - UAE

Subranshu Kar

Professor, Dept of Pediatrics & Neonatology, RAKMHSU, Ras al Khaimah, U.A.E

The aim of the session is to discuss how the Commission for Academic Accreditation (CAA) in the UAE assesses Higher Education Institutions (HEIs) through an Outcome-Based Framework (OBF) designed to shift focus from inputs (resources) to measurable student and institutional outcomes. The OBF is built upon six key pillars:1. Employment Outcomes, 2. Learning Outcomes, 3. Industry Collaboration, 4. Research Outcomes, 5. Reputation and 6. Community Engagement. The discussion highlights how strategic integration of the Emirates MEDs Competency Framework (EMCF) and Entrustable Professional Activities (EPAs) at University level has holistic impact across multiple OBF pillars. While the most direct link is to institutional reputation, the EMCF functions as a multi-dimensional tool that enhances performance across all six OBF pillars. The primary objective of this implementation is to support Pillar 5 (Reputation), specifically KPI 5.2 (International Accreditation Status). By focusing on practice – ready; skills, the framework ensures that the graduates are immediately employable and relevant to the healthcare sector (Employment- Pillar 1). It enhances the quality and alignment of skills acquisition through a Competency-Based Medical Education (CBME) model (Learning Outcomes -Pillar 2). Deepening partnerships with clinical sites and the healthcare industry through standardized training and assessment protocols contributes to Industry Collaboration (Pillar 3). It also encourages a culture of inquiry and evidence-based practice among students and faculty (Research - Pillar 4). By operationalizing roles like , Health Advocate through specific EPAs (e.g., community health promotion) and embedding social accountability into the core curriculum, the framework strengthens Community Engagement (Pillar 6). By adopting these frameworks, RAK College of Medical Sciences (RAKCOMS) achieves several critical milestones, e.g.,

 Global Benchmarking: The curriculum is pre-aligned with international gold standards; such as WFME, ACGME-I (USA), and CanMEDS (Canada), which are prerequisites for international accreditation.

 Standardized Quality Assurance: EPAs convert abstract competencies into observable and assessable tasks. This provides the robust, data-driven evidence of student performance required by global accrediting bodies.

 Graduate Interoperability: Graduates are recognized as meeting global competency benchmarks, which enhances their professional mobility and the institution and global ranking (KPI 5.1). In conclusion, the implementation of Emirates MEDs and EPAs is characterized not merely as a pedagogical update, but as a strategic investment. It provides a structured, evidence-based pathway for RAKCOMS to achieve international accreditation and institutional excellence, effectively satisfying the Ministry's rigorous evaluation metrics for higher education in the UAE.

Accreditation and Global Standard Setting in Medical Education - Nepal

Shital Bhandary

Associate Professor, PAHS, Nepal

In 2023, Medical Education Commission (MEC) Nepal formed an expert committee to further review existing accreditation standards for the MBBS program and to suggest a pathway forward. Following rigorous document reviews, the committee recommended seeking WFME recognition for global recognition. MEC subsequently wrote to WFME, confirming eligibility. WFME team of experts visited and observed the MEC accreditation process at a medical school in the Kathmandu Valley. Later, MEC received a detailed report with focused feedback from the WFME experts, and the expert committee addressed all the "areas of improvement" identified.

A draft accreditation document was prepared and has been shared with all medical schools in Nepal, and a one-day consultative workshop was organized with them to get comments and suggestions. Subsequently, a final draft of the MBBS accreditation standards was prepared and shared with three international experts. They reviewed the document critically and two of them engaged with the expert committee members at MEC premises, providing critical insights. The committee is now finalizing the document and will conduct a pilot test in 1-2 medical colleges in Nepal for local validation and document evidences for WFME recognition of MBBS accreditation program of Nepal.

Keywords: Quality assurance, local accreditation standards, global standards, MEC,Nepal

Seamless Transition? Listening to Student Journeys in Indian Medical Colleges

Anand Zachariah

Senior Professor, Department of Medicine at Christian Medical College, Vellore

Srimathi Gopalakrishnan

India has seen a rapid expansion of medical colleges, with large numbers of students entering MBBS each year through the highly competitive NEET examination. While much attention is given to selection and academic performance, far less attention is paid to how students actually experience the transition from school to medical college. This phase involves not only academic adjustment, but also shifts in identity, belonging, relationships, and self-confidence.

This presentation is based on our experience and reflections as medical teachers of working with students and the design of an ongoing qualitative study that seeks to map students' journeys from high school into professional training. Using the lenses of professional Identity formation and transformative Learning, we explore the transition as a developmental process shaped by the ecology of medical colleges—large batches, hierarchical culture, vast and intense curriculum, competitiveness and assessment pressure, and early postgraduate entrance anxiety.

Rather than viewing student struggles as individual weakness, this session invites educators to examine how our institutional structures shape formation. We would suggest practical ways to redesign mentoring, curriculum, and faculty engagement to create a more supportive, developmentally responsive environment for students becoming doctors.

NEP-2020 Policy, Strategy-Tactics-Action continuum in Health Professions Education.

K.R. Sethuraman

Professor Emeritus of AIMST University

Endowed Chair in Health Professions Education in Sri Balaji Vidyapeeth and an adjunct Professor of Medical Education for AVMC, Puducherry

This talk outlines a 10-step framework for transforming educational policy into meaningful societal impact under India's National Education Policy (NEP) 2020. To convert any policy into impactful outcomes, an institution should move from Vision, Mission, and Values through Strategy and Tactics to Operations and Monitoring.

Key NEP-2020 directives for health professions education include a mandate for multidisciplinary universities by 2030, credit-based curricula via the Academic Bank of Credits, and an integrative approach to healthcare. To successfully transition, institutions must shift from "standalone silos" to Multidisciplinary Education & Research Universities (MERU).

This involves practical steps like designing "bridge courses," establishing innovation labs, and utilizing a "hub-and-spoke" model with medical colleges at the centre. The ultimate goal is producing "T-Shaped Professionals" who possess deep medical expertise alongside broad multidisciplinary understanding, leading to improved health equity and a robust healthcare system.

If HPE institutions pay heed to NEP-2020 directives and systematically work on the 10-step continuum from Vision to impact, then the Societal benefits envisioned by NEP can be realised.

Why do we need systems of assessment in Medical Education?

John Norcini

Research Professor in the Department of Psychiatry at Upstate Medical University and a Fellow of Presence (a Centre at Stanford Medical School)

Assessment plays several important roles in education: it guides decisions, identifies key areas of focus, and promotes student learning. Often, these goals are achieved through multiple assessments that may not be seen as part of an overall system. However, seeing assessments as interconnected and adopting a systems approach can improve efficiency and inspire creative solutions to problems. This presentation will examine the various functions of assessment, highlight the characteristics of an effective assessment system, and present tools designed to assist in their development.

Researching: What matters in medical education

Kevin Eva

Associate Director and Scientist in the Centre for Health Education Scholarship, and Professor and Director of Educational Research and Scholarship in the Department of Medicine, at the University of British Columbia

Health professional education is rife with diversity (of roles, scholarly backgrounds, methodological approaches, and conceptual outlooks). That diversity is essential to the field's current success and continued maturation, but simultaneously creates challenges for defining "what matters" in a uniform and productive manner. This talk will be aimed at doing that by prompting reflection on trends in health professional education research that can enable discussion about the field's priorities, its conception of quality, and how its scholarship has evolved. Methodological rigour is important, but scientific progress has little to do with method. Practical relevance is important, but context plays such an essential role in education that proof is a flawed concept. In complex domains, we are better served by focusing attention on what empirical data are required to improve our thinking about practical goals, striving constantly for quality improvement, rather than trusting that a single correct answer could ever be found. Attendees will, thus, be encouraged to define research that matters as that which helps us adapt to different and ever-changing situations. In doing so, we will consider implications of that outlook for research, publication, and dissemination efforts.

Parallel session - Workplace-Based Assessment Methods

Shital Bhandary

Medical education curricula are organized around cognition and performance, utilizing Miller's triangle. The cognition domain focuses on foundational knowledge (knows) and the application of knowledge (knows how), while the performance domain assesses performance in simulated settings (shows how) and in the workplace (does). These four levels are interrelated, and the "does" level is considered a more authentic assessment, specifically assessing the "affective" domain as well. Consequently, workplace-based assessment (WPBA) tools are developed to provide immediate feedback to residents and students at the workplace. These formative assessment tools are crucial to the success of competency-based medical education programs.

The Mini Clinical Evaluation Exercise (Mini-CED) is a type of WPBA tool that assesses history taking, physical examination, professionalism etc. where residents and students are observed by faculty and assessed using a standardized checklist and provided with immediate feedback and documentation for future reference and competency completion/certification. Directly Observed Procedural Skills (DOPS) is another WPBA tool assessing residents and students while they perform procedures, with observing faculty providing immediate feedback and a clear roadmap for future encounters towards competency completion/certification. Case-Based Discussion (CbD) is a further WPBA tool used to discuss assigned clinical cases with residents and students, providing immediate feedback for further improvement and competency completion/certification. An entrustment-based discussion (EbD) can also function as a formative or summative assessment tool. Numerous other WPBA tools are available for specific purposes and can be utilized as formative assessment tools for residents and students.

Given that WPBA tools require time for observation, global checklist based and narrative feedback, and documentation, they can potentially lead to a "failure to fail" phenomenon. This can be minimized through rigorous trainings of observers and residents/students.

The main aim of this workshop is to share, discuss, and practice some commonly used WPBA tools within competency-based medical education programs, and to assess their potential application in both undergraduate and post-graduate programs.

Choice-Based Credit System: A key performance indicator of NEP

Resource person details:

Dr Shivasakthy Manivasakan,

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Objective:

The participants will be able

1. to relate the Choice Based Credit System with the requirements of National Education Policy
2. to recognize the process of how a CBCS curriculum is implemented
3. to explain the Academic Bank of Credits (ABC) and National Academic Depository (NAD)
4. to analyse the challenges involved in the implementation of CBCS

Symposium:

Choice-Based Credit System (CBCS) – A Key Performance Indicator of National Education Policy (NEP)

An overview of the symposium

The implementation of the Choice Based Credit System (CBCS) has emerged as a pivotal reform in transforming higher education in alignment with the goals of the National Education Policy. This symposium, titled "Choice Based Credit System (CBCS) – A Key Performance Indicator of NEP," aims to provide a comprehensive platform for faculty members and academic administrators to understand the conceptual foundations, regulatory processes, and practical challenges associated with CBCS adoption across disciplines.

CBCS represents a paradigm shift from rigid curriculum structures toward learner-centric, flexible, and outcome-based education. By enabling credit mobility, multidisciplinary learning, and multiple entry-exit pathways, CBCS directly supports NEP's vision of improving access, equity, and academic flexibility. The symposium will begin with an overview of the NEP–CBCS relationship, highlighting the policy rationale, institutional readiness, and pedagogical transformation required to transition toward competency-based education.

A focused session will explore regulatory frameworks and implementation procedures guided by the All-India Council for Technical Education, providing insights as they have CBCS for several years in practice now. In engineering, each course is assigned a specific number of credits based on contact hours, laboratory work, tutorials, and self-learning components. Programmes are typically organized into core courses, professional electives, open electives, humanities and social sciences, and skill-based courses. This restructuring ensures flexibility while maintaining programme outcomes and graduate attributes required by accreditation agencies such as the National Board of Accreditation.

Once the curriculum framework is developed, institutions move to the credit and semester mapping stage. Engineering programmes are generally structured across eight semesters, with a defined credit range per semester to maintain academic balance. Students are allowed to choose electives based on their interests, emerging technologies, or interdisciplinary areas such as artificial intelligence, sustainability, entrepreneurship, and data science. This choice-based approach enhances student engagement and promotes industry-relevant skill development.

The next stage involves academic regulations and governance. Universities and autonomous institutions develop CBCS regulations that define grading systems, credit transfer rules, minimum and maximum credit limits, and academic progression policies. A grading system based on grade points and

cumulative grade point average (CGPA) replaces the traditional marks-based system, enabling better standardization and comparability across institutions.

Another key component will examine the digital ecosystem supporting CBCS through the Academic Bank of Credits and National Academic Depository, initiatives facilitated by the Digital India Corporation under the Ministry of Electronics and Information Technology. Together, they form the backbone of a modern, technology-enabled academic ecosystem that allows seamless storage, verification, and transfer of academic credentials.

The Academic Bank of Credits (ABC) is a national-level digital repository that enables students to earn, store, transfer, and redeem academic credits from recognized higher education institutions. Designed as a student-centric system, ABC allows learners to accumulate credits from multiple institutions over time, thereby promoting multidisciplinary and flexible learning pathways. Under the ABC framework, each student is assigned a unique academic bank account in which credits earned through courses, certificates, diplomas, or degree programmes are securely deposited. These credits can later be transferred or redeemed toward the completion of a qualification, enabling multiple entry and exit options in higher education. This flexibility is particularly significant for students who need to pause or shift their education due to personal, professional, or financial reasons.

The National Academic Depository (NAD) complements ABC by serving as a secure digital repository for academic awards such as degrees, diplomas, and certificates. NAD eliminates the need for physical documents by providing digitally signed and verifiable academic records that can be accessed anytime, anywhere. Institutions upload students' credentials into the system, ensuring authenticity and preventing fraud, duplication, and document tampering. Employers, universities, and verification agencies can securely access verified academic records with student consent, making the recruitment and admission processes more efficient and transparent.

Both ABC and NAD are implemented with the support of the Digital India Corporation under the Ministry of Electronics and Information Technology, reflecting India's commitment to building a digitally empowered knowledge society. Together, these platforms promote interoperability among institutions, encourage academic mobility, and facilitate recognition of learning across disciplines and institutions.

The integration of ABC and NAD marks a shift toward a lifelong learning model where education is not confined to a single institution or time frame. Students gain the freedom to design personalized learning journeys, institutions benefit from improved transparency and efficiency, and employers gain access to trusted academic records. Ultimately, these initiatives represent a major step toward creating a flexible, inclusive, and globally competitive higher education system in India.

Implementation also requires institutional readiness in teaching–learning and assessment practices. Faculty members undergo training to shift from teacher-centric instruction to outcome-based education, continuous assessment, and project-based learning. Assessment methods now include quizzes, assignments, presentations, laboratory performance, and semester-end examinations, ensuring continuous evaluation of student learning outcomes.

Digital integration forms a crucial component of CBCS implementation. Institutions register students on the Academic Bank of Credits to enable credit storage and transfer. This allows students to take courses from other approved institutions through MOOCs, online platforms, or collaborative programmes and transfer the credits toward their degree. This mobility promotes interdisciplinary learning and supports the multiple entry–exit provisions introduced under NEP. Finally, monitoring and quality assurance mechanisms ensure effective implementation. Academic audits, curriculum review boards, industry advisory committees, and accreditation processes regularly evaluate the effectiveness of CBCS.

The symposium will also critically analyse institutional and operational challenges, including faculty readiness, curriculum mapping, assessment redesign, and administrative coordination. By addressing real-world barriers and sharing practical strategies, the event aims to support institutions in successfully operationalising CBCS.

Led by resource experts including Dr Shivasakthy Manivasakan from Sri Balaji Vidyapeeth, Dr S Sivasathya from Pondicherry University, and Mr Pritam Pradhan from Digital India Corporation, the

symposium is designed to equip participants with conceptual clarity, procedural knowledge, and implementation strategies. Ultimately, the programme seeks to empower institutions to effectively integrate CBCS as a measurable indicator of NEP success and to foster a more flexible, transparent, and student-centric higher education ecosystem in India.

Strengthening Nursing Education in recent times - MJ Kumari "

Parallel workshop for Nursing faculty on April 2nd, 2026 at 2 pm to 5 pm

Panel Discussion on Application of Artificial Intelligence in Nursing Education, Research, and Clinical Practice: Exploring Opportunities, Ethical Considerations, Faculty Preparedness, Data Privacy, and Transformative Strategies to Prepare Nurses for Technology-Driven Healthcare Systems and Evidence-Based Practice. By addressing these factors, the discussion seeks to identify the most effective methods for developing safe, competent, and compassionate healthcare professionals capable of meeting the demands of increasingly complex healthcare environments.

Talk on Bridging the Gap Between Theory and Practice in the Health Care Profession. Bridging this gap is essential for preparing confident, competent professionals capable of delivering safe, patient-centered care and responding effectively to the demands of modern healthcare environments. Talk on Preparing Nurses for Complexity, Uncertainty, and Global Health Challenges: Transforming Nursing Education Through Leadership Development, Global Health Perspectives, Critical Thinking, Resilience Building, and Innovative Teaching Approaches for Future Healthcare Systems.

Debate to explore simulation-based learning versus traditional learning in nursing education by examining clinical competence, student readiness, experiential exposure, cost, feasibility, and educational outcomes. It presents contrasting perspectives to stimulate critical reflection among educators and practitioners.

Integrating Digital Health and AI into Medical Training: Opportunities and Ethical Considerations

Magnus Boman

Professor of Artificial Intelligence in Health at Karolinska Institute, Stockholm, Sweden

Given that AI offers fantastic possibilities for enhancing education, in ways that human intelligence alone would not have been able to achieve, how do we safely incorporate these possibilities into the existing curriculum? One thing is clear: AI experts cannot provide the safeguards and ethical guarantees for how this should be done. Instead, an interdisciplinary stance is needed, where ethicists and educators together form critical perspectives on adoption, creating a requirement specification for engineers and developers to follow. Medical educators and researchers should be driving this development. Medical ethicists must respond to this challenge, even if they find AI a tremendously difficult topic to familiarise themselves with. Social scientists and philosophers too should not hide behind their non-technical background when they face 'reversed ethics' problems like a patient asking why their individual triaging and diagnosis was not AI-augmented, like the success story they had read about in the daily paper.

Leadership & Advocacy in Medical Education: *Driving Systemic Change*

Ravikumar T S

Visiting Professor, Chair, Research Advisory Council, All India Institute of Medical Sciences (AIIMS), Madurai, India

While there are overlaps (perhaps more synergies) between Leadership and Advocacy, the two terms confer distinct meanings & attributes. Leadership is the ability to inspire, organize and guide individuals towards a vision and common objectives. Advocacy is the process of pleading for, at times taking an aggressive stance, to support a cause or felt-need in order to influence systems, policies or decisions. Leadership focuses on the "how" & "who", while Advocacy emphasizes the "what" & "why" to drive systemic change. Leadership is the engine for implementation and Advocacy is the catalyst for change. The overlaps and synergies include: empowering others, social change, relationship management, accountability, inside-outside tactics, and *using lived experience for strategy*. I will use the last attribute named above, to frame my presentation at MEDUCON.

Creating healthcare professionals for the 21st century involves transformational training to produce socially responsible agents focusing on patient/community advocacy and health policy, including social determinants of health. The core competencies must be embedded in the curriculum design, with longitudinal projects to prepare learners for addressing systemic health inequities and health justice. The 'Leader" role in modern health education is not just about 'being in charge'; it is about imparting the functional competency that ensures physicians (and all health professional) navigate the complex systems that vary depending on geography, populations (e.g. the evolving threat of global migrations) as well as many cultural, linguistic & socioeconomic disparities. For educators this means teaching learners how to transition from clinical experts to system leaders. Adaptive leadership is the ability to identify and meet the challenges when /where there are no clear answers; co-develop new competencies rather than top-down solutions.

New avenues such as AI provide greater opportunities to bring faster, but not hasty, solutions. As healthcare leaders, systemic change requires understanding cultural & socioeconomic factors that affect clinical outcome. Systemic change requires autonomy & independence of the society empowered for sustainability. Advocacy & Leadership can transform the C-Suite in healthcare by pivoting executive focus from purely financial metrics to patient-centered, equitable and sustainable care models.

As healthcare providers we are trusted leaders already, and perhaps a "natural" to drive change using trust. This "natural prestige" is for us to squander or not!

Are current medical education systems equipped to train doctors for effective primary care roles?

Sundararaman T

Independent consultant and adjunct faculty in the JIPMER International School of Public Health

There are now a fair number of studies that show, rather conclusively, that most primary care doctors prescribe the correct treatment for less than half the patients they see in primary care practice, and their diagnostic and therapeutic accuracy is not much more than that of non-physician care providers. There is also considerable evidence that they are even less prepared to provide patient centred, population-based care. The current medical curriculum, in terms of knowledge and motivation, prepares students to enter into specialist careers. But only a proportion of medical graduates can make that journey. Knowing the essential nature of building health systems on a primary health care foundation, many countries have successfully introduced a specialisation in primary care to address the primary health care needs of universal health care systems. But given the constraints on following that route in the Indian context, the question that we need to pose is as to what needs to change in the current curriculum to be able to provide the doctors that are required. And when we talk of curriculum it is not only what is taught in the class-rooms and clinical rounds, but also the structure of examinations, and the 'hidden curriculum' viz the culture and values related to medical practice that medical colleges impart. Such curricular reform requires a better understanding at decision making levels of what primary healthcare means in the current context.

Parallel session on Nursing Education

Panel Discussion on Application of Artificial Intelligence in Nursing Education, Research, and Clinical Practice: Exploring Opportunities, Ethical Considerations, Faculty Preparedness, Data Privacy, and Transformative Strategies to Prepare Nurses for Technology-Driven Healthcare Systems and Evidence-Based Practice. By addressing these factors, the discussion seeks to identify the most effective methods for developing safe, competent, and compassionate healthcare professionals capable of meeting the demands of increasingly complex healthcare environments.

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Oral Presentations

List of Oral Presentations

Abstract Number	Presenting author	Title of Abstract
O_1	Zachariah Bobby	Concept mapping as a tool for fostering self-directed learning among graduate medical students in Biochemistry: An experimental, analytical study
O_2	Monisha M	Formative Structured Oral Examination as a novel method of Academic Mentoring for slow and medium achievers in Medical Biochemistry: A Mixed method study
O_3	Dinesh Kumar V	EmbryoSketch: A pilot structured intervention to reinforce visual literacy skills for first-year students
O_4	Samuel Frank Stephen	Teaching students to see: A self-directed imaging-based approach to head and neck Anatomy.
O_5	K Swaminathan	Development and Validation of Entrustable Professional Activities for Pathology Postgraduate Residents
O_6	Nanthini Saravanan	Bridging the Skills Gap in Cervical Cancer Screening: A Simulation-Based, Competency-Oriented Pap Smear Training Using a Low-Cost Cervical Model for MBBS Interns at JIPMER Karaikal
O_7	Sumathy MK	Developing a Simulation-Based Skill Teaching Module for Medical Students using the ADDIE Model
O_8	Sujatha M.P	Art Integra – An Innovative, Unconventional Art Form-Based Integrated learning for First-Year MBBS Students
O_9	Amrithanand V T	Implementing a Dual-Platform Digital system for Assessment for Learning in Emergency Department
O_10	K. Soundariya	Implementation and Evaluation of multidisciplinary competency based integrated skills assessment as formative strategy for phase II undergraduates

O_1. Concept mapping as a tool for fostering self-directed learning among graduate medical students in Biochemistry: An experimental, analytical study

Presenting author: Zachariah Bobby

Authors

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Background

Concept mapping is an active learning strategy promoting self-directed learning. The intellectual involvement in the preparation of concept mapping is a learning process. We tested the utility of concept mapping in improving self-directed learning among medical graduate students in Biochemistry.

Methods

The study was conducted among first-year undergraduate medical students in Biochemistry. The students prepared concept maps on three topics by referring to textbooks. Pre and post-tests were conducted with MCQs to assess the gain from the exercise. Classification of the students into Low, average, and high achievers was carried out. After the training, we took feedback from the students using a Likert scale. We conducted focus group discussions among the different groups of students.

Findings

There was a significant gain in understanding the three chosen topics by the concept mapping. Although the overall gain from concept mapping was higher than the gain from self-study, it reached statistical significance only among the Low achievers in this study. The students generally felt this exercise was more beneficial than self-study and enhanced their self-directed learning process. Several factors facilitated their self-directed learning by concept mapping.

Conclusion

Concept mapping is an effective method for fostering self-directed learning among graduate medical students in Biochemistry.

Key ideas

1. The gain from concept mapping was higher than the gain from self-study overall
2. 'Flow of Thoughts' and student-tailored learning enhanced learning from concept mapping
3. They experienced a stress-free learning environment during the exercise.

Theme

Foundations of Learning & Human Development, Designing & Refining Learning Systems

O_2. Formative structured oral examination as a novel method of academic mentoring for slow and medium achievers in Medical Biochemistry: A mixed method study

Presenting author: Monisha M

Authors

Zachariah Bobby[1]*, Monisha Muralidharan[1], Nandeesha H[1], Ramesh R[1], V Devanatha Desikan[1], M Deepthi Sudha[1], Zayapragassarazan Z[2]

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Background

Academic mentoring is essential for graduate slow and medium achievers, yet the usefulness of formative structured oral examination (FSOE) as a tool for academic mentoring has not been studied. The aim of the study is to assess the utility of FSOE as a tool for fostering academic mentoring among slow and medium achievers.

Methods

A mixed-method study was conducted among first-year MBBS students, covering three Biochemistry topics with residents serving as academic mentors. Two cycles of FSOE were conducted on each topic with one student at a time with pre-prepared color cards. Multiple-choice pre and posttests were conducted before and after the FSOE. At the end of exercise, feedback was obtained from the students using a Likert scale and focus group discussions were conducted among the students and mentors.

Findings

There were increments in the post-test scores and in the oral examination in the second cycle in each of the three topics. The internal assessment scores were also higher after the conduct of the FSOE compared to the previous IA scores. Student feedback, free comments, and FGD responses supported the usefulness of the FSOE in addressing learning difficulties, as well as improving the mentors' teaching skills.

Conclusion

The FSOE was an effective academic mentoring program as it was beneficial to both the students and the mentors. The FSOE may be implemented as a regular mentoring program in Medical Biochemistry for addressing the academic difficulties.

Key ideas

1. FSOE, an academic mentoring tool, improves learning and performance in slow and medium achievers.

Theme

Foundations of Learning & Human Development, Relationships, Communication & Collaboration

O_3. EmbryoSketch: A pilot structured intervention to reinforce visual literacy skills for first-year students

Presenting author: Dinesh Kumar V

Authors

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Background

Visual Literacy begin with an individual's ability to interpret, evaluate, create and use them. As per Van Meter & Firetto's Generative Theory of Drawing Construction, visual Thinking Strategies coupled with feedforward training constitute a serious meta-cognitive process of self-monitoring while learning. Over here, we compared the pedagogical benefits of the serious game, EmbryoSketch with the time-tested concept-map in consolidating the learning outcomes in embryology.

Methods

48 students were divided into two groups, and two parallel sessions of the concept map and EmbryoSketch were conducted. In EmbryoSketch, students need to create the image from the given topic without visual cues. With repeated cycles of metacognitive practice under supervision and inputs from peers, they could draw the desired image. Scalar responses were analyzed quantitatively and qualitative analysis of nominal group discussant data to elicit the perception regarding both pedagogies.

Findings

Themes that emerged from NGD were more mixed in that EmbryoSketch increased the curiosity but limited the ramifications of ideas; Concept-map was easily doable, but didn't translate into long-term retention. The pre-and post-test comparison showed a significant increase in scores for the Blank Page Technique group compared to the counterpart. The quantitative survey analysis also portrayed the differential benefits rendered by both pedagogies. During the course, many participants identified their challenges with visual literacy, especially in areas requiring high visual-spatial expertise and felt that EmbryoSketch helped them to identify the knowledge gaps. In accordance with recent work, Ruth AA et al., students had difficulty in shifting to strategies that regulate their metacognition compared to the existing strategies, such as concept maps.

Conclusion

Though EmbryoSketch adds value to the existing toolbox of pedagogies, especially for visually adept subjects, we didn't get a significantly positive outcome because metacognitive demand leads to cognitive overload, and this makes students 'double down' on existing strategies. We also feel that integrating structured drawing activities into the curriculum may help learners develop stronger visual literacy skills.

Key ideas

1. Potential of EmbryoSketch to reinforce visual literacy and engagement in embryology education
2. Students had difficulty in shifting to strategies that regulate their metacognition
3. Metacognitive methods by cognitive overload makes students 'double down' on existing strategies

Theme

Designing & Refining Learning Systems, Foundations of Learning & Human Development

O_4. Teaching students to see: A self-directed imaging-based approach to head and neck Anatomy

Presenting author: Dr. Samuel Frank Stephen

Authors

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Background

Radiology is central to modern clinical practice, yet undergraduate anatomy teaching in India remains largely cadaver-based, with limited exposure to cross-sectional imaging. As a result, students struggle to translate three-dimensional anatomy into two-dimensional clinical images, especially in complex regions like the head and neck. This study evaluates a self-directed, imaging-based learning module to strengthen anatomical understanding and clinical visual skills.

Methods

A quasi-experimental mixed-methods study involved 121 Phase 2 MBBS students in a structured session combining learner sensitisation, self-directed radiology tutorials, guided clarification, case discussions, and formative assessment. Outcomes were measured using pre–post tests assessing recall, reasoning, and image analysis. Student feedback was collected on a validated Likert scale, and faculty insights via thematic interviews CVI .9. Paired t-tests with effect sizes analysed quantitative data.

Findings

Post-intervention scores improved significantly across all domains: recall (+21.7%, $p<0.001$, $d=1.10$), reasoning (+13.8%, $p<0.001$, $d=0.65$), and image analysis (+36%, $p<0.001$, $d=2.12$), indicating large educational effects, particularly in visual interpretation. Forty-five percent of students reported increased confidence in interpreting investigations, and 42% felt better prepared for clinical postings. Most learners (74%) felt the time allocation was appropriate. Faculty highlighted improved spatial orientation and earlier clinical contextualisation as key benefits, while identifying barriers including limited imaging expertise, curricular constraints, and lack of knowledge of how to access free imaging resources.

Conclusion

A structured SDL session using simple imaging resources proved both effective and feasible. By activating students as visual learners, anatomy shifted from memorisation to clinical relevance. Importantly, meaningful learning did not require sophisticated technology—curated tutorials, guided reflection, and case-based reinforcement achieved substantial gains. Future work includes extending this model to other regions, integrating ultrasound, and building faculty imaging expertise.

Key ideas

1. Self-directed learning bridges critical anatomy gaps with accessible resources

2. Great anatomy learning needs design, not technology

Theme

Designing & Refining Learning Systems, Designing & Refining Learning Systems

O_5. Development and validation of entrustable professional activities for Pathology postgraduate residents

Presenting author: K Swaminathan

Authors

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Background

The Entrustable Professional Activities [EPAs] Unit of professional practice that can be fully entrusted to the trainee as soon as he/she demonstrates necessary competence to execute the activity unsupervised. It enables a shift of focus from individual competencies to the work that must be done . Knowledge gap : There is no uniform set of EPAs available for the training of the postgraduates in the specialty of Pathology

Methods

A set of Entrustable Professional Activities [EPAs] in alignment with the programme outcomes laid down by the National Medical Commission was prepared. The list was circulated to the expert panel members of 20 Senior Professors who are involved in postgraduate training. The cumulative score of each activity divided by the number of respondents to arrive at the mean score. The activities with mean score of 4 were shortlisted as mandatory EPAs.

Findings

From the initial list of 100 EPAs only 35 EPAs were shortlisted as mandatory. Validation of these 35 EPAs were done using the EQual rubric with 14 items. We have developed our own scale of validation with descriptor prompts for each item. Step wise implementation is being piloted in our Institute.

Conclusion

Encourages educators to be more observant and articulate teachers. Recognize the learner's progression from novice toward mastery. May be one of the tool to address current challenges in pathology graduate medical education. Institutions can develop and validate their own EPAs according to the regional needs in alignment with the outcomes laid down by the National Medical Commission.

Key ideas

1. Development of an Uniform Entrustable Professional Activities for Pathology Postgraduates

2. Development of a System of Assessment with Robust feedback

3. Make postgraduates realize ownership of their learning.

Theme

Designing & Refining Learning Systems, Innovations & Emerging Concepts

O_6. Bridging the skills gap in cervical cancer screening: A simulation based, competency oriented Pap smear training using a low cost cervical model for MBBS interns at JIPMER Karaikal

Presenting author: Nanthini Saravanan

Authors

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Background

Traditional opportunistic learning often exposes patients to novice errors. Simulation-based training using cost-effective models offers a safe and scalable solution within Competency-Based Medical Education (CBME). Objective: To design, implement, and evaluate a structured, simulation-based Pap smear training module using a low-cost cervical model to improve knowledge, confidence, and procedural competence among MBBS interns.

Methods

A prospective educational intervention was conducted at JIPMER Karaikal among MBBS interns. The module integrated interactive teaching, guideline-based discussion, Peyton's four-step demonstration led by faculty, supervised hands-on practice using a low-cost cervical model developed by the team, and OSCE-based competency assessment. Qualitative feedback from interns and faculty evaluators was analysed thematically.

Findings

The pre-test mean knowledge score was 12.4/15, improving to 14.4/15 post-training, with most interns achieving maximum scores. Confidence scores improved across domains, including speculum insertion, smear fixation, and supervised performance readiness. The mean OSCE score was 16.4/20, with all assessed interns achieving a ≥75% competency threshold. Step-wise analysis revealed strong performance in cervical identification and rotation technique, while hand hygiene and slide labelling required reinforcement. Faculty feedback highlighted structured step adherence and patient empathy as strengths, with infection control practices identified as improvement areas. Interns reported increased confidence and valued the realism and safety of the simulation model.

Conclusion

A structured, low-cost, simulation-based Pap smear training model significantly improved knowledge, confidence, and procedural competence among MBBS interns. Integration of OSCE assessment and service workflow planning enhances readiness for real-world screening implementation. This scalable model can strengthen undergraduate training and contribute to improved cervical cancer screening capacity in resource-limited settings.

Key ideas

1. Simulation-based education using low cost model
2. Competency-Based Medical Education for undergraduate and Interns
3. File a patent

Theme

Designing & Refining Learning Systems

O_7. Developing a simulation based skill teaching module for medical students using the ADDIE model

Presenting author: Masanam Kasi Sumathy

Authors
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Background

Traditional bedside teaching has long been the primary method for clinical and procedural skill instruction. However, the increasing need for standardized teaching, rising student numbers, and heightened patient safety concerns necessitate a shift toward simulation-based education. As this is a new initiative within our institute, there is a need to standardize simulation as a core teaching and learning tool. The primary aim of this study was to design, implement, and evaluate a standardized simulation-based teaching module using the ADDIE framework to enhance the technical proficiency and clinical confidence of third-year medical students in performing NMC-prescribed procedural skills.

Methods

We developed a structured simulation module using the ADDIE instructional design model. Through the Delphi method, six procedural skills were selected from the National Medical Commission (NMC) prescribed list. The intervention comprised comprehensive teaching modules, demonstration videos, and 45-minute hands-on sessions using part-task trainers with immediate feedback. The curriculum emphasizes deliberate practice and real-time error correction. Assessment tools, including OSCE checklists and Multiple-Choice Questionnaires (MCQs), were developed and subjected to reliability and validity testing.

Findings

Student outcomes were assessed using pre- and post-test Objective Structured Clinical Examinations (OSCE). Results demonstrated a significant improvement in both technical skills and theoretical knowledge following the implementation of the module. Ethical approval was obtained, and informed consent was provided by all participants.

Conclusion

Simulation provided a vital, safe space for learners to commit and correct errors without clinical risk. Key lessons include the critical necessity of faculty training in debriefing techniques and the importance of aligning simulation scenarios with actual real-world clinical documentation requirements. Ultimately, a structured program with careful planning can be successfully implemented within the existing curriculum and is highly feasible to adopt for third-year medical students.

Key ideas

1. Simulation-based skills teaching

2. Integrated assessment enhances confidence and authenticity while reducing student stress.

O_8. Art Integra – An innovative, unconventional art form based integrated learning for first year MBBS students

Presenting author: Sujatha M.P

Authors

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Background

Integrated teaching in first-year MBBS results in fragmented understanding, with students struggling to connect the concepts between subjects. To bridge this gap, an engaging, interdisciplinary, and student-centred approach - "Art Integra" was implemented. It was a art based,innovative and unconventional learning with integration across Anatomy, Physiology, Biochemistry, and Community Medicine. This also promoted team based learning and critical thinking in students.

Methods

First year students were divided in small groups and assigned clinical topics like anaemia, jaundice, osteoporosis, CVD etc. Each group was encouraged to deliver the content in an art form of their choice—poetry, model-making, face painting, meme creation, games, posters, or chart displays. The students choose their own formats aligned with their interests and learning styles. Guided by faculty mentors, the process culminated in group presentations and feedback.

Findings

Students expressed that the activity improved their conceptual clarity, creativity, and teamwork. They appreciated the autonomy to choose how they represented medical concepts, making learning both engaging and personally meaningful. Faculty observed increased participation, enthusiasm, and depth of understanding across subjects.

Conclusion

Art Integra demonstrated that art-based, student-delivered teaching can effectively integrate disciplines and cater to diverse learning preferences. Such creative and personalised approaches can transform passive learning into an active, enjoyable, and holistic educational experience for medical students.

O_9. Implementing a dual platform digital system for assessment for learning in emergency department

Presenting author: Amrithanand V.T

Authors

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Background

Medical education has shifted toward Competency-Based Medical Education, emphasising continuous Assessment for Learning over end-point exams. However, implementing AfL in the busy Emergency Department is difficult due to time pressure, noise, and shift work. To address this, our department introduced a digital AfL ecosystem integrating the Emergency Medicine Assessment Portal, for real-time clinical appraisal and monthly MCQ-based LMS tracking for longitudinal theoretical assessment.

Methods

Prospective educational innovation conducted in the Emergency Medicine Department at JIPMER involving 27 residents. A dual-platform AfL model integrated real-time workplace assessments via the Manus bedside portal (Mini-CEX, DOPS, End-shift reports with Likert scoring and feedback) and monthly MCQ-based theoretical evaluation through an LMS, generating individual and cohort analytics.

Findings

Over two months, 152 workplace-based assessments were completed across 27 Emergency Medicine residents, achieving a 100% completion rate. End-of-Shift reports (n=98) were most common, followed by DOPS (n=43) and Mini-CEX (n=8), supporting high-frequency formative assessment. Dashboard analytics enabled performance stratification, identifying residents needing support (<70%) and facilitating early mentorship. Qualitative feedback was specific and actionable, including procedural coaching and decision-making guidance. Monthly MCQ assessments generated cohort analytics, highlighting knowledge gaps and guiding teaching. Integrated dashboards provided cohort benchmarking and longitudinal trend graphs, enabling residents to track progress, identify performance dips, and align learning with clinical exposure.

Conclusion

Digitizing workplace-based assessment helps overcome teaching and evaluation challenges in the busy Emergency Department. Mobile, real-time tools enabled structured feedback without affecting patient care. Self-assessment and peer dashboards promoted reflection and self-directed learning. The technology-enabled Assessment for Learning is feasible and supports continuous competency development in high-acuity settings.

Key ideas

1. Innovative approach in Assessment for learning in Emergency Department

Theme

Designing & Refining Learning Systems

O_10. Implementation and evaluation of multidisciplinary competency based integrated skills assessment as formative strategy for phase II undergraduates

Presenting author: K. Soundariya

Authors

K. Soundariya*

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Background

Competency-Based Medical Education (CBME) integrates knowledge, skills, and communication for real-world practice. Though OSCE is objective, it often assesses skills in isolation, limiting holistic application. To address this, multidisciplinary Integrated OSCE (iOSCE) modules on Anaemia in Pregnancy and Carcinoma Breast were developed and validated. This pilot study evaluated their effectiveness and stakeholders' perceptions of integrated skills assessment.

Methods

This mixed-methods pilot study implemented two validated iOSCE modules—Anaemia in Pregnancy and Carcinoma Breast—each with five stations on history, examination, procedures, lab interpretation, and counseling. Disciplines included Surgery, OBG, Pathology, Microbiology, and Physiology. Fifty students (25 per module) participated in rotation. Performance was assessed using structured checklists (max 10), and perceptions were gathered through a Likert scale with qualitative feedback.

Findings

There was 100% attendance from the students for the assessment. Pilot observations showed high achievement and positive feedback from the students. All 50 students scored above 6/10 in every station, showing a steady grasp of clinical tasks. Students strongly agreed (Mean >4.5/5) that the integrated skill modules covered essential competencies and helped them apply knowledge holistically. Feedback indicated that the sessions felt like real-life practice and helped students identify their personal strengths and weaknesses. Notably, students found this integrated format less stressful and more confidence-building than traditional practical exams.

Conclusion

The pilot study shows that integrated skill assessment is a practical and effective way to assess students. It successfully connects different subjects into a single clinical experience while reducing student stress. These positive results support expanding the program to the entire student group.

Key ideas

1. Multidisciplinary Integrated OSCE enables holistic, competency-based assessment across disciplines.

2. Integrated assessment enhances confidence and authenticity while reducing student stress.

Theme

Designing & Refining Learning Systems

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Domain 1: Teaching – Learning Methodologies

1.1. Reimagining biochemistry teaching: A jigsaw-based intervention for Indian medical undergraduates

Presenting author: Astha Sachan

Authors

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Background

Didactic lectures, even though structured, can only promote passive learning, and limit student engagement in medical education. The Jigsaw method, a cooperative learning method, facilitates active participation, critical thinking, and peer teaching. Our study evaluated the effectiveness of a Jigsaw-based intervention in teaching disorders of amino acid metabolism to first-year MBBS students.

Methods

This was an analytical cross-sectional study was conducted among 80 1st year MBBS students, with their consent. Following the traditional lectures on amino acid metabolism, students participated in a Jigsaw activity based on four clinical cases. After a pre-session MCQ test, students engaged in peer discussions within expert and home groups. A post-session test and structured feedback were subsequently collected via google forms.

Findings

Most participants found the session engaging (88.9%), motivating (96.2%), and more effective than conventional lectures (91.4%). Peer learning and communication were significantly enhanced. Over 94% of students reported improved understanding and confidence in applying knowledge to clinical scenarios. Their mean test scores also improved from 5.97 (pre-session) to 9.26 (post-session), indicating enhanced comprehension.

Conclusion

Jigsaw method fostered independent learning & conceptual clarity through structured peer interactions, promoted clinical reasoning and teamwork, essential in medical practice. While challenges such as unequal participation exist, the method is resource-efficient and feasible to implement as an effective, student-centric strategy that complements traditional lectures. This will enhance engagement, retention, and clinical applicability in foundational subjects like biochemistry.

Key ideas

1. Incorporation of innovative teaching & learning methods, to increase enthusiastic participation

Theme

Designing & Refining Learning Systems, Relationships, Communication & Collaboration

1.2. Gamification as an active learning strategy for teaching minerals to first-year MBBS students

Presenting author: Arul Vijaya Vani S

Authors

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Background

Teaching minerals using traditional lectures to first year medical students can be challenging due to dense content and intellectual nature which will lead to superficial understanding and less engagement. Understanding minerals is very crucial for their clinical application. To solve this problem, newer approaches like gamification is recommended to increase engagement and deeper understanding but more evidence is needed to implement them.

Methods

Minerals was taught to students using a gamified teaching module. This module incorporated team based quizzes, problem based learning, rapid fire question rounds which were designed based on predefined learning objectives and point based progression was used. Pre and post session MCQ were used to assess learning. 12 item questionnaire covering five domains were used to collect feedback. Content validity of the module and internal consistency were assessed.

Findings

Post session MCQ scores showed improvement when compared pre session MCQ scores which indicated student's better understanding of minerals and their clinical relevance. Student's feedback highlighted the enhanced student engagement, better perception of learning experience with majority of them reporting better clarity, enthusiasm and increased confidence in applying the knowledge gained. The questionnaire used showed reliable as indicated by the Cronbach alpha ≥ 0.7.

Conclusion

Teaching minerals to first year students using gamification module effectively increased engagement and learning. Incorporating structured, objective driven gamified activities into first year topics can boost learner commitment and better understanding. Future studies are needed to explore the long term retention of the knowledge gained and to compare gamification and with other active learning methods to measure its full impact.

Key ideas

1. Gamification as an active learning strategy

Theme

Designing & Refining Learning Systems, Equity, Ethics & Systemic Responsibility

1.3. Assessment of learning gaps in core anaesthesia topics among operation theatre and anaesthesia technology students using a validated MCQ tool

Presenting author: Mouriya S

Authors

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Background

Operation Theatre and Anaesthesia Technology (OTAT) students play a vital role in perioperative patient care and require strong foundational knowledge in core anaesthesia domains, including monitoring, regional, general anaesthesia, post-operative care, anaesthesia equipment and safety. However, conventional teaching methods may not adequately identify individual learning gaps. This study aims to assess baseline learning gaps in core anaesthesia using a validated (MCQ) assessment tool.

Methods

A cross-sectional descriptive study was conducted among 2nd and 3rd year B.Sc. Operation Theatre and Anaesthesia Technology students. A 50-item MCQ test covering core anaesthesia topics was developed and validated by five subject experts using the Content Validity Index. After obtaining ethical approval and informed consent, the tool was administered. Responses were scored and analyzed using descriptive statistics and topic-wise error analysis to identify learning gaps.

Findings

The validated MCQ assessment revealed significant learning gaps across multiple core anaesthesia domains, with higher error rates observed in monitoring-related parameters, management of complications during regional anaesthesia, and immediate post-operative care. Students scoring below 60% were identified as having substantial knowledge deficits, warranting targeted educational intervention.

Conclusion

This study showed that a validated MCQ-based assessment can effectively identify baseline learning gaps. The findings highlight the need for structured, needs-based educational strategies to address these gaps. The results provide a basis for developing targeted instructional approaches to improve foundational anaesthesia knowledge. Future work will focus on implementing and evaluating a needs-based constructivist instructional framework to enhance student learning outcomes.

Key ideas

1. Validated MCQs identify baseline knowledge gaps in students.

Theme

Designing & Refining Learning Systems, Preparing for the Digital Future of Healthcare Education

1.4. Learner centric unconventional teaching-learning methods for undergraduates in ophthalmology clinical postings

Presenting author: Rajalakshmi S

Authors

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Background

Teaching faculty face burnout in clinical teaching due to the existing disproportionate ratio of faculty to medical students. Monotonous case discussions and lack in number and variety of patients also curb the attention and interests of medical students. Hence, newer Teaching Learning methods (TLM) help students understand the concepts besides effective utilization of time of the faculty during clinical postings.

Methods

Surgical Debate: Clinical batch is allowed to debate between two standard cataract surgery techniques. AETCOM- Role play: This TLM involves enacting a clinical scenario for Attitude, Ethics and Communication (AETCOM) like examining an uncooperative patient, obtaining consent for enucleation and counselling mature cataract for earlier surgery. Case-Based Self-Directed Learning: Groups are given a case scenario with application-based questions and self-directed learning time.

Findings

Feedback was collected in Google forms with open-ended questions and results were summarized. The surgical debate session helped students to thoroughly learn the advantages and disadvantages of the two techniques and retain the concepts. Students will use this in decision making of choice of surgical technique and consider availability of resources, patient indications and surgeon's confidence level while choosing the technique in future. Role play session insisting on various aspects of AETCOM, imparted students to have an empathetic communication with patients, implement theory to practice and handle difficult situations. Students will behave polite to patients, reassure them, obtain proper consent and will not panic at complex challenges. Case based self-directed learning promoted multidimensional thinking and correlate symptoms to diagnosis. Students will approach any real-life patient in a step wise manner and make right diagnosis upon recognition of common symptoms.

Conclusion

Debating sets a perfect stage for deep diving into the two techniques and accords clarity to students. AETCOM Role play, adds fun to learning, with opportunity for students to enact roles as patients and doctors as well. Case Based learning promotes team spirit and engages students in self-directed discussions. These alternate Teaching -Learning Methods can be adopted in between the routine case discussions to break the monotony.

Key ideas

1. Self-directed learning in Ophthalmology clinical postings.

2. Soft skills in medical education

Theme

Relationships, Communication & Collaboration, Non-Technical Skills training in Primary Care settings

1.5. A quasi-experimental mixed methods study of clay module based teaching in laryngeal anatomy

Presenting author: Arulmozhi Sakthignanavel

Authors

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Background

Understanding three-dimensional laryngeal anatomy is difficult for medical students when taught through lectures and two-dimensional diagrams. Clay module–based teaching may improve spatial understanding and engagement, but evidence in ENT education is limited. Objectives: To compare clay module–based teaching with lectures in improving comprehension and retention of laryngeal anatomy and to assess student engagement, motivation and perceptions.

Methods

A quasi-experimental mixed-methods study was conducted among 148 medical students divided into intervention and control groups. After a standard lecture, the intervention group participated in faculty-guided clay modeling. Pre-tests, immediate post-tests, and four-week retention tests using validated MCQs assessed knowledge. Engagement and motivation were measured through Likert questionnaires. Focus groups explored learning experiences. Data were analyzed using t-tests and thematic analysis.

Findings

The intervention group demonstrated a statistically significant improvement in post-test scores compared to pre-test scores ($p < 0.05$), with higher mean scores than the control group in both immediate post-test and four-week retention assessments. Students exposed to clay module–based teaching reported higher levels of engagement, motivation, and perceived understanding of spatial relationships within the larynx. Qualitative analysis revealed key themes including enhanced three-dimensional visualization, collaborative learning, increased confidence in anatomical identification, and initial difficulty with model construction.

Conclusion

Clay module–based teaching is an effective active learning strategy for improving comprehension and short-term retention of laryngeal anatomy among medical students. It also promotes learner engagement, motivation, and teamwork. Incorporating clay modeling into ENT anatomy teaching may complement traditional methods and support deeper anatomical understanding.

Key ideas

1. Clay module–based teaching

2. Active learning

3. ENT anatomy

Theme

Designing & Refining Learning Systems

1.6. Comparison of mind wandering and memory retention between live lecture and video recorded lecture – A pilot study

Presenting author: Rajprasath R

Authors

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Background

We often assume that the energy of a lively classroom helps students stay focused and learn better. However, as medical education moves toward digital formats, we wanted to examine this 'dynamic' relationship of mind wandering more closely. We examined whether having a professor lecture live versus on video alters students' learning experience in the classroom. This study compares how students' minds wander during live versus recorded lectures and how this relates to final test scores.

Methods

Fifty first year MBBS students attended both a live anatomy lecture and a video-recorded lecture with balanced content difficulty. By manipulating only the live professor presence, we maintained all other factors that might vary between a live and an online setting in an ecologically valid manner. Six random "Are you attentive?" probes tracked mind-wandering during each session. Learning was assessed via post-session memory tests, alongside feedback on interest, motivation, and cognitive load.

Findings

The present study shows that students' memory performance differs between live and video versions of a lecture, and that they are more motivated and interested when attending a session with a live professor present. In the live lecture, students became more focused over time, with mind-wandering dropping from 69% at the start to just 25% by the end. In contrast, those watching the video had more consistent, moderate levels of mind-wandering. In the memory test, the students performed slightly better after the live lecture (Mean score of 3.57) than after the live lecture (3.07), though the difference was not statistically significant. The students also reported that the live lecture was much more interesting and motivating. Cognitive load was similar in both groups, suggesting that both methodologies were comparable in terms of content load.

Conclusion

Levels of mind wandering seem stable, with more attention towards the end of the live lecture. It is also supported by slightly higher memory test scores and students' positive perceptions of live lectures compared to video-recorded lectures. For complex topics, the live lecture format is superior, with an initial hook to engage students and improve attention and memory retention.

Key ideas

1. Mind wandering between live and video recorded lectures

Theme

Foundations of Learning & Human Development

1.7. Perception of MBBS students on factors facilitating and hindering an effective lecture at a medical college in South India – A qualitative study

Presenting author: Vijaykishan Bheemavarapu

Authors

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Background

Didactic lectures continue to be a dominant instructional method in undergraduate medical education because of their feasibility in addressing large groups and their cost-effectiveness. However, they are frequently criticized for promoting passive learning, limited knowledge retention, and reduced learner engagement. Understanding learners' perceptions is essential for transforming traditional lectures into more learner-centered educational encounters and hence this study was undertaken.

Methods

A qualitative study was conducted among MBBS students who had completed their first year. Participants were selected by simple random sampling. Force Field Analysis (FFA) was undertaken with 13 students to identify and prioritize driving and restraining forces influencing lecture effectiveness through group scoring. This is being followed by Focused Group Discussions (FGDs), each comprising six students, to explore strategies for enhancing lecture quality.

Findings

Force Field Analysis revealed that the most important facilitating factors for an effective lecture were structured delivery with an outline and summary, appropriate pace of teaching, student preparedness, positive teacher attributes. Other facilitators included interactive and engaging teaching, clear explanation and simple language, effective use of visual aids, incorporation of clinical examples and optimal lecture duration with breaks. The major hindering factors were poor structuring of content, long lectures, excessive information and overloaded slides, monotonous delivery, and student-related factors such as lack of sleep and inadequate preparation. Fast-paced teaching, poor lecture timing and lack of interaction were also reported. Two Focused Group Discussions have been conducted to explore strategies for improvement, and its analysis is in progress.

Conclusion

Effective lectures, from the students' perspective, are characterized by interaction, clarity, structured delivery, and optimal duration. Addressing modifiable barriers such as monotonous teaching, cognitive overload, and poor pacing can significantly enhance lecture effectiveness.

Key ideas

1. Major facilitating & hindering factors of an effective lecture were discussed through this study.

2. Various ways to improve the quality of lecture was also discussed through the focus group discussion

Theme

Designing & Refining Learning Systems

1.8. Can public health be taught better? Applying four component instructional design (4C/ID) model in undergraduate medical education

Presenting author: Aswathy Raveendran K

Authors

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Background

Teaching complex public health topics may not be adequately supported by traditional lecture-based approaches. The Four-Component Instructional Design model provides a structured framework that facilitates learning of complex skills. The objectives of the study is to design and deliver a session on epidemic investigation using the 4C/ID instructional design model and to evaluate student engagement, understanding, and satisfaction with the new instructional approach.

Methods

A pre–post educational evaluation was conducted among 238 third-year MBBS students following implementation of a structured instructional session on epidemic investigation based on the 4C/ID framework comprised of (1) Whole-task learning (2) Supportive information (3) Just in time procedural guidance (4) Part-task practice. Assessment questions were categorised into lower-order, application-level, and higher-order cognitive domains. Student perceptions were collected using structured feedback.

Findings

A total of 238 third-year medical students completed both pre- and post-intervention assessments. Mean total scores increased from 11.21 ± 3.65 to 18.18 ± 1.75 (paired t-test, $p < 0.001$), corresponding to a very large effect size (Cohen's $d = 1.62$). The normalized learning gain (Hake's g) was 0.79, indicating high educational impact. Analysis of performance categories demonstrated a marked shift toward higher competency levels. The proportion of students achieving excellent scores increased from 19.7% to 94.5%, while below-average and average categories were eliminated in the post-test. Cognitive domain analysis showed significant improvement across lower-order, application-level, and higher-order thinking domains ($p < 0.001$). Improvement in higher-order thinking items was statistically greater than lower-order gains ($p < 0.001$).

Conclusion

The 4C/ID approach was found to be an effective method for teaching complex epidemiological tasks in an engaging and structured manner. The integration of real-world scenarios promoted deeper understanding. These findings highlight the potential value of this instructional design in undergraduate medical education, particularly for topics requiring integration of knowledge, reasoning, and decision-making. This model holds promise for broader adoption in public health and epidemiology teaching.

Key ideas

1. The 4C/ID framework supports learning of complex public health competencies

2. Integrating real-world tasks supports higher-order thinking in medical students.

Theme

Designing & Refining Learning Systems

1.9. Evaluating the jigsaw strategy for collaborative learning in environment and health: A mixed-methods triangulation among medical undergraduates

Presenting author: Soumik Ghosh

Authors

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Background

Active and collaborative learning strategies are increasingly used in medical education to improve engagement, retention, and competency. The Jigsaw technique, a structured cooperative learning method, promotes peer teaching and shared responsibility. This study assessed undergraduate perceptions and evaluated the effectiveness of the Jigsaw strategy in teaching Environment and Health spotters during a community medicine revision tutorial.

Methods

A triangulation mixed-methods study was conducted among 60 MBBS students during a Community Medicine revision tutorial on Environment and Health spotters at a tertiary care teaching hospital in Deoghar. Students learned using the Jigsaw method in parent and expert groups facilitated by faculty and residents. Effectiveness was evaluated using Kirkpatrick's reaction and learning levels through pre- and post-MCQ tests, structured feedback via Google Forms, and FGDs analyzed using thematic analysis.

Findings

The post-test scores were significantly higher than the pre-test scores, indicating improvement in knowledge following the Jigsaw intervention (Wilcoxon signed-rank test, $p < 0.001$). Quantitative feedback revealed high levels of student satisfaction, with most participants reporting that the method enhanced engagement, understanding, and retention of concepts. Thematic analysis of FGDs identified several key themes: promotion of peer learning, cooperative learning environment, reduced hesitation in asking doubts, ease of interaction, greater approachability when peers were teaching, increased responsibility to both learn and teach, effective facilitation by instructors, equitable participation with minimal domination by individuals, and structured opportunities for all students to contribute.

Conclusion

The Jigsaw strategy proved to be an effective collaborative learning approach for teaching Environment and Health spotters to medical undergraduates. The technique significantly improved knowledge scores and fostered a supportive peer-learning environment. Integrating Jigsaw sessions into routine teaching may enhance student engagement, promote deeper understanding, and support competency-based medical education by encouraging active participation and collaborative learning.

Key ideas

1. Jigsaw Technique

2. Collaborative learning

3. Peer learning

Theme

Designing & Refining Learning Systems

1.10. Effectiveness of case-based learning using dialogical method vs traditional teaching for learning clinical pharmacology

Presenting author: Meenakshi B

Authors

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Background

Medical students need to learn much from patients, teachers, text books and latest updates through journals. In traditional lecture-based teaching methods is that the students listen, read, reproduce in the exams and forget. For effective learning, teaching should facilitate creative thinking and analytical approaches to a problem. The aim of the study is to determine the effectiveness of case-based learning using dialogical method for clinical Pharmacology compared to traditional teaching

Methods

A mixed method cross over design study was conducted in Phase 2 MBBS students. For Topic I (OPC poisoning) Group A students (No 32) were taught by traditional method using power point. Group B of 20 students were asked to interact with patient/bystanders of OPC poisoning and the dialogical method of discussion with the facilitator was conducted on the next day. Crossing over of methods for topic 2(Glaucoma). Evaluation was done by pretests, post-tests and feed backs from the students

Findings

No significant differences were seen when post-tests scores were compared. For topic one the pretest was conducted just before the discussion (after exposure to cases) the pretest score was significantly high for case-based learning. For topic 2 the pretest was conducted before exposure to cases. No significant difference in mean change in scores for both methods. All (n=52) except one preferred CBL dialogical method. Students feedback revealed better understanding, retention, clinical applications and enhanced problem-solving skills were seen with case based dialogical method. Qualitative analysis revealed that students valued the active and self-directed learning experience, highlighting better conceptual understanding and increased engagement.

Conclusion

Students gained knowledge in both methods. However, students preferred Case-Based Learning, reporting it enhanced understanding, retention, engagement, and improved ability to connect theory with clinical practice. Students explained case-based learning as active and self-directed learning. They insisted for bedside learning and their willingness to see a greater number of cases and to have more such type of classes.

Key ideas

1. Treatment of common diseases if linked with real cases memory and clinical application will be good

2. Interacting with the patients will improve cognitive, psychomotor and affective domains

Theme

Designing & Refining Learning Systems

1.11. Feasibility and preliminary outcomes of a reciprocal peer teaching intervention on self-directed learning readiness and learning approaches among first-year MBBS students: A pilot study

Presenting author: Vijisha Phalgunan

Authors

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Background

Under competency-based medical education (CBME) the Indian Medical graduate (IMG) is expected to be a clinician, critical thinker, and researcher. These roles require deep and self-directed learning from early training. Reciprocal peer teaching (RPT) may foster deeper learning and self- directed readiness. However, evidence regarding its feasibility in first-year students is limited. This pilot study assessed its feasibility and preliminary educational outcomes.

Methods

A single-group pilot study among first-year MBBS students(n=36;32 completed) evaluated RPT integrated into anatomy teaching. Abridged Fisher's SDLRS and R-SPQ-2F tools assessed SDL readiness and learning approaches. Pre-post changes were analysed using paired tests and effect sizes.

Findings

The SDLRS demonstrated high reliability ($\alpha = 0.936$). The R-SPQ-2F indicated good reliability for deep learning ($\alpha = 0.848$) and acceptable reliability for surface learning ($\alpha = 0.754$). Following the intervention, SDL readiness improved significantly (mean difference = +3.47; $p = 0.009$; $d = 0.49$). Surface learning scores showed a significant decline ($p = 0.018$; $r = 0.42$), whereas deep learning scores showed a positive trend ($p = 0.058$; $d = 0.35$). The RPT evaluation tool displayed sufficient sampling adequacy (KMO = 0.723; Bartlett's $p < 0.001$), featuring a two-factor structure that accounted for 66.6% of the variance along with strong internal consistency ($\alpha = 0.876$ and 0.812). A ceiling effect of 64.3% was observed, suggesting clustering of responses at higher scores.

Conclusion

This pilot study suggests that integrating RPT among first -year medical undergraduates is feasible and may contribute to enhanced SDL readiness and reduced surface learning tendencies. Preliminary psychometric results support the reliability of the tool while also suggesting areas for enhancement. These preliminary findings provide a basis for conducting a larger, methodologically robust study to further examine long-term educational outcomes within CBME contexts

Key ideas

1. To explore the feasibility and early effects of Reciprocal Peer Teaching

Theme

Foundations of Learning & Human Development

1.12. From passive to proactive: self-directed learning readiness and its determinants among medical undergraduates in Jharkhand

Presenting author: Gurusanganabasava Hawaldar

Authors

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Background

Self-directed learning (SDL) is vital in medical training, equipping students to navigate evolving clinical knowledge. While SDL cultivates critical thinking and lifelong learning skills essential for future professionals, studies evaluating this competency are scarce in the Deoghar region. Consequently, this study aimed to assess the level of self-directedness among medical students in this specific setting.

Methods

A cross-sectional study was conducted at a medical college of Deoghar from July 2025– December 2025. Following ethical clearance and informed consent, eligible medical students were enrolled. Data were collected via Google Forms, capturing demographics, academic factors, and learning styles. Readiness levels were measured using Williamson's Self-Rating Scale for Self-Directedness in Learning. Data analysis was performed using SPSS Version 23.

Findings

The study included 427 medical students with a mean age of 20.7 ± 1.83 years. The cohort was predominantly male (71.0%), from urban residences (59.3%), and belonged to nuclear families (75.4%). Most students (88.9%) reported having no doctors in their immediate family. The mean overall Self-Directed Learning readiness score was 215.98 ± 38.5. Analysis revealed that nearly half of the participants (47.3%) exhibited a high level of self-directedness. Additionally, 48.7% demonstrated moderate levels, while only a small minority (4.0%) showed low readiness. Daily self-study of ≥4 hours was the only significant predictor of higher self-directed learning readiness (p=0.021). Gender (p=0.135), residence (p=0.467), academic year (p=0.335), and previous year academic scores (p=0.713) showed no statistically significant association.

Conclusion

Medical students in this region exhibit commendable levels of self-directed learning readiness, with the vast majority scoring in high or moderate categories. This indicates a strong foundation for lifelong learning. However, targeted educational strategies remain necessary to support those with lower readiness and further enhance overall self-directedness.

Key ideas

1. Self directed learning readiness

Theme

Foundations of Learning & Human Development

1.13. Formative assessments by concept mapping and feedback from peer evaluation for graduate medical students in biochemistry: A mixed method study

Presenting author: V. Devanatha Desikan

Authors

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Background

Formative assessment, central to Competency-Based Medical Education, supports continuous learning, yet the most effective and feasible tools remain uncertain. Concept mapping helps learners visually organize relationships among concepts, improving understanding and retention. Incorporating peer evaluation strengthens feedback and collaborative learning. Evaluating concept mapping with peer feedback may address this gap and improve learning outcomes in biochemistry among first-year MBBS students.

Methods

Students constructed concept maps in response to questions using a combined closed-book and open-book approach. Initially, maps were prepared individually under closed-book conditions. During the open-book session, students formed groups of three to perform peer evaluation using study materials and provided feedback and feedforward. Learning gain was assessed through pre- and post-tests consisting of MCQs administered before and after the activity.

Findings

There was a significant gain in understanding the three areas of the selected topic (Amino Acids) following peer feedback on concept mapping ($p < 0.01$). Based on peer review, students made better concept maps that promoted learning in other related areas of the same topic as well. Several students reported better understanding than expected and considered it a useful learning strategy following open book, peer feedback and feedforward session. Some suggested increasing the time allotted and reducing the number of concept map questions to improve feasibility. Overall, students generally welcomed the exercise and perceived it as beneficial for self-evaluation and learning.

Conclusion

Formative concept mapping is an effective method for promoting team-based learning among graduate medical students in Biochemistry. Overall, students perceived that concept mapping combined with feedback and feedforward sessions provided greater learning benefit than self-study and was conducted in a relatively stress-free environment.

Key ideas

1. Concept Mapping

2. Peer Evaluation

3. Mixed Method Study

Theme

Designing & Refining Learning Systems

1.14. Learning preferences among undergraduate medical students in a tertiary care teaching institution: A cross-sectional study

Presenting author: Veena G Dev

Authors

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Background

Understanding students' learning preferences is important for aligning instructional strategies with learner needs in medical education. This study aimed to assess learning preferences among undergraduate medical students using the VARK model and to evaluate their perceptions of existing teaching modalities.

Methods

A cross-sectional analytical study was conducted among 395 MBBS students at a tertiary care teaching institution in India. Data were collected using the validated VARK questionnaire along with items assessing satisfaction with lecture, practical, and clinical teaching sessions. Preferences were categorized as unimodal or multimodal. Descriptive statistics and chi-square tests were applied ($p<0.05$).

Findings

Unimodal preferences were observed in 50.1% of students, with kinesthetic learning being most common (37.2%). Multimodal preferences were identified in 49.9%, and the Auditory–Kinesthetic combination was the predominant bimodal pattern (16.7%). Quadmodal learners constituted 15.2% of participants. No significant associations were found between learning preferences and gender, age, or year of study ($p>0.05$). Clinical teaching received the highest satisfaction scores (6.99±1.90), followed by practical sessions (6.77±1.71), while lectures scored lowest (6.14±1.75). Qualitative feedback highlighted the need for greater interactivity, hands-on practice, and patient-centered learning.

Conclusion

The predominance of kinesthetic and multimodal preferences underscores the importance of active, experiential, and blended instructional strategies in undergraduate medical education.

Key ideas

1. Learning Preferences

2. VARK model

Theme

Designing & Refining Learning Systems

1.15. Near peer led teaching intervention in slit lamp examination among Ophthalmology postgraduate students: A mixed method pilot study

Presenting author: A R Rajalakshmi

Authors

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Background

Early postgraduate training is often characterised by unstructured, opportunistic learning with variable supervision and inconsistent feedback, largely due to faculty workload and service pressures. Workplace based assessments such as DOPS have been shown to support structured feedback and improve learning, but their use is inconsistent in early postgraduate training. Structuring and training of peer teaching may benefit both the peer teachers, learners and reduce faculty burden.

Methods

First year postgraduates were assessed on slit lamp examination skills, with 3rd year postgraduates and faculty as assessors. A structured teaching module on slit lamp examination presented to 1st years by the 3rd year postgraduates under faculty supervision. A post test was conducted after 4 weeks to assess skill improvement. The scores were compared using a paired t-test. Focus group discussions (FGDs) were held separately for both peer learners and tutors to understand their perceptions.

Findings

Total DOPS improved from 11.5 to 16.5 ($p < 0.001$). Preparation, procedure, and post procedure domains all improved significantly. Effect size was 4.21, indicating a very strong educational impact. Global ratings shifted upward. Learner satisfaction was 4.7/5, tutor satisfaction 3.8/5. Near peer session was effective and well appreciated by the peer teachers and learners. Improved DOPS scores aligned with learners' clarity of demonstration and tutors' reinforced understanding. High learner satisfaction corresponds with psychological safety and supportive peer interactions. Moderate tutor satisfaction reflects the dual demands of performing and teaching.

Conclusion

Peer led, faculty supervised DOPS is feasible, acceptable, and beneficial for both learners & tutors. The mixed methods approach strengthened interpretation by showing how quantitative improvements aligned with learners' and tutors' experiences. Embedding DOPS into routine practice and providing repeated opportunities for supervised practice may enhance skill retention and confidence.

Key ideas

1. Peer assisted learning can help address gaps in traditional skill training of postgraduates.

2. WPBS should be a part of routine clinical practice.

Theme

Designing & Refining Learning Systems

1.16. Effectiveness of training and assessment in objective structured clinical examination among medical interns during community medicine posting: A pilot study

Presenting author: Joy Bazroy

Authors:

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Background

The Graduate Medical Regulations 2019, part of the Competency-Based Medical Education reforms, emphasized the importance of assessing practical competencies through methods such as Objective Structured Clinical Examination and Mini-Clinical Evaluation Exercise. This study evaluates the effectiveness of OSCE in improving primary healthcare skills among medical interns.

Methods

This study conducted in the Department of Community Medicine and Medical education Unit, PIMS for a period of 5 months with Interns posted in Urban and Rural Health Centre, using a mixed-method approach. The study assessed skill gain through Pre- and Post-test OSCEs and gathered Intern and Faculty perceptions via focus group discussion.

Findings

Ten OSCE stations with 10 marks each having a total of 100 marks in five core competencies: Communication; Diagnosis & management of common diseases; Medical emergency; Health team approach; Outbreak/Disaster response. Significant Improvement: The mean score increased from 53.77 (Pre-Test) to 75.67 (Post-Test), indicating a substantial improvement in performance after the intervention or training. Interns mentioned Practical relevance and hands on learning as the strengths while lack of skill based training and lack of preparation with structured guidance as the weakness. Assessors mentioned comprehensive coverage of skills and step by step structured learning as Strengths while lack of practical exposure and incomplete patient assessment as weakness.

Conclusion

The results demonstrate that OSCE training had a positive impact on medical interns' performance. Focus group discussions supports the need for incorporating structured, hands-on OSCE training to improve clinical skills and confidence among future healthcare professionals.

Key ideas

1. effectiveness of OSCE in improving primary healthcare skills among medical interns.

Theme

Designing & Refining Learning Systems

1.17. Nurturing novice researchers: Impact of a guided research-writing and e-poster initiative in first-year MBBS students

Presenting author: Jayasree Srinivasan

Authors

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Background

Integration of research competencies into medical curricula is essential for developing evidence-based practitioners. Structured scaffolding and expert feedback are known to enhance academic writing competence, yet the impact of guided research-writing remains under-explored. This study examines the effects of a guided research-article writing on the research knowledge and perceived competence of Phase I MBBS students, addressing a critical gap in early medical education research training.

Methods

This quasi-experimental, mixed-methods study involves 250 Phase I MBBS students. The program includes a validated pretest, expert-led training on research structure and ethics, and team-based manuscript drafting under faculty mentorship. Students present findings via posters evaluated by external experts using structured rubrics. Data collection concludes with a posttest and qualitative feedback. Quantitative analysis utilizes descriptive statistics and Wilcoxon signed-rank tests ($p < 0.05$)

Findings

The educational intervention resulted in a statistically significant improvement in research knowledge and scholarly writing competence among participants ($p < 0.05$). Comparison of pre- and post-test scores demonstrated a significant increase in understanding regarding research-article structure, literature search and ethical considerations. Qualitative thematic analysis of student feedback indicated high levels of perceived usefulness and relevance of the program in early medical education. Evaluation of poster presentations by external experts confirmed high standards of content accuracy and critical appraisal skills. These findings indicate that the structured, team-based approach effectively bridges the gap between theoretical knowledge and authentic scholarly activity, establishing foundational competencies critical for long-term clinical training.

Conclusion

Early structured exposure to research-article writing significantly improves research knowledge, attitudes, and confidence in first-year medical students. The synergistic effect of faculty mentorship and team-based learning provides a feasible and effective pedagogical model for integrating research into medical curricula. These findings offer practical evidence-based insights for educators seeking to implement similar research training programs in diverse institutional contexts.

Key ideas

1. Integrated Early Research Training

2. Improvement of Research Attitudes and Competence

Theme

Scholarship, Leadership & Educator Growth, Designing & Refining Learning Systems

Domain 2: Learning systems including simulation based training, interprofessional education, community based teaching

2.1. Interprofessional Non-Technical Skills Among Medical Interns through Primary Care Simulations

Presenting author: Thiruselvakumar D

Authors

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Background

The global healthcare sector is prioritizing collaborative care to enhance patient outcomes and mitigate clinician burnout. Despite the CBME curriculum highlighting the importance of IPE and Non-Technical Skills training, structured programs for preparing graduates for IPE collaboration in primary healthcare are lacking. The INSPIRE project aimed to evaluate the effectiveness of low-fidelity simulation with guided reflection in enhancing IPE collaborative skills and NTS among medical interns.

Methods

A convergent parallel mixed-methods study was conducted with thirty medical interns utilizing distinct LFS scenarios and structured debriefing via the PEARLS framework. Quantitative data were obtained through the ICCAS, RIPLS, and SPICE-R2 instruments. Behavioral performance was evaluated objectively using the TeamSTEPPS TPOT, ICAR, and NOTECHS systems. Qualitative insights were collected through semi-structured FGDs and analysed with reflexive thematic analysis

Findings

Quantitative analysis demonstrated statistically significant improvements post-intervention across all assessment measures. ICCAS scores revealed a large effect size (Cohen's $d = 2.0$, $p < 0.001$), with marked gains in communication and team functioning domains. RIPLS scores indicated a substantial enhancement in readiness for interprofessional learning ($p < 0.001$), while SPICE-R2 scores reflected positive shifts in perceptions of teamwork and collaborative clinical practice ($p < 0.001$). Thematic analysis of the FGDs identified five predominant themes: the perceived realism and relevance of LFS, enhanced understanding of roles and responsibilities, improved communication and teamwork, the transformative impact of guided reflection, and increased confidence in public health management.

Conclusion

The INSPIRE project provides robust evidence that low-fidelity simulation coupled with guided reflection is a highly effective, resource-efficient pedagogical strategy for developing critical non-technical (NTS) and interprofessional skills in primary care contexts. The integration of such interventions into the medical internship curriculum is essential for bridging the gap between theoretical knowledge and collaborative clinical practice, particularly in resource-constrained settings.

Key ideas

1. Efficacy of low-fidelity simulation in Indian primary care teaching and training

Theme

Relationships, Communication & Collaboration, Foundations of learning and human development.

2.2 Bridging Classroom and Community: Can Simulation-Based Training enhance understanding of Socio-Cultural barriers to health care?

Presenting author: Arulmozhi. M

Authors:

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Background

Undergraduate medical students often fail to recognize socio-cultural factors during community postings due to limited exposure and feedback. Simulation-based learning provides a safe environment, utilising standardized patients and scripted scenarios to replicate real barriers, enabling contextual learning. This study aimed to develop and implement a simulation exercise, assess its effectiveness through pre- and post-tests, and evaluate student perceptions through reflective feedback.

Methods

A quasi-experimental pre and post-test study among 225 MBBS students used standardized patients in faculty-led large group teaching. Scenarios on socio-cultural determinants were validated and pilot-tested for simulation-based teaching. It was followed by debriefing, post-test and reflective feedback. Students observed, identified barriers, suggested solutions, and reflected. Paired t-test was applied to measure knowledge gain and manual content analysis done for reflective feedback.

Findings

There was a statistically significant improvement in knowledge, with mean pre-test scores of 17.03 ± 6.4 rising to post-test scores of 23.94 ± 5.5. This indicates enhanced student ability to identify socio-cultural barriers in health care seeking. Further qualitative feedback analysis is ongoing.

Conclusion

Integrating simulation-based training in Community Medicine provides an effective, holistic approach to teach socio-cultural determinants of health, bridging classroom learning and strengthening undergraduate community-based medical education. While simulation-based teaching is often applied to clinical skills, it can equally be adapted in Community Medicine, providing contextual learning for the competencies which focuses on simulated environment.

Key ideas

1. Simulation-based Teaching in Community Medicine

Theme

Designing & Refining Learning Systems, Innovations & Emerging Concepts

2.3. The use of simulation-based training for obstetrics and gynecology skills for undergraduate medical and nursing students in WHO-EMRO countries- A scoping review

Presenting author: Rajani Dube

Authors

Rajani Dube

Background

Simulation-based training (SBT) offers safe & effective opportunities for acquiring competencies without compromising patient safety. Technological advances in education have expanded SBT modalities. Mapping specific tasks to appropriate simulation types optimizes resource use, reduces cognitive load, and supports mastery learning. This review aimed to map existing evidence on the use of different SBT types for OBG skills among UG medical and nursing students in WHO-EMRO countries.

Methods

Using the Arksey and O'Malley framework, a scoping review was conducted. Searches of PubMed, Web of Science, CINAHL, and PsycINFO included all original English-language studies on OBG skills training in WHO-EMRO countries up to July 2025. PCC framework was used for study selection.

Findings

Thirty-five studies met the inclusion criteria, most from Iran and Egypt. No studies were reported for five countries. Vaginal delivery, postpartum hemorrhage, and other obstetric emergencies were the most frequently taught skills through simulation. A variety of simulation designs and modalities were reported. Identified strengths of SBT were safe practice opportunities, building confidence, acquiring knowledge, engagement, a safer learning environment, reduced anxiety, and reduced errors. Perceived challenges were a lack of resources (mannequins, space to practice), trained faculty, workload, and availability of dedicated time. High-fidelity mannequins had the advantage of promoting communication and teamwork in complex scenarios, whereas low-fidelity SBTs were useful for repetitive task training. Hybrid and web-based SBTs were found to be effective, but rarely used. There is a lack of longitudinal studies comparing modalities for specific skills that assess long-term outcomes.

Conclusion

SBT is widely used for OBG skills, with consistently positive learner outcomes. As the evidence is inconclusive regarding the superiority of a specific SBT over another, choice should be contextual & carefully decided. Hybrid and web-based methods need to be promoted for use in EMRO countries with sociocultural barriers. Future research should explore innovative technologies. Region-specific guidelines and policy frameworks are needed to support effective integration of best practices.

Key ideas

1. Optimal use of Simulation-based training for reducing cognitive overload

2. Contexual use of SBT to overcome socio-cultural barriers in OBG education

3. Region specific guidelines for optimization of use of resource

Theme

Foundations of Learning & Human Development

2.4. Development and Evaluation of Competency-Based Clinical Education (CBCE) on Safer Infusion Practices

Presenting author: L. Anand

Authors

Anand L, Gandhimathi M, Unmona B, Lyngdoh WV, Chisi L, Chyne ID

Background

Background: Nurses competencies in Intravenous therapy are associated with patients' outcomes such as phlebitis, infiltration, etc., The role of Competency-Based Education programs are well recognized in other disciplines, however, its applications in infusion nursing were limited. Hence, this study aims to "develop and evaluate the Competency-Based clinical Education (CBCE) regarding safer infusion practices on competencies of nurses and patient outcomes.

Methods

A before and after design was adopted and carried out in three phases. The development of CBCE was done by analyzing data of phase-I, reviewing of INS and CDC standards/guidelines, expert group discussions, consultation with infection control team, and review and validation by experts. The implementation of CBE was carried out through a workshop, didactic instructions, simulated practice and clinical bedside training.

Findings

Results: Out of 84 nurses who have participated in phase I, 80 and 77 nurses completed in phase-II and phase-III respectively. In phase I and phase III, 407 PIVCs placed by 84 nurses and 407 PIVCs placed by 77 nurses were observed respectively. The CBE was highly effective as nurses competencies such as knowledge, practice and attributes of nurses improved significantly after CBE regarding safer infusion practices ($p<0.05$). The patients' outcomes such as phlebitis and post catheter removal phlebitis decreased significantly ($p<0.05$) after CBCE. Though Infiltration rate reduced after CBE, the difference was not statistically significant. Improper hand hygiene, poor quality veins, placements of PIVC over joints, hands and wrists, 20G catheter, dynaplast and antibiotic use increased the risk of phlebitis and difficult veins increased the risk of infiltration.

Conclusion

Competency-Based Clinical Education (CBCE) regarding safer infusion practices resulted in a positive impact on clinical practices of nurses and patients' outcomes. The study confirms the beneficial effects of competency-based applications in nursing, which may have wider implications in addressing perplexing issues of patient safety and quality of nursing care.

Key ideas

1. Applicability of Competency based approaches in actual clinical setting and its impact

Theme

Designing & Refining Learning Systems

2.5. Impact of an Educational Intervention on Adherence to Minimum Laboratory Re-Testing intervals (MRTI) among Internal MEdicine ResIdenTs: (MERIT Study)

Presenting author: Dineshbabu S

Authors

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Background

Overuse of laboratory investigations is common in inpatient care and can increase costs and patient discomfort. Evidence suggests that a substantial proportion of inpatient tests are repeated earlier than clinically indicated. Limited familiarity with minimum re-testing intervals (MRTI) and system-related factors contributes to this practice. This study aims to assess adherence to MRTI following an educational intervention for Medicine residents.

Methods

This before-and-after study evaluated the impact of a targeted educational intervention for medicine residents in multiple small-group, unit-based education which started with harms of over testing, recommended evidence-based intervals, for commonly ordered laboratory tests, case-based discussions, and a "5-Question Rule" decision pause. A simplified MRTI checklist was shared digitally for reinforcement. Adherence proportions were compared pre and post using the chi-square test.

Findings

A total of 121 patient records were reviewed (pre-education: n = 65; post-education: n = 56). The number of laboratory tests were 863 in the pre-education period and 824 post-education period. MRTI adherence increased (6.9%), non-adherent testing decreased (20.8%), and patient-day–adjusted adherence improved (12.8%) without increasing overall test intensity. Adherence improved across all test categories, most notably for hemogram testing (55.2% to 83.4%). Post-education adherence was significantly higher for all tests, with odds ratios ranging from 2.10 to 4.09 ($p < 0.01$).

Conclusion

A simple educational intervention significantly improved adherence to minimum retesting intervals and reduced unnecessary repeat laboratory testing without reducing overall test intensity. Educational stewardship interventions represent a feasible and effective strategy to promote appropriate laboratory utilization.

Key ideas

1. A structured, small-group medical education can reduce unnecessary repeat laboratory testing.

Theme

Foundations of Learning & Human Development

2.6 Cost Effective Model for Simulation and Practical Training in Diagnostic Bronchoscopy

Presenting author: Yallanti Jothir Surya Teja

Authors

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Background

The Harvard Medical Practice Study, revealed adverse events occurred in 3.7% of inpatients, with 13.6% leading to death and 27.6% due to negligence; Emphasising the need to integrate theory with early hands-on experience. Because performing interventions in real-life intimidates novices, simulation-based training, a tactic to improve competency is needed. Our Study aims to develop and validate a low-cost bronchoscopy model for resident training, addressing the high cost of existing simulators.

Methods

Development of the model was done using easily resourceable materials with meticulous attention to anatomical details and lot of research to attain the highest possible level of realism. After faculty Demonstration of the model, residents participated in a 10-minute session. Pre- and Post- test was done using an anonymous 5-point Likert survey. Continuous variables were summarised as mean±SD or median(IQR); Survey data as frequencies; all variables were non-normal (Shapiro–Wilk $p<0.05$).

Findings

The survey evaluated the model in four domains-face validity, content validity, curriculum validity, and confidence attained (transfer validity). Following model simulation exercises-All participants answered the survey. We compared the median scores residents gave across the four domains using Friedman's test, which showed a statistically significant difference between the domains. Post-hoc analysis using the Wilcoxon signed-rank test with Bonferroni correction revealed that the scores for face validity, content validity, and curricular validity were all significantly higher than the pre-test scores of transfer validity, with $P < 0.008$. The median face validity score was 4 , for content validity it was 4.5, for curriculum validity score was 4.5. Pre- and Post- test scores for transfer validity showed a significant difference between the scores across all postgraduates of different clinical years ($p <0.001$; Wilcoxon signed rank test).

Conclusion

The model was developed at a cost of INR 1,000 and received unanimous endorsement from residents for its anatomical realism, the bronchial tree view and carinal angulations. Encouragingly, content validity received the highest score, reflecting strong consensus on its educational utility. First-year residents rated the model more beneficial than their seniors and most "strongly recommended" the model for training. Low pre test scores reflects the inherent anxiety seen with high-risk procedures.

Key ideas

1. Our idea was to develop a Low-cost bronchoscopy model and more such models in medical education

2. Maintaining the environment as close to real life scenario as possible.

Theme: Designing & Refining Learning Systems

2.7. Simulation-Based Experiential Learning(SBEL) for Teaching Cardiovascular Physiology: Insights from a Qualitative Study of Student Learning Experiences

Presenting author: M Gopinath

Authors

Gopinath M
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Background

Cardiovascular physiology is a core component of undergraduate medical education, yet students often find it challenging due to the abstract and dynamic nature of hemodynamic mechanisms. Traditional didactic lectures may not facilitate conceptual understanding or clinical correlation. Simulation-based experiential learning has emerged as an innovative pedagogical strategy for active participation that potentially bridge the gap between theoretical knowledge and practical understanding.

Methods

A structured simulation-based experiential learning session was conducted among 150 first-year undergraduate medical students (18-20 years)following a conventional didactic lecture on cardiovascular system (CVS) physiology. After dividing the Students into small groups we incorporated computer-based physiological simulation software and interactive simulation methods designed to demonstrate key cardiovascular concepts. Faculty facilitators supervised the sessions and played an active role.

Findings

Structured debriefing was conducted following each exercise, where students reflected on the observations and connected the simulation outcomes with the theoretical concepts. Student learning experiences were explored using a qualitative approach through a feedback with structured open-ended responses focusing on their perceptions of the learning process, conceptual understanding, engagement, and perceived usefulness of simulation in physiology education.The responses were analysed using thematic analysis to identify recurring patterns and key themes. Analysis revealed several dominant themes including enhanced conceptual clarity, improved visualization of dynamic cardiovascular processes, increased student engagement, active participation, and better integration of theory with physiological mechanisms. Students reported that the simulation environment helped them better understanding on complex physiological relationships that were difficult to grasp through lectures alone.

Conclusion

SBEL represents a promising pedagogical strategy and a potent adjunct to traditional teaching for first-year medical students. It not only significantly improves academic performance but also delivers early clinical reasoning. The positive feedback on CVS topics suggests that simulation based teaching is highly valued among students. However, successful implementation requires adequate faculty facilitation, appropriate resources and structured integration with existing curricular content.

Key ideas

1. SBEL represents a promising pedagogical strategy and a potent adjunct to traditional teaching

2. SBEL significantly improves academic performance and delivers early clinical reasoning

3. SBEL enhances conceptual understanding of core concepts in certain topics of physiology

Theme

Designing & Refining Learning Systems

2.8. Impact of an Infection Prevention and Control Certification Program on Nursing Professionals' Competency: A Pre- and Post- Program Evaluation

Presenting author: Rajini Peter

Authors

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Background

Healthcare-associated infections (HAIs) remain major patient safety challenge worldwide, contributing to substantial morbidity, mortality, and healthcare costs. Burden is higher in LMIC countries, including India. Strengthening infection prevention and control (IPC) competencies among nurses is critical to reducing HAIs. However, evidence on effectiveness of short-term IPC certification programmes is limited. This study evaluated a short-course IPC certification programme for nurses.

Methods

This quasi-experimental study evaluated a 1 week IPC course using pre- and post-assessments. 34 nurses from institutions across the country participated. Written informed consents and approvals from the institutional ethics committee was taken. Programme included lectures, hands-on, assignments, simulations, and case discussions. Knowledge was assessed using a 30-item MCQ, and clinical competence through an OSCE using 2 manned and 3 unmanned stations, scored with expert-validated rubrics

Findings

Significant improvements were seen in all IPC competency domains post-programme. Mean knowledge increased from 30.09 ± 5.02 to 34.89 ± 3.51 ($p < 0.001$), while clinical skill scores improved from 14.49 ± 4.54 to 27.96 ± 4.54 ($p < 0.001$). Attitude also showed significant improvement ($p < 0.001$). Overall competency increased from a median of 57.33 at baseline to 81.17 post-programme (effect size-d, 2.43). The proportion of participants achieving the competency threshold (≥75%) increased substantially from 5.9% pre- programme to 85.3% after completion. Improvements were also observed in adherence to IPC bundles. Correlation analysis showed that knowledge scores were significantly associated with attitude and skills at baseline, but these relationships were not observed after the programme. Additionally, a negative correlation between baseline competency and change scores suggested that participants with lower baseline competency demonstrated greater improvement following the training.

Conclusion

The IPC short-course significantly improved competency of nurses in IPC knowledge, skills, and attitude. The substantial increase in participants achieving competency thresholds indicate its effectiveness. Such structured, skill-oriented training with simulation-based learning and skill tests will strengthen IPC capacity in healthcare settings. Future studies with larger samples and longer follow-up are needed to evaluate sustained practices and impact on HAI outcomes.

Key ideas

1. Structured IPC certification short-courses can significantly improve nurses' overall IPC competency.

2. Simulation-based learning and OSCEs are effective approaches for assessing practical IPC competency

Theme

Designing & Refining Learning Systems

2.9. Electives as a learner-centered learning system in CBME: insights from a mixed method program evaluation

Presenting author: Suchitra Pusapati

Authors

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Background

Electives in CBME aim to extend learning beyond the traditional MBBS curriculum, promote exposure to diverse disciplines, and support informed career choices. As electives are a recent addition to undergraduate medical education in India, systematic evaluation is essential to ensure alignment with competencies, effective teaching–learning methods, and feasibility within institutional resources. This study was conducted as a program evaluation to refine elective postings as a learning system.

Methods

A mixed-methods cross-sectional study was conducted over three months in a tertiary care teaching hospital in India. Participants included third MBBS (Part I) students and faculty preceptors involved in elective postings. Quantitative data were collected using an online Likert-scale questionnaire, while qualitative data were obtained through open-ended responses and faculty focus group discussions. Descriptive statistics and thematic analysis were used.

Findings

A total of 110 students and 14 faculty preceptors participated in the study. Nearly two-thirds of the students perceived electives as a valuable academic activity that provided learning beyond the traditional curriculum. Students reported greater gains in the domains of knowledge and skill compared to attitudinal learning, suggesting the need to include more structured approaches to enhance the attitude and professionalism related competencies. Faculty acknowledged the role of electives in broadening students' understanding of specialties, longitudinal patient care and interdepartmental functioning. However, challenges such as variable student engagement, time constraints, staffing limitations and difficulty completing research-oriented electives within the available duration were highlighted.

Conclusion

Elective postings are a key learner-centered innovation in CBME and function as an important educational learning system. This study identifies strengths and system-level gaps, providing actionable insights to enhance student and faculty engagement. Improved planning and support, greater emphasis on hands-on learning, recognition of faculty efforts, and continuous stakeholder-based evaluation are essential to optimize electives and strengthen competency-driven undergraduate medical education.

Key ideas

1. Evaluation and refining Electives postings will serve as a powerful learner centered learning system

2. All stakeholders must be involved in the process

Theme

Designing & Refining Learning Systems, Relationships, Communication & Collaboration

2.10. Innovative practices in various curricular components of medical education and their effects in India: A scoping review and evidence gap map

Presenting author: Aravind Gandhi P

Authors

Aravind Gandhi P[1]*, Amol Dongre[2], Pradeep Deshmukh[1], Kalyani P Deshmukh[1], Sujiv Akkilagunta[1], Yogesh Bahurupi[1], Priyanka Yadav[1], Vijayageetha M[1], Mubashshera Khan[1], Nishaant Ramasamy[1], Aiswarya Lakshmi N R[1], Nandeesh K[1], Vikas Dhiman[3], Sanghamitra Pati[3]
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Background

Considering the long journey of India in medical education, with a recent shift in the medical curriculum, it is imperative to look into the landscape of the medical education research in the context of effective medical education curriculum practices, in India. The scoping review and the evidence gap map (EGM) explores the effective and innovative practices in curricular components of medical education and map the gaps in medical education research in India.

Methods

Studies published from inception till 13.06.2025, in five databases: MEDLINE (PubMed), Scopus, Embase, Web of Science, Cochrane were searched. Studies reporting on the innovative methods in the curricular components (content, teaching, learning, educational environment, educational strategies, assessment and evaluation) in medical education, and their effect on learning outcomes in Indian context, were included. An EGM was developed using Eppi-Reviewer and Eppi-Mapper.

Findings

Of the 4342 unique studies, 607 studies were finally included in the review. Majority of the studies were conducted among the MBBS students (n=534, 88%), while 59 (9.7%) studies were conducted among MD-MS-DNB. Teaching-Learning methods were the common curricular components studied (n=549, 90.3%). The most common teaching-learning methods evaluated in India was Case-based Learning (CBL) (n=32, 5.82%). Objective structured practical examination (n=15, 25.42%) was commonly studies assessment technique. Physiology (n=118, 19.4%) followed by pharmacology (n=74, 12.2%) were the most common subjects where studies were conducted. Most studies assessed Krikpatrick' level II (n=570, 93.9%), followed by Level 1 (n=545, 89.8%). Majority of the studies were non-funded (n=590, 97%). Majority of the studies in India were non-funded (589, 97%). EGM revealed a gap for studies among the clinical departments, post-graduate medical education and reporting higher level of outcomes.

Conclusion

In terms of participants, postgraduate students (MD-MS-DNB and DM-MCh-DNB) and faculty members require greater inclusion. Educational research should include all clinical departments, which remain underrepresented. A clear need to prioritize higher-level educational outcomes such as behaviour change and its system and patient level impact has been identified. Systematic funding mechanism also needs to be established in India to support quality and impactful medical education research.

Key ideas

1. Majority medical education research have been conducted among the undergraduate students, in India

2. Need to prioritize educational outcomes such as behavior change and patient level impact

3. Lack of Systematic funding mechanism for medical education research

Theme: Scholarship, Leadership & Educator Growth, Designing & Refining Learning Systems

2.11. Elucidating and Validating Core Competencies for Safe Anaesthesia Practice among Anaesthesia Technologists in India

Presenting author: Deepakraj K

Authors

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Background

Anaesthesia Technologists are essential for perioperative patient safety. Despite long-standing B.Sc. programs in India, graduates show variable competence due to inconsistent training and poor alignment with clinical practice. Although a national competency-based curriculum was introduced in 2025, translation into workplace tasks is limited. This study aims to identify and validate core competencies for safe anaesthesia practice, forming a basis for entrustment-based training.

Methods

A multi-step qualitative study was completed after obtaining IEC approval from SRM MCH RC, Chennai (IEC No. 9217) and informed consent. Document analysis and literature review were thematically analysed. Semi-structured interviews with 130 Anaesthesia Technologists across India were analysed using Braun and Clarke's framework. Tasks were converted into competency statements, mapped to EPAs, and validated through a modified Delphi process achieving 80% content validity.

Findings

The study identified a comprehensive set of core competencies essential for safe anaesthesia practice. Technical competencies included anaesthesia assistance, patient monitoring and safety, equipment and drug preparation, infection prevention, and emergency response. Non-technical competencies such as effective communication, teamwork, professionalism, ethical responsibility, situational awareness, and adherence to institutional safety protocols were also identified as critical. All competencies were grounded in real-world clinical practice and validated through expert consensus.

Conclusion

This study presents a validated, context-specific competency framework for Anaesthesia Technologists in India. The findings provide a robust foundation for strengthening competency-based training, improving workplace readiness, and enhancing perioperative patient safety. In the next phase, these competencies will be translated into Entrustable Professional Activities to support structured, entrustment-based training and assessment.

Key ideas

1. Validation of core competencies for safe anaesthesia practice.

2. Alignment of workplace tasks with Entrustable Professional Activities.

3. Expert consensus to improve standardization and clinical readiness.

Theme

Designing & Refining Learning Systems, Scholarship, Leadership and Educator Growth

2.12. To explore the leadership dynamics of educational leaders involved in implementing personalized learning pathways in health science center's.

Presenting author: Kirthika Y

Authors

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Background

Academic health science centers rely on educational leaders for curriculum design and learner development. However leadership roles are often assumed without formal training, particularly in India. Despite leadership being a core competency in health sciences education structured leadership development aligned with personalized learning pathways is limited. This study explores leadership dynamics to inform a tailored leadership development module for postgraduate health science students in India

Methods

A qualitative multi-step design was used. Ethical approval was obtained from the Institutional Ethics Committee, SRM MCH RC, Chennai (IEC No. 9220), and informed consent was obtained from all participants. Phase one involved thematic document analysis of literature and curriculum reports. Phase two comprised semi-structured interviews with educational leaders recruited through snowball sampling until saturation, with triangulation of findings.

Findings

The study identified key leadership qualities, leadership styles, challenges, and personality traits influencing the implementation of personalized learning pathways in academic health science settings. Themes highlighted the importance of adaptive leadership, communication, emotional intelligence, decision-making, and organizational support, alongside challenges related to role transition, institutional constraints, and limited formal leadership preparation.

Conclusion

This study provides an in-depth understanding of leadership dynamics among educational leaders in academic health science center's in India. The findings offer a foundation to design a personalized leadership development module aimed at enhancing the inherent leadership qualities of postgraduate health science students.

Key ideas

1. Formal leadership training is limited for educational leaders in academic health science center's.

2. Implementing personalized learning requires complex, context-dependent leadership practices.

3. Leadership insights can guide development of a targeted postgraduate leadership module.

Theme

Scholarship, Leadership & Educator Growth, Preparing for the Digital Future of Healthcare Education

2.13. Embedding Planetary Health Through Transformative Biodegradation of Polymer-Based Dental Impression Materials: An Innovative Sustainability-Driven Cross-Disciplinary Conceptual Framework

Presenting author: Queen Alice A

Authors

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Background

This framework examines the environmental impact of polymer-based dental impression materials, which persist in landfills and contribute to greenhouse gas emissions. It addresses the gap in integrating planetary health into oral healthcare waste management and biomaterials science, proposing a cross-disciplinary approach to advance biodegradable alternatives and embed sustainability in dental practice.

Methods

This framework integrates microbiology, dental materials science, and environmental science to evaluate biodegradation of polymer-based dental impressions using polymer-degrading microorganisms. It spans laboratory analysis, life-cycle sustainability assessment, and transformative education. By reframing biomaterials teaching as inquiry-based and sustainability-driven, it advances interdisciplinary innovation and ethical, environmentally responsible dental practice.

Findings

Evaluation is conceptualized through a mixed-methods approach assessing cognitive, attitudinal, and applied competencies. Anticipated outcomes include improved understanding of polymer biodegradation mechanisms, increased awareness of environmental implications of dental practice, and strengthened interdisciplinary collaboration skills. Learners are expected to demonstrate the ability to critically appraise material sustainability and integrate ecological considerations into clinical decision-making. Institutionally, the framework supports curriculum innovation by operationalizing sustainability as a measurable educational competency.

Conclusion

This model integrates biodegradation research into biomaterials education, linking sustainability with clinical practice. It fosters transformative learning, cultivates ecological awareness, and prepares dental professionals to uphold environmental stewardship alongside clinical excellence.

Key ideas

1. Transformative Biodegradation Science

2. Planetary Health Integration

3. Sustainability-Driven Education Reform

Theme

Innovations & Emerging Concepts, Equity, Ethics & Systemic Responsibility

2.14. Implementation of an integrated teaching module on 'Pandemic Preparedness' for Phase 3 MBBS students

Presenting author: Mukta Wyawahare

Authors

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Background

The undergraduate education on pandemic preparedness for MBBS students remains insufficient at present. In order to deliver relevant and comprehensive hands-on knowledge on pandemic preparedness, we proposed to implement modular teaching on this topic for Phase 3 part 1 MBBS students.

Methods

Institute's scientific and ethics committee approval was obtained and informed consent was taken from the students prior to the study. The teaching module consisted of three sessions on infection control practices, triaging patients and sample transport procedures in a pandemic setting. The students were divided into smaller groups of 5-6 during the demonstrations. Their perception was gathered from the feedback questionnaire and learning was assessed using pre and post-test forms.

Findings

One hundred and fifty five students participated in the study. One hundred and eight answered both the pre and posttest enabling paired analysis, mean scores improved significantly from 8.79±2.01 to 10.33±2.22 (mean difference: -1.5; 95% CI: -2 to -1.07; $p<0.0001$). Student feedback (n=146) was predominantly positive. High satisfaction (78-81%) was observed for the sessions on infection control practices, hand hygiene and PPE demonstration, and learning material effectiveness. Triage understanding and preparedness showed positive, though slightly lower, ratings (62-68%).

Conclusion

This module is an effective approach to enhance pandemic preparedness education for undergraduate medical students. Incorporating more hands-on practice and real-world scenarios may further optimize the module's impact.

Key ideas

1. Implementation of a structured training module on pandemic preparedness for MBBS undergraduates

Theme

Designing & Refining Learning Systems

2.15. Ignited to Inspire: How a Curriculum Innovation Project in 2009 ignited a student led community based palliative care unit that continues to inspire generations of medical students

Presenting author: Sairu Philip

Authors

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Background

A Curriculum Innovation Project initiated in 2009 introduced training in palliative care for medical students. The students were introduced to the concepts and principles of community based palliative care in the Community Medicine Curriculum for, four days of practical posting during third semester through experiential learning in the community using a variety of teaching learning methods.

Methods

Training involved interactive lectures, video show, role-play and group discussion to understand the relevance of palliative care and basic communication skills. The students were taken to a CBPC Unit where they were taken for home visits to bedridden patients. They initiated a student led community based palliative care unit named Karunyam on November 1, 2009.Every Sunday, students conducted home care visits to bedridden patients under the leadership of a trained nurse.

Findings

This voluntary initiative stood the test of time and is continuing during 2026 and it has become a proud activity of students under the Students Union. From 2012 to 2026, they are conducting regular Family meets in the campus wherein around 25 bedridden patients and their caregivers are brought to the campus and have food together and entertainmentsIn 2013, they gathered 20 paraplegia patients and helped in a two-day rehabilitation workshop which was the first time these patients meet each other. During 2015, they collected money and took back and gave land deed to a patient who had no children. Students have bonded with these family and they are invited for special occasions to these houses.

Conclusion

The initiative was student led and faculty intervened only for coordination with higher ups. Students without any instruction plan to bring the patients safely to the campus, feed them, take them to the bathroom with great careA tradition has been made such that the seniors help in case the patients need any assistance from the hostel. On Jan 4,2026, a student shared “We practise AETCOM module through karunyam more than what is taught in class”.

Key ideas

Exposing students to real needs of the community help students to practise empathy and compassion

Theme

Innovations & Emerging Concepts, Reflective and Affective Learning in Early Medical Education

2.16. Exploration of Global Community-Based Medical Education Curricula: A Scoping Review

Presenting author: Vinayagamoorthy V.

Authors

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Background

WHO mandates strengthening primary healthcare for global health equity, yet many regions remain underserved. Community-Based Education (CBE) addresses this by training students outside hospitals, fostering social accountability and understanding social determinants of health. Essential for universal health coverage, CBE remains globally inconsistent. This review analyses curricula to identify barriers, helping developers design models that effectively meet local community needs.

Methods

Using the Arksey and O'Malley framework, this scoping review mapped global CBE literature following PRISMA-ScR guidelines. A systematic search of PubMed and Google Scholar targeted service, research, and training-focused models. Researchers independently screened titles and abstracts, followed by full-text appraisal based on methodological rigor. Data were charted into Excel, focusing on curriculum design, participants, and barriers, then analyzed through textual narrative synthesis.

Findings

The scoping review of 36 global models reveals that nearly half were published between 2010 and 2020, primarily in Southeast Asia. Most programs used descriptive designs and were situated in rural settings (83.4%), with Primary Health Centres as the main learning site. Curricula focused on community health awareness (55.6%) and socio-cultural determinants. While 44.4% of programs were longitudinal, assessment methods were underreported in 67.9% of studies, showing a reliance on written tests over field-based evaluation.Implementation faced significant barriers, including poor student attitudes, faculty pedagogical gaps, and administrative issues like funding and transport. Community-related hurdles included language barriers and security concerns. Despite these, stakeholders reported enriched learning experiences and positive attitudes toward rural practice.

Conclusion

CBME globally improves student attitudes and social accountability, yet implementation remains inconsistent. A significant gap exists between longitudinal, interprofessional Western models and shorter, department-led Indian programs. To optimize impact, curricula must shift from classroom testing to community-based, workplace assessments using diverse indicators. Future success depends on moving beyond service-oriented models toward true community engagement and sustainable institutional reform.

Key ideas

Diverse educational models. Global implementation gaps and Multidimensional barriers.

Theme

Designing & Refining Learning Systems

2.17. Panel Discussion: An Effective Tool in Medical Education for a Multidisciplinary Team

Presenting author: Vidya G.

Authors

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Background

Medical education has evolved from a passive, content-centered approach to an active, competency-based model of learning. Conventional teaching-learning methods like lectures, fail to capture the nuance of interprofessional nature of modern health care, medical education and community outreach. Panel Discussion as a dynamic synthesis tool that integrates diverse evidence into a cohesive interprofessional educational experience.

Methods

We have conducted a mixed method study: A strategic approach to promote voluntary whole-body donation. As a part of the study, we conducted a panel discussion on Optimizing Body Donation for Medical Education and Research: Challenges and Solutions. All possible challenges for body donation put forth by the public were addressed and the solutions discussed by the experts' team from Forensic medicine, Law and order officials and the Anatomists were recorded and reviewed.

Findings

Three major themes emerged: promotion of voluntary body donation, institutional procedures for procuring unclaimed bodies for medical education, and challenges with potential solutions. It revealed that voluntary body donation remains limited, due to inadequate public awareness and the lack of simple, standardized procedural information accessible to the community and inter-institutional variation in documentation and implementation practices Logistical barriers, particularly the absence of reliable transport mechanisms for transferring the deceased from the place of death to the medical college, were identified as a significant operational concern. In addition, persistent public confusion between body donation for medical education and organ donation for transplantation was frequently highlighted. These findings provide credible qualitative evidence and actionable guidance for strengthening voluntary body donation programs and improving procurement practices in medical institutions.

Conclusion

Panel discussion is an effective method for qualitative data analysis where in a limited duration of time ampule amount of valuable information can be recorded and it serves as an effective platform for the interprofessional scientific conversation and aids numerous participants to register their related thoughts in the same platform.

Key ideas

1. Challenges in body donation and solutions for it

3. Solutions and the role of panel discussion for overcoming the challenges

Theme

Foundations of Learning & Human Development

2.18. Health system contextual factors informing teaching, learning and evaluation methods to practice team-based care for non-communicable disease care in iterative implementation research

Presenting author: Kalaiselvi S

Authors

Kalaiselvi S[1]*, Akkilagunta Sujiv[2], Mubasherra Firdoss Khan[2], Pradeep R Deshmukh[2], Srinivasan T[1], Lokesh Tamgire[2]

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Background

Health care for non-communicable diseases involves multidimensional components. The current mid-level health care provider reliant model faces challenges due to overburden. To ensure the predictive availability of care and support a patient-centric continuum of care, there is a need to redistribute tasks within a team. Implementing such a model needs shared understanding and skill acquisition. Aim was to develop a strategy for capacity building to facilitate team-based care for NCDs.

Methods

As a part of a implementation strategy to strengthen NCD care, an embedded mixed methods study condcuted. Process mapping and facility observations helped to understand the roles and responsibilities and the existing standards of care practised. Non-participant observation, combined with contextual interviews and in-depth interviews explored perceived training needs and expectations. Knowledge score, prescription audits and non-participant observations are used as evaluation methods.

Findings

The training content was informed through formative phase findings and co-design workshops conducted in clusters. Learning from the initial round of orientation programs informed the modifications for subsequent cycles. A total of 88facilities and 3 in-depth interviews conducted. The refresher trainings held at three levels: district, block, and facility. These training sessions followed an approach of training all care providers as a team, with modules mapped to skills for delivering care, delivered in pulses, embedded in the routine work schedule, and using case-based learning and discussion to address misconceptions. Trainings which emphasized protocol-based management, familiarity with technical support, team-based incentives, service delivery frameworks, aspirations to be a part of NQAS, defined clinical flow and decentralized training opportunities have motivated to practice team based care. Competing priorities, new cadre, insufficient resources are major bottlenecks.

Conclusion

The reorientation facilitated the acceptance of additional responsibilities. Community engagement and outreach services strengthened by redistribution of tasks. Team-based care can strengthen the quality of chronic disease management by improving patient communication, adherence to standard of care, and retention in long-term care in primary care settings. However, integration of such a strategy needs to be supported by an adequate resource pool of trainers and strong supportive supervision.

Key ideas

1. Team based care in primary care settings for chronic disease management

2. Training need assessment for programmatic service delivery

Theme: Designing & Refining Learning Systems

2.19 Medical students' perceptions and experiences of simulation-based skill teaching: A qualitative analysis

Presenting author: Masanam Kasi Sumathy

Authors

Masanam Kasi Sumathy[1]*, Zayabalaradjane Zayapragassarazan[1], Dinker Pai[2], Mukta Wyawahare[3]

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Background

While quantitative scores measure competency, qualitative feedback is essential to understand the student's learning journey. Identifying perceived advantages and barriers is crucial for refining simulation-based education and ensuring a smooth transition from theory to clinical practice. The objective of the study is to explore and analyze the perceptions, experiences, and challenges of third-year medical students regarding the newly implemented simulation-based skill teaching module.

Methods

A qualitative descriptive study was conducted using semi-structured interviews and open-ended feedback forms. Ethical clearance was secured from the Institutional Ethics Committee (IEC) and the Dean (Academic). Written informed consent was obtained from all participants prior to data collection. Interviews were digitally recorded with participant permission, and strict anonymity was maintained throughout the data analysis and reporting process. Data were analyzed via thematic analysis, focusing on how students "constructed" their understanding of procedural skills through the simulation environment based on social constructivism theory.

Findings

Students reported high "Psychological Safety" and valued "Immediate Feedback" over traditional bedside methods. However, challenges included a "Fidelity Gap" regarding emotional complexity and initial "Technology Anxiety." Despite these barriers, participants expressed that the anonymous feedback process allowed for honest reflection. They unanimously suggested "Curriculum Expansion" and the inclusion of refresher sessions prior to internship postings.

Conclusion

The third year undergraduate medical students felt psychological safety in the simulation based skill teaching module.

Key ideas

1. Perception on simulation based training

2.20. Development of entrustable professional activities for a three year geriatric mental health training program: A Delphi based curriculum reform study

Presenting author: Akanksha Sonal

Authors

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Background

CBME requires operationalization into observable clinical tasks to guide entrustment decisions. Entrustable Professional Activities (EPAs) bridge competencies and independent clinical practice. While EPAs have been developed across multiple specialties, no structured EPA framework exists for geriatric mental health training in India. The objective is to develop and validate specialty-specific EPAs for the geriatric mental health training program using a structured consensus methodology.

Methods

A mixed-methods research design will be conducted in two phases. Phase 1 will include mapping curriculum, interviewing stakeholders, and looking at national and international frameworks for geriatric mental health competency. Phase 2 will employ a 2-round modified Delphi process with 10-12 experts. Candidate EPAs will be rated on relevance, observability, essentiality, and measurability using a 5-point Likert scale. Consensus was defined as ≥75% agreement with a mean score ≥4.0 and SD <1.

Findings

Expected Results: We anticipate generating an initial list of over 30 EPAs spanning 12 domains. Following iterative refinement, we will be getting a minimum of 20 or so EPAs that have achieved consensus. As a trainee and now as faculty, I talked to senior consultants and residents, which helped us figure out that the important areas should include thorough assessments of older adults' mental health, brain disorders, medication management for older people, evaluating their decision-making ability, and working with other medical teams on issues like confusion, care in the community, and end-of-life. A five-level entrustment scale, which will be embedded for longitudinal assessment, will be used.

Conclusion

This study will provide the first structured EPA framework tailored to geriatric mental health training in India. The framework will clarify essential knowledge for trainees during various training phases and will guide trainers on what and how to assess in accordance with CBME reforms and international guidelines, thereby supporting structured entrustment decisions. Future research should evaluate feasibility, reliability, and impact on training outcomes.

Key ideas

1. Entrustable Professional Activities for Geriatric Mental Health

2. Modified Delphi study design

3. Assessment techniques in superspecialty departments

Theme

Designing & Refining Learning Systems

Domain 3: AETCOM, Technology, Learning environment

3.1. Development and Validation of a Structured Neuro-Linguistic Programming–Based Academic Enhancement Module for Operation Theatre and Anaesthesia Technology Students: A Modified Delphi Study

Presenting author: U. Monica Varshini

Authors

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Background

Academic performance, motivation, and emotional regulation are essential for success among undergraduate OTAT students. Many face challenges such as poor study habits, procrastination, low confidence, and academic anxiety, which affect learning outcomes. Although Neuro-Linguistic Programming (NLP) is used in education, validated interventions in Allied Health Sciences remain limited. This study aimed to develop and validate a standardized NLP-based academic enhancement module.

Methods

The study used a modified Delphi-based validation design and obtained ethical approval (IEC No: ECR/8966/INST/TN/2013/RR-19). The module was developed using three NLP pillars: Outcome Thinking, Behavioural Flexibility, and Sensory Frame, applied through Visualization, Swish Pattern, and Circle of Excellence. Content validation involved expert review. NLP Practitioners assessed relevance and clarity using I-CVI and S-CVI. Items below acceptable levels were revised until consensus was achieved.

Findings

The results demonstrated a high level of agreement among NLP practitioners regarding the relevance, clarity, and importance of the module components. For relevance, all items achieved excellent I-CVI values above 0.889, except for one item with an I-CVI of 0.78, which was considered acceptable. For clarity, all items showed excellent I-CVI values greater than 0.889, except for one item with an I-CVI of 0.667. Through successive Delphi rounds, items with lower validity indices were revised and re-evaluated until consensus was achieved. Scale-level analysis indicated moderate to high overall content validity (S-CVI/UA = 0.694; S-CVI/Ave = 0.996), reflecting strong expert agreement and supporting the suitability, conceptual soundness, and practical applicability of the module.

Conclusion

The validated NLP-based academic module provides a structured framework to enhance academic motivation, behavioural adaptability, and emotional regulation among OTAT students. Expert validation strengthens its rigor and practical relevance. The module represents a novel contribution to Allied Health Science education and shows potential for academic use. Future research will focus on large-scale implementation and evaluation of its impact on academic performance and learning outcomes.

Key ideas

1. Structured NLP-Based Academic Support

2. Expert Consensus Strengthens Educational Interventions

3. Bridging Behavioural Techniques and Health Professions Education

Theme

Designing & Refining Learning Systems, Scholarship, Leadership & Educator Growth

3.2. Artificial Intelligence -Augmented Standardised patient models for AETCOM competency Evaluation(Communication Skills): A Pilot Study

Presenting author: Magi Murugan

Authors

Nayyar Iqbal[1], Sunil Subramanyam[2], Magi Murugan[3], Sandesh[4], Johny Asir[5], Manikandan[6], Renu G'Boy Varghese[7]

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Background

The AETCOM module is important part of CBME curriculum. It teaches about communication and professionalism. Effective communication is essential for good doctor patient relationship. It is usually tested by OSCE but this is time consuming ,requires more resources and do not give feedback.AI-based Standardized Patients (SPs) can offer a more realistic and patient-centered way to test communication skills. This study aims design and validate an AI based simulated patient for AETCOM session

Methods

A checklist was created for the informed consent which was validated by 10 independent faculty for relevance and clarity. 2AI chatbots were created one which acted as simulated patient and the other chatbot for evaluation of the conversation. Participants were asked to interact with chatbot and the conversation scripts were downloaded. These scripts were evaluated by another AI based module to generate the score as per rubric with narrative feedback. The same participants were evaluated by OSCE.

Findings

The AI based assessment showed excellent agreement with expert ratings with ICC of 0.906 and near perfect agreement on average measures)ICC=0.980)indicating expert level reliability. Interexpert agreement was lower and more variable with moderate reliability among individual experts ICC=0.536highlighting subjectivity in human scoring.AI expert agreement was stronger than agreement among individual expert themselves demonstrating superior consistency and reproducibility of AI tool. Bland Altmann analysis showed a small but consistent negative bias with AI scoring slightly lower than experts indicating mild underestimation. Comparison of Mean score of AI assessment with OSCE assessment showed no significant difference.

Conclusion

AI based assessment shows promising reliability and consistency in evaluating communication skills.It may reduce interobserver variability compared to human assessors.AI tools can support assessment of large group of students within limited time frames.AI may supplement rather than replace standardised patients and human evaluators.

Key ideas

1. Soft skills like communication skills can be assessed

2. AI tools can support assessment of large group of students within limited time frames

3. AI may supplement rather than replace standardised patients and human evaluators

Theme

Preparing for the Digital Future of Healthcare Education

3.3. Comparative Analysis of Optimised Generative Artificial Intelligence Architectures for Objective Structured Practical Examination development in Anatomy Education

Presenting author: Nikilesh S

Authors

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Background

Artificial intelligence (AI), the GPT-based large language models, offers to support Objective Structured Practical Examination (OSPE) development.However, how model generation parameters influence assessment quality remains underexplored.AI-assisted assessment design may improve efficiency and consistency in OSPE development.Temperature generation directly affect creativity and reproducibility.The primary objective is to evaluate how different GPT temperature configurations affect OSPE quality.

Methods

Using a single GPT model, three configurations were tested: low-temperature[Temperature 0.1-0.2], moderate-temperature[Temperature 0.5-0.7] and high-temperature[Temperature 0.8-1]. Each configuration will generate OSPE stations aligned to predefined competencies. Stations were evaluated by blinded investigators using standardized criteria: validity, realism, clarity, feasibility, and usability. The quantitative variables were analyzed using one-way ANOVA and Kruskal–Wallis tests.

Findings

The primary investigator evaluated the compliance with the format, while educational content was assessed independently by two others, blind to architectural configurations, using a comprehensive assessment grid. Low-temperature OSPEs had higher inter-rater reliability and checklist consistency. Moderate-temperature configurations achieved overall optimal usability. It also had 88% usability without major revisions and a first-place preference ranking, outperforming the other configurations. They performed best in format compliance and most content quality criteria, including accuracy and clarity. Higher-temperature OSPEs will score higher on realism and authenticity ratings.

Conclusion

It establishes a best practice model for the structured design of OSPEs, whereby architectural optimisation reduces failure rates stemming from inconsistencies. It also works as a scalable framework that allows rapidly to expand their assessment, in various disciplines. By automating the laborious drafting phase, AI allows human experts to shift their focus from creation to validation and refinement, ultimately enhancing the overall quality of assessment in the modern medical curriculum

Key ideas

1. Establishes a "Best practice" model for the structured design of OSPEs.

2. Developing a "Scalable Framework" that allows rapidly to expand their assessment.

Theme

Designing & Refining Learning Systems, Innovations & Emerging Concepts

3.4. Readiness in medical pedagogy and practice: A critical reflection on scaling telemedicine in India

Presenting author: Kuru Dindi

Authors

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Background

When the COVID-19 pandemic struck the world, not only did it test the existing health system's preparedness, but it also accelerated the use of telemedicine. India continues to face a critical gap in realising the full potential of telemedicine for adequate healthcare, as efforts are non-uniform across the country. Existing challenges in telemedicine, requires revisiting the medical curriculum for the successful expansion and adoption of telemedicine.

Methods

This abstract proposes an educational innovation module to integrate telemedicine into curricula, building on the existing system that prepares medical professionals for virtual care. A shift is necessary to build capacities of medical colleges for a socially accountable digital practice by incorporating simulation for teleconsultation and community immersion programs which includes both summative and formative modes of assessment. An interdisciplinary collaboration is much-needed.

Findings

The inclusion of an evaluation that assesses medical students' socio-technological competencies in telemedicine will require a broader foundation in digital health. Pre- and post-training assessments are indicators of students' quantitative and qualitative aptitude, readiness to adopt telemedicine or the tenets of digital health, confidence, and the ethical approaches required to prepare future medical professionals.

Conclusion

Sustained participation by institutions with leadership support and funds earmarked is a significant factor that will ensure a successful scale-up in India, despite the ongoing challenges of erratic internet connectivity, disparities in device access, and data privacy concerns. As medical colleges are a vital link to a healthy nation, a continued upskilling through innovation is the way forward.

Key ideas

1. Digital health in medical curriculum and pedagogy

2. Scaling telemedicine in India

3. Leveraging existing medical curriculum and pedagogy for telemedicine

Theme

Preparing for the Digital Future of Healthcare Education

3.5. Comparing the Efficacy and Validity of AI-Generated vs Teacher-Generated Multiple Choice Questions in Pharmacology for Phase II MBBS Students- A mixed method study

Presenting author: P. Deepa Kameswari

Authors

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Background

Multiple-choice questions (MCQs) are widely used in medical education for formative and summative assessment. With the rise of generative AI, question generation can be automated, potentially reducing faculty workload. However, concerns persist about the accuracy, cognitive level, and validity of AI-generated MCQs compared to faculty-created ones. This study aims to evaluate the efficacy and validity of AI- versus teacher-generated MCQs in Pharmacology for Phase II MBBS students.

Methods

Sixty MCQs were generated: 30 teacher-sourced from standard books (6 per Bloom's level 1-5) and 30 AI-produced (15 each from ChatGPT-4 and Gemini 2.5, 3 per level). Three senior pharmacology experts vetted all 60 MCQs on five domains - appropriate to competency, relevance, quality, cognitive level correctness and accepted for summative assessment. Forty validated MCQs (20 each group) were administered to 106 students. Content validity, item analysis and faculty feedback were assessed.

Findings

AI MCQs showed superior expert ratings overall (P=0.026), in competency (P=0.013) and summative suitability (P=0.016), with higher content validity (0.85 vs 0.76). However, no significant difference between ChatGPT and Gemini across all domains. Percentage of correct guesses by experts (blinded) were low (AI: 40%, teacher: 58%) Students scored higher on AI questions (12.9 vs. 9.7, P<0.001). Item analysis showed higher difficulty index (64.5 vs. 49.9, P<0.001) and lower discrimination index (0.18 vs. 0.47, P<0.001) for AI MCQs, insignificant distractor effectiveness(79.9 vs 89.9).KR-20 reliability scores=0.7 for both question sets. Compared scores between experts on AI MCQs indicated positive perception, thematic analysis of interviews revealed AI was perceived as highly accurate and comparable to teacher items, but emphasized need of human vetting.

Conclusion

AI-generated MCQs outperform teacher-generated in validity but lag in difficulty and discrimination indices.With expert oversight, AI serves as a supportive tool for efficient, high-quality assessment in pharmacology education.

Key ideas

Prudent use of AI can support the development of high-quality MCQs for medical assessments.

Theme

Preparing for the Digital Future of Healthcare Education

3.6. Operationalising CBME through an AI-Enabled Intelligent Central Academic Management System (iCAMS): An Implementation Study with Early Pilot Evidence

Presenting author: Shrithu BM

Authors

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Background

CBME is adopted in India yet operational implementation remains fragmented. Incoherent alignment between competency mapping and documentation creates a data-logistics gap. These silos inflate faculty and administrative burden. Parallelly, evolving medical knowledge drives learner demand for responsive, digitally enabled support beyond the classroom. A critical unmet need exists for integrated academic solutions that addresses this gap. Such solutions must be pedagogy led, transparent and human governed.

Methods

ORFIQ's Intelligent Central Academic Management System (iCAMS) is a multiagent AI enabled system that unifies teaching delivery, competency tracking and regulatory documentation within a single framework by unifying the data silos. Embedded with an intelligent knowledge graph and guided by the ADAPT Framework (Adaptive, Data-driven, Actionable, Pedagogy-led, Transparent), iCAMS supports CBME implementation model that strengthens governance and supports institutional academic excellence.

Findings

Guided by the ADAPT framework, iCAMS was piloted across pre-clinical, para-clinical, and clinical undergraduate teaching in two university settings. The implementation involved 650 students, 27 faculty, and 30 competency-mapped sessions delivered through a digitally enabled flipped-classroom model incorporating pre-session materials, knowledge checks, in-session teaching aids, and post-session revision resources. System analytics recorded 1,131 quiz attempts and 418 structured feedback submissions, with 30% of engagement occurring outside scheduled academic hours, suggesting increased self-directed use. In a faculty- and student-evaluated pilot subset, quiz participation reached 74%, 92% of students reported improved conceptual clarity, and all learners revisited materials after sessions. Faculty reported an approximate ten-fold reduction in quiz preparation time and 69% improved logbook maintenance. Together, these findings provide early evidence of feasibility, acceptability, and operational value for CBME implementation.

Conclusion

Pilot findings indicate that AI-enabled academic infrastructure can successfully operationalise CBME while preserving faculty judgement. Through integration of curriculum, teaching workflows, learner analytics, and documentation, iCAMS improves learner engagement and streamlines academic processes, showcasing feasibility and institutional acceptance. Pedagogy-led, human-governed AI provides a scalable, data-driven solution for advancing medical education in a digital-ready environment.

Key ideas

Idea 1: Digital transformation & CBME - AI-enabled academic infrastructures can operationalise CBME by connecting curriculum, teaching workflows, assessments, and learner analytics.

Idea 2: – Personalised learning & engagement - Learning analytics and intelligent tutors enable personalised learning pathways, continuous feedback, and enhanced student engagement.

Idea 3 – Institutional readiness & governance - Integrated AI systems strengthen academic governance, faculty efficiency, and institutional readiness for digitally enabled healthcare education.

3.7. Development and Implementation of a Rubric for Assessment of Community Diagnosis Record Notebooks with AI-Assisted Scoring

Presenting author: Viswanath Narendiran

Authors

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Background

Community Diagnosis (CD) posting is an important experiential component in undergraduate Community Medicine. Student record notebooks document field work, observations, and reflections and are central to assessment, but evaluation is time-consuming and variable. Rubric-based assessment improves consistency. This study aims to develop a simple holistic rubric and examine feasibility and agreement of AI-assisted scoring with faculty evaluation.

Methods

A holistic rubric for Community Diagnosis notebooks will be developed by expert consensus using competency-based principles. It will assess theory, field observation, reflection (6 marks each), and legibility (2), total 20. Notebooks will be scanned, transcribed, and scored by AI using a standardized rubric prompt. Faculty and AI scoring will be blinded. Errors will be documented. Agreement (ICC) and evaluation time will assess feasibility.

Findings

The study is expected to show that a simplified holistic rubric can be applied consistently for assessing Community Diagnosis notebooks in routine academics. AI-assisted scoring is anticipated to show good agreement with faculty scores in theory, field observation, and reflection, but lower agreement for legibility due to handwriting variability. Intraclass correlation is expected in the moderate–good range, supporting AI as a supplementary tool, not a replacement. Bland–Altman analysis is likely to show no major bias. Minor text extraction errors may occur but predefined exclusions will limit impact. AI scoring is expected to reduce evaluation time, supporting feasibility, transparency, and workload reduction with acceptable validity.

Conclusion

A structured yet simple rubric, combined with careful documentation of AI-related errors, may support consistent and transparent assessment of Community Diagnosis record notebooks while reducing faculty workload. This approach aligns with competency-based assessment principles and offers a practical framework for responsible integration of AI in undergraduate medical education.

Key ideas

1. Feasibility of AI as a Supplementary Assessment Tool

2. Structured Rubric-Based Assessment Improves Consistency

3. Validity and Agreement Between AI and Faculty Evaluation

Theme

Scholarship, Leadership & Educator Growth

3.8. Why are some patients neglected? - A visual learning tool to explore "neglect" in Neglected Tropical Diseases: A mixed-methods study from Jodhpur, India

Presenting author: Maya Gopalakrishnan

Authors

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Background

Neglected Tropical Diseases (NTDs) are diverse conditions -leprosy, Kala-azar, dengue, and snakebite affecting >1 billion people. "Neglect" in NTDs has been explored through the lens of unequal resource distribution between the Global North and South. However, it is the "people" who are neglected, not the disease. Vocabulary/tools to explore neglect in an individual patient are limited. We aimed to develop and validate a visual learning tool for learners to conceptualise neglect in NTDs.

Methods

Sequential-exploratory mixed-methods design was used. Explored perspectives & attitudes about neglect in NTDs, using eight ~90 min focus groups (FG). FGs were recorded with consent, transcribed, coded, and reflexively analysed. Based on the themes, visual tool was designed. Content validation by NTD experts & clinical-educators, 4 patients provided feedback on inclusivity/comprehensibility. Learners participated in retrospective cognitive interviews for response process validity.

Findings

FG participants were 28 JRs, 4 SRs, 7 medical students, and 12 faculty. Two themes- "Neglect is widespread, dynamic, multidimensional, and deep-rooted" and "Mitigating neglect" were generated. Using the dimensions of neglect from the subthemes (e.g. patient related factors, health access issue, health system related neglect, curricular gaps in NTD training etc.), we evolved the 'neglect map' as a visual learning tool for use in learner-patient interaction in clinical settings. The NTD map, a physical pen and paper-based tool with the patient at the centre of the map and depicting relationships between various dimensions of neglect was further refined based on inputs from experts, patient feedback and learners [Undergraduate medical students (n=6), Interns (n=6), JRs (n=7), SRs (n=2)]. The learners reflected and documented the various dimensions of neglect for a patient with NTD using the map.

Conclusion

We developed a unique NTD-specific learning tool that effectively provides vocabulary and context for exploring neglect utilising perspectives and experiences of patients, learners, and healthcare professionals. The tool introduces and allows learners to explore and address disparities and promote health equity in a safe learning environment. Further, patient engagement positively their utilising lived experience (Towles level 5 engagement) is a key aspect of tool design.

Key ideas

1. A unique NTD-specific validated learning tool for addressing inclusivity and equity in curriculum.

2. Methodologically robust - addressing felt needs for our local problems

3. Key stakeholder (learners & patients) involved in tool evolution and validation

Theme

Equity, Ethics & Systemic Responsibility, Relationships, Communication & Collaboration

3.9. Perceptions and experiences of medical interns on learning and applying AETCOM competencies in patient care: A qualitative study

Presenting author: Nishanthi.A

Authors

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Background

Competency-Based Medical Education curriculum has introduced Attitude, Ethics and Communication (AETCOM) module for medical undergraduate students. However, there is lack of evidence on exploration of students' holistic learning perception and experiences in translation of these learnings in day-to-day patient care. Thus, present study explored perceptions of medical interns in learning AETCOM competencies and their experiences in applying AETCOM learning in real-life clinical practice.

Methods

This qualitative exploratory study was conducted by MEU, SMVMCH, Puducherry. Participants included medical interns who have completed at least 3 months of internship and exposed to entire NMC prescribed AETCOM module. Study was initiated after IEC approval (EC/190/2025). Written informed consent was obtained from participants. Free-listing exercise, focus group discussions (FGDs) and in-depth interviews (IDIs) were conducted. Data was analyzed by manual thematic analysis.

Findings

A total of 30 interns participated in the free-listing exercise; and three FGDs and five IDIs were conducted to reach point of data saturation. Thematic analysis for perceived learning identified six themes, namely improved doctor patient communication skills, ability to break bad news, development of professionalism, empathy, understanding ethical issues and working in teams. Similarly, for experiences on applying AETCOM learnings, four themes emerged, namely patient centered communication, ethical issues, empathy, and professionalism and teamwork.

Conclusion

This study shows that interns perceived AETCOM training to contribute to improved doctor-patient communication skills including ability to break bad news, development of professionalism, empathy, ethical reasoning, and teamwork, with many interns reporting real-life application of these competencies in clinical practice. Thus, structured implementation and evaluation of the AETCOM module across medical colleges should be considered to assess its wider applicability and impact.

Key ideas

1. AETCOM module builds communication skills, empathy, ethics, and professionalism in medical interns

Theme

Equity, Ethics & Systemic Responsibility, Innovations & Emerging Concepts

3.10. Enhancing Communication Skills through Early Clinical Exposure: An Interdepartmental Role-Play–Based Intervention for First-Year MBBS Students

Presenting author: Bitty Raghavan

Authors

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Background

Early Clinical Exposure (ECE) in CBME contextualizes basic science in clinical settings. Introducing engaging, theme-based role play with explicit communication assessment and reflection within ECE may enhance early professional growth and patient-centredness. The objective is to describe implementation of a structured interdepartmental ECE role-play module and evaluate communication behaviours and student perceptions among first-year MBBS students.

Methods

A structured ECE intervention among 42 first-year MBBS students was evaluated using multisource online feedback. Faculty facilitated interdepartmental integrated learning. Students performed doctor patient role-plays on six common clinical conditions (fever, cough,vomiting,diarrhea,headache and jaundice). Each scenario included communication challenges promoting empathy, listening, and reassurance. Skills were assessed using a six item Kalamazoo based checklist completed by peers and faculty.

Findings

Quantitative data were analysed using R software with descriptive statistics (frequencies, percentages, mean ± SD). Open-ended responses were analyzed using inductive thematic analysis. A total of 42 student feedback forms were analyzed. : The proportion of "done well" ratings across six communication domains in adapted Kalamazoo checklist which are greeting, empathy, active listening, open ended questions, summarization and closure, ranged from 78% to 90%, with an overall average of 86%. Highest performance was observed in greeting, empathy, and active listening. The mean usefulness rating for peer observation was 4.6 ± 0.5. Summarization and checking showed relatively lower scores. Student feedback demonstrated high satisfaction (4.8 ± 0.4) and improved confidence in patient interaction. Qualitative themes included empathy, structured communication, reflective learning, and enhanced self-confidence.

Conclusion

A structured clinical scenario based role-play in interdepartmental ECE session was effective in enhancing communication skills to first-year MBBS students. Early structured clinical exposure combined with peer and faculty feedback promotes reflective learning, empathy, and confidence, supporting the early integration of communication training in the medical curriculum.

Key ideas

1. Structured role play
2. Early Clinical Exposure and Communication Skills
3. Innovation in Medical education

Theme

Foundations of Learning & Human Development

3.11. "In Their Final Chapter, I Began Mine": Using Rich Pictures and Reflective Writing to Explore Medical Students' Emotional Responses to Cadaver Disrobing

Presenting author: Divyashanthi CM

Authors

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Background

The first cadaver disrobing marks a profound transition in a medical student's journey. Beyond anatomy, it evokes anxiety, curiosity, reverence, and ethical reflection. Traditional teaching emphasizes cognition while overlooking structured emotional processing. This study examines rich pictures and reflective writing as complementary tools to support emotional articulation and early professional identity formation during students' initial cadaver encounter.

Methods

A structured reflective intervention was conducted among first-year MBBS students (n=50) at JIPMER, Karaikal. After a 30-minute orientation on rich pictures and reflective writing, students created visual and/or written reflections following their first cadaver disrobing session. Submissions were assessed independently by four faculty members using structured rubrics for emotional depth and insight, with selected students participating in brief follow-up interviews.

Findings

Rich Pictures vividly depicted emotions such as fear, gratitude, curiosity, and respect through symbolic imagery. Reflective writing revealed evolving perceptions of death, empathy, and professional responsibility. Some students who struggled with verbal expression conveyed deeper insights visually. A few students initially struggled to engage in structured reflection, indicating the novelty of the method. Overall, the dual-modality approach facilitated safe emotional expression in a multilingual learning environment.

Conclusion

Cadaver disrobing marks the beginning of a student's professional identity. When emotions go unaddressed, important formative learning may be lost. Rich pictures & reflective writing transform this vulnerable encounter into a meaningful learning moment where science meets humanity. Embedding reflective arts in anatomy education nurtures emotionally resilient, ethically grounded physicians and reaffirms that medical training must shape not only competent clinicians but also compassionate healers.

Key ideas

1. Introduces arts-based reflection to process emotionally intense early learning

2. Demonstrates how visual and written reflection together deepen professional identity formation

3. Validates multimodal reflection as inclusive in multilingual medical classrooms

Theme

Relationships, Communication & Collaboration, Relationships, Communication & Collaboration

3.12. Healthcare Professionals' Perceptions of Gender Equity in Indian Healthcare Institutions: A Cultural Domain Analysis

Presenting author: Shruti Singh

Authors
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Background

Gender equity in healthcare institutions is vital for workforce sustainability, leadership diversity, and organisational culture. Despite persistent disparities in career progression, role allocation, and representation in decision-making within Indian healthcare settings, limited research has explored how professionals conceptualise gender equity and interpret their workplace experiences. Understanding these cognitive domains is essential for designing context-sensitive institutional reforms.

Methods

A cultural domain analysis was conducted among 10 healthcare professionals using free listing and pile-sorting techniques. Participants generated items across four domains. Data collection continued until no new salient items emerged, indicating saturation. Smith's salience, frequency, and average rank were calculated using Anthropac. Pile-sorting data were analysed through similarity matrices and cluster mapping. IEC approval was obtained and informed consent was secured.

Findings

Gender equity was most strongly conceptualised as equal opportunities for professional growth (S = 0.365) and absence of gender bias (S = 0.328), reflecting a structural framing of fairness and advancement. The most salient challenges included gender-based stereotyping in role allocation (S = 0.460), differential work–life balance expectations, and underrepresentation in leadership and decision-making roles, indicating persistent systemic inequities. Institutional reforms were prioritised around equitable leadership access (S = 0.405), pay and workload parity, structured gender-sensitisation programmes, and transparent grievance redressal mechanisms. Positive workplace experiences were strongly associated with visible leadership representation (S = 0.571), inclusive organisational climate, and merit-based recognition systems.

Conclusion

Healthcare professionals view gender equity as a systems-level construct focused on structural fairness and leadership access, yet experiences reveal persistent stereotyping and allocation bias. Future research should expand to multi-institutional samples, use mixed-methods designs to quantify concerns, and undertake longitudinal evaluations of gender-sensitisation interventions. Developing an institutional equity framework and implementation toolkit may support measurable organisational change.

Key ideas

1. Gender equity is conceptualised as equal opportunity and leadership access.

2. Stereotyping, allocation bias, and leadership underrepresentation remain salient challenges

3. Sustainable equity requires structural, cultural, and accountability-focused interventions.

Theme

Equity, Ethics & Systemic Responsibility

3.13. Empathy Map-driven learning and Reflective writing: A qualitative exploration of patient-centeredness among medical students

Presenting author: Niraimathi Manickam

Authors

Niraimathi Manickam*[1], Rajalakshmi Selvaraj[2], Divyashanthi Chellathambi Malathi[3], Nanthini Saravanan[4], Vijaykishan Bheemavarapu[5], Arun Kumar Karthikeyan[1]

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Background

Empathy lies at the heart of patient-centred care, yet medical colleges face challenges in cultivating it during undergraduate training. Students rarely go beyond surface-level listening when collecting patients' histories during clinical posting. Empathy Map, a visual tool with 6 compartments, captures what the patient says, does, thinks, feels, pain points, & Gains. Introducing Empathy mapping and reflective writing helps students develop a deeper understanding of patients' lived experiences.

Methods

MBBS students (n=60) were divided into 6 groups and assigned a patient with uterine bleeding each. Following patient interview, each group filled Empathy map from patient's perspective. They participated in reflective writing to capture their learnings. A Focus group discussion was conducted to understand students' experiences. We performed 'Keyword-in-context analysis' of empathy maps for recurring words and 'Thematic analysis' of reflective writing & FGD to elicit students' understanding.

Findings

Of the total 1,634 words used in the Empathy maps, the most frequent words include family (32), bleeding (22), pain (21), and work (14). The student's response to guided prompts for reflective writing was categorized into Patients' perspectives, Clinical hearing Vs Empathic understanding and Patient-centred practices. The patient's perspectives include subcategories of personal, family-related, and social factors, with 'Gender influenced experience' as the common intervening contextual variable. Codes such as active listening to the patient's point of view, engaging with their emotions, being mindful of the patient's thoughts and non-verbal cues, and creating a safe space for emotional expression highlight the student's depth of understanding of patient-centred care.

Conclusion

Empathy mapping, combined with reflection and discussion, promotes deeper engagement with patient narratives and supports the development of patient-centred learning.

Key ideas

1. Empathy map
2. Reflective writing
3. Patient-centredness

Theme

Foundations of Learning & Human Development

3.14. From Mentorship to a Structured Student Support System: A Phased Institutional Mixed-Methods Experience

Presenting author: Rajalakshmi Mahendran

Authors

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Background

Mentorship is vital in competency-based medical education, yet inconsistent implementation and limited coverage reduce its impact. At our institution, these gaps prompted progressive strengthening of the program into a structured, inclusive Student Support System. This study describes the phased transformation of a conventional mentorship model into an institution-wide system and evaluates its implementation outcomes using a mixed-methods approach.

Methods

This mixed-methods interventional study was conducted at a tertiary care teaching institution involving all undergraduate medical students and faculty mentors. The program included structured mentor–mentee meetings, coordinators, parent–teacher meetings, and a Student Support Diary. Quantitative data assessed meeting frequency and coverage, while qualitative feedback explored perceived effectiveness and rapport. Descriptive statistics and thematic analysis were applied.

Findings

Post-intervention, regularity and documentation of mentor–mentee meetings improved substantially following timetable integration and coordinator oversight. Student participation expanded from selective inclusion of academically challenged students to universal coverage. Qualitative findings revealed improved mentor–mentee rapport, earlier identification of academic and psychosocial concerns, enhanced student engagement, and greater faculty satisfaction. The Student Support Diary strengthened accountability, continuity, and reflective practice.

Conclusion

Systematic administrative integration, coordinated monitoring, and structured documentation facilitated the successful transition from an informal mentorship model to a comprehensive Student Support System, improving consistency, inclusivity, and perceived effectiveness.

Key ideas:

1. Structured, timetable-integrated mentor–mentee program with universal coverage.

2. Student Support Diary for longitudinal tracking and reflection.

3. Positive impact on engagement, rapport, and student support.

Theme Scholarship, Leadership & Educator Growth

3.15. Evaluation of a Mental Health Literacy and Coping Skills Awareness Session for Undergraduate Medical Students: A Pre–Post Study

Presenting author: Karthik Balajee Laksham

Authors

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Background

Medical students frequently experience stress but may under-recognize symptoms and delay help-seeking. Improving mental health literacy early in training may support healthier coping and awareness of support systems. This study evaluated an awareness session conducted on World Suicide Prevention Day aimed at improving mental health literacy and promoting reflection on coping strategies among undergraduate medical students.

Methods

A pre–post educational evaluation was conducted among undergraduate medical students following a 70-minute awareness session. Mental well-being was assessed using GHQ-12 and mental health literacy using a 31-item adapted MHLq-SVA administered before and immediately after the session. Data were analysed in R (v4.4.1) using descriptive statistics, paired t-tests, and Cohen's d. Open-ended feedback responses were analysed using inductive thematic coding.

Findings

Fifty-nine students completed the pre-test (mean age 21 years). Baseline GHQ-12 scores suggested that 98% had scores within the normal range (mean 4.2 ± 3.0). Mean mental health literacy scores increased from 3.93 ± 0.67 to 4.23 ± 0.66 following the session ($p = 0.018$; Cohen's $d = 0.46$). The largest improvements were observed in understanding biological contributors to mental disorders, the importance of early intervention, and healthy coping practices. Analysis of open-ended feedback identified four themes: coping and stress management strategies, challenges in time management, relatability and empathy in the session, and emerging willingness to seek support. Approximately 18% of participants expressed interest in confidential counselling.

Conclusion

The brief awareness session was associated with improved immediate mental health literacy and positive learner reflections on coping and help-seeking. Findings correspond to Kirkpatrick Level 1 (reaction) and Level 2 (learning) outcomes. Incorporating regular mental health literacy sessions alongside accessible counselling services may support student well-being in medical training.

Key ideas

1. Brief awareness sessions can improve immediate mental health literacy among medical students.

2. Learner feedback highlights the importance of discussions on coping and time management.

3. Embedding mental health literacy sessions with support systems may promote early help-seeking

Theme

Designing & Refining Learning Systems

3.16. A Novel Training Strategy Employing Undergraduate Students as Standardized Patients to Enhance Communication Skills among Medical Interns: A Facility-Based Pilot Study

Presenting author: R.Rajalakshmi

Authors

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Background

Effective doctor–patient communication is a critical component of clinical care. Despite this, many medical training programs provide limited formal instruction in communication skills during internship period, even though interns are frequently frontline healthcare providers. Inadequate preparation in this domain may influence patient satisfaction, safety, and the overall quality of healthcare delivery. Strengthening communication competencies at this stage of training is therefore important.

Methods

A four-month facility-based mixed-methods pilot study was conducted. The communication skill training program was developed using the ADDIE framework. Thirty interns participated in brief teaching sessions followed by interactive practice with standardized patients played by trained junior medical students. Evaluation followed Kirkpatrick's model using attitude scales, retrospective pre–post questionnaires, OSCE with the Gap-Kalamazoo tool, focus groups, and structured feedback.

Findings

The intervention led to a noticeable shift towards more positive attitudes and a decline in negative perceptions regarding communication skills among participants. Interns reported improvements in knowledge, practical communication abilities, understanding of communication principles, and confidence during patient interactions. OSCE evaluations revealed higher ratings from faculty members and standardized patients compared with the interns' self-assessments. Qualitative feedback indicated enhanced empathy, more patient-centred communication, and a sense of professional development.

Conclusion

The structured communication skill training program effectively enhanced communication competencies among medical interns and encouraged a more positive attitude towards learning these skills. Incorporating structured, experiential communication training into internship programs could improve clinical interactions and enhance the quality of patient care.

Key ideas:

1. A novel, resource-efficient approach for communication skills training of interns.

2. Structured simulated encounters improved interns' communication competence and confidence.

Theme

Designing & Refining Learning Systems, Relationships, Communication & Collaboration

3.17. Perceptions of educational environment among medical students, Karaikal, south India- assessment using Dundee questionnaire

Presenting author: Niranjjan R

Authors

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Background

The educational environment is a crucial determinant of medical students' academic performance and overall well-being. A positive learning environment fosters critical thinking, enhances professional development whereas stressful environment leads to anxiety and dissatisfaction. Hence this study aims to assess medical students' perceptions of their educational environment. It helps to identify areas for improvement and implement necessary changes

Methods

A cross-sectional study was conducted at a private medical college across various academic levels. 298 MBBS students except interns were enrolled. Simple random sampling technique was employed. MBBS students who have completed at least one semester of medical education were included and Students who are on academic leave and not provided consent for participation were excluded. Dundee Ready Education Environment Measure (DREEM) questionnaire was used to collect the data

Findings

A total DREEM score of 130.48 ± 23.85 out of 200 was observed. Subscale mean scores were as follows: Students' Perception of Learning (SPoL) 32.63 ± 5.81, Students' Perception of Teaching (SPoT) 28.51 ± 4.11, Students' Academic Self-Perception (SASP) 22.10 ± 4.37, Students' Perception of Atmosphere (SPoA) 30.74 ± 6.04, and Students' Social Self-Perception (SSSP) 16.50 ± 3.51. No statistically significant differences were noted between genders or academic years across any subscales ($p > 0.05$). Item-wise mean scores ranged from 1.96 to 3.20 across domains.

Conclusion

The study indicates that medical students perceive their educational environment as generally positive across all domains, with no significant differences based on gender or academic year. Areas such as academic atmosphere and social support may benefit from targeted improvements to enhance the overall learning experience.

Key ideas:

1. students perceptions about educational and learning environment

Theme

Foundations of Learning & Human Development

3.18. What Do Learning Environment Questionnaires Measure? Meta-Synthesis of Conceptual Domains

Presenting author: Mahalakshmy T

Authors

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Background

Learning environment plays a major role in the learning of the health professional students. It is measured using multiple scales. However, the conceptual domains they measure vary considerably in terminology and structure. This systematic review aimed to synthesise the constructs measured in these tools so as to propose a comprehensive and conceptually integrated framework.

Methods

We conducted a scoping review of exploratory nature to synthesise the construct of learning environemnt. The article and relevant documents were identified using the search engine PubMed, Google scholar and Cochrane library. The key words for learning environment, health professionals' education, higher education. Only articles in English language were used. Additionally, cross references were also manually searched.

Findings

Different questionnaire assessed various aspects of learning environment. The domains can be consolidated into four broder domains such as (1) psychosocial factors, (2) pedagogical factors, (3) organisational and leadership-related factors, (4) physical or virtual environment factors. Psychosocial dimensions refer to the interpersonal and social relational aspects of the learning environment. Pedagogical factors refers to the instructional approaches and learning processes involved while delivering the curriculum. Organisational and leadership-related factor represents the structural and managerial characteristics of the educational setting. Physical and virtual environment feature refers to material/physical resources and technological environment.

Conclusion

Despite variation in terminology, substantial conceptual overlap exists across instruments. Learning environment questionnaires primarily assess psychosocial and pedagogical dimensions through students' subjective appraisal, with less attention to organisational and physical or virtual contexts.

Key ideas

1. Learning environment

Theme

Foundations of Learning & Human Development

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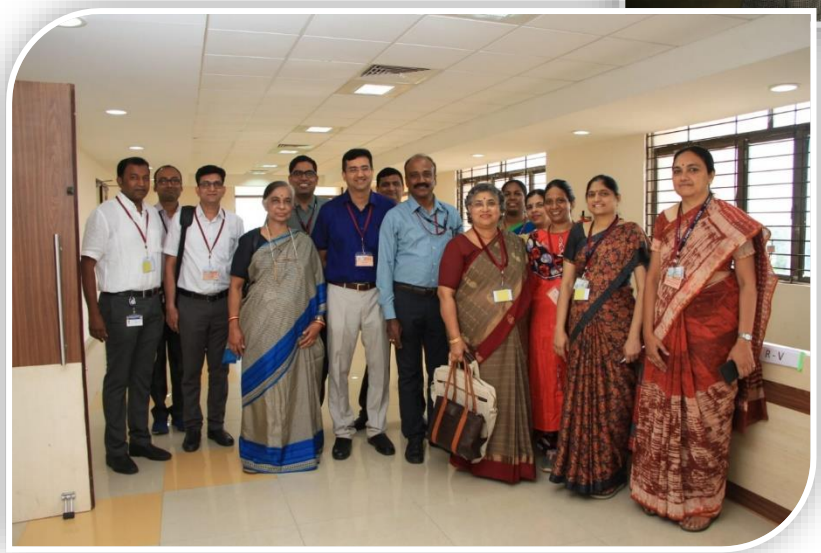
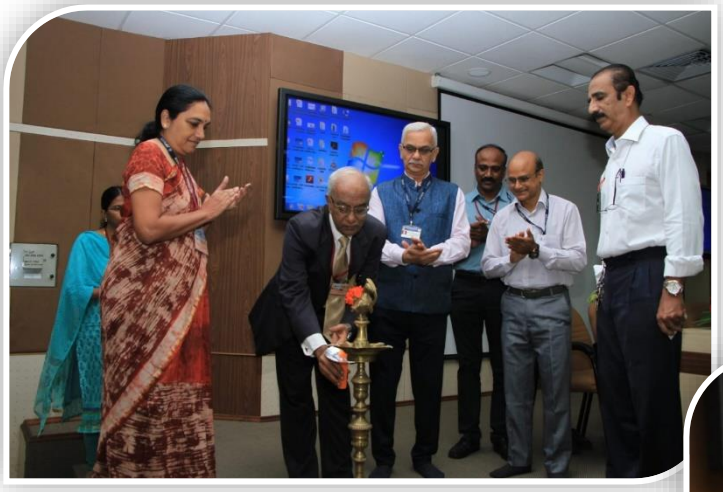
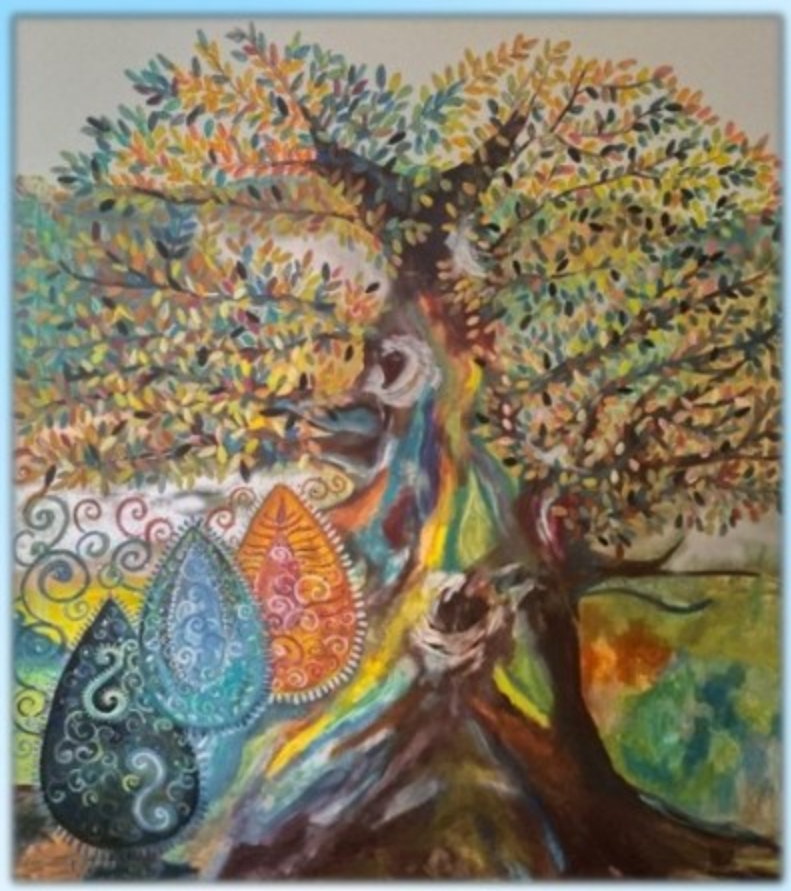




Pravaaha

The artistic wall mural of NTTC JIPMER

Art by Christina Ravi



Pravaaha in Sanskrit means flow or movement. This art stands testimony to the flow and dynamic exchanges of work, thought, ideation and the unified strength of so many people that has made this golden jubilee milestone of NTTC JIPMER a reality.