



Editorial

Academic Leadership in Neuroanesthesia and Neurocritical Care in India

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Academic leadership involves guiding and managing academic institutions, such as universities, colleges, or departments. Key responsibilities include setting educational goals, developing strategic plans, fostering research, teaching and training excellence, managing faculty and staff, securing funding, and ensuring compliance with academic standards. Effective academic leaders are often expected to balance administrative responsibilities with their research and teaching while encouraging a supportive and innovative environment for students and faculty. The fields of neuroanesthesiology and neurocritical care are integral to managing complex neurological and neurosurgical conditions. These specialties have evolved significantly in India, driven by academic and clinical advancements. Leading institutions such as the All India Institute of Medical Sciences in New Delhi, the National Institute of Mental Health and Neurosciences in Bangalore, Sree Chitra Tirunal Institute of Medical Science and Technology in Trivandrum, and the Postgraduate Institute of Medical Education and Research in Chandigarh have spearheaded progress in neuroanesthesiology and neurocritical care.¹ Apart from these institutes of national importance, the National Board of Examinations and many other public and private institutions played a significant role in creating awareness of the requirements of such superspecialties. These institutions offer advanced training programs, including Doctorate of Medicine courses, Doctorate in National Board of Examination, and postdoctoral fellowships, which combine extensive clinical training with research activities.

The Indian Society of Neuroanaesthesiology and Critical Care (ISNACC) has been instrumental in organizing annual conferences, workshops, and continuing medical education programs.² Expanding these initiatives to include leadership training modules, faculty development programs, and mentorship networks could further enhance the development of

future educators in the field. Similarly, the Neurocritical Care Society of India has the potential to provide platforms for emerging neurointensivists to present their research, engage in collaborative projects, and gain international exposure. By creating a sense of community and collaboration, we can ensure that professionals remain at the forefront of the field.

Recognizing and rewarding mentorship efforts is vital to maintaining the tradition of academic excellence in neuroanesthesiology and neurocritical care. Integrating mentorship responsibilities into academic promotions and professional recognition can encourage seasoned specialists to continue nurturing the next generation of experts.³ This mentorship culture promotes a supportive environment where young professionals can thrive, ensuring the sustainability of high standards in patient care and research. Experienced mentors can provide invaluable guidance on navigating the complexities of the field, from technical skills to research methodologies, thereby helping to cultivate a robust pipeline of talent.

Indian researchers have made notable contributions to the global knowledge base in these specialties. To nurture the development of research leaders, it is crucial to provide young investigators with access to research funding, collaborative networks, and international fellowship opportunities. Establishing research mentorship programs, where experienced researchers guide junior colleagues through academic writing, grant applications, and project management, can significantly boost research output and innovation. By creating an environment that encourages curiosity, institutions can ensure that their researchers are well-equipped to tackle the most pressing challenges in our fields.

The integration of advanced technologies has markedly enhanced neuroanesthesiology and neurocritical care in India. Techniques such as intraoperative neuromonitoring, multimodal anesthesia approaches, and enhanced recovery protocols

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have improved patient outcomes. Training young practitioners in these technologies and encouraging the exploration of innovative applications can drive future care. Additionally, telemedicine and remote monitoring could expand neurocritical care services to rural and underserved areas, ensuring timely and expert intervention. Incorporating telemedicine training into the neurocritical care curriculum will prepare future leaders to leverage these technologies effectively. This approach not only broadens access to care but also ensures that patients receive the highest standard of care regardless of their geographic location.

A defining feature of neurocritical care in India is the robust collaboration among neuroanesthesiologists, neurologists, neurosurgeons, and critical care specialists. This multidisciplinary approach ensures comprehensive and holistic patient care. Promoting interdisciplinary training programs and joint research initiatives can further strengthen these collaborations, developing a culture of teamwork and mutual learning. By encouraging open communication, health care providers can develop more effective and innovative treatment strategies that improve patient outcomes.

Despite significant progress, several challenges remain. There is an ongoing need for more training programs and fellowship opportunities to meet the increasing demand for specialists. Enhancing research funding is essential for driving innovation and improving patient outcomes. Bridging the health care access gap, particularly in rural and underserved regions, is also a priority. Addressing these challenges requires sustained commitment and strategic planning. Governments, institutions, and professional organizations must work together to ensure that resources are allocated effectively, and that the infrastructure is in place to support the growth and development of these critical fields.

One of the significant challenges in advancing these fields is motivating young anesthesiologists to take up this new subspecialty, which demands a high level of expertise and dedication, often involving long hours and complex cases. To attract

young professionals, it is essential to highlight the rewarding aspects of these fields, such as the opportunity to work on groundbreaking procedures and the potential for significant patient impact. Providing clear career pathways and mentorship opportunities and emphasizing the subspecialty's importance in improving patient outcomes can help inspire the next generation of specialists. Furthermore, showcasing success stories and offering incentives such as scholarships, research grants, and professional development opportunities can make these fields more attractive. Professional bodies such as ISNACC could continue to play a significant role in this mission.

In summary, academic leadership in neuroanesthesiology and neurocritical care in India is characterized by strong institutional support, active support from professional societies, dedicated research, and technological advancements. Ongoing efforts in education, research, and interdisciplinary collaboration are crucial for further progress in these essential fields. By encouraging mentorship, enhancing training programs, and stimulating innovation, we can ensure that the next generation of neuroanesthesiologists and neurointensivists is well-equipped to lead and advance these specialties. Through a concerted effort to address current challenges and promote the growth of these fields, we can continue to improve patient care in India and beyond.

Conflict of Interest

None declared.

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