Role of conferences and continuing medical education (CME) in post-graduate anaesthesia education

INTRODUCTION

Conferences and continuing medical education (CME) programmes are important for post-graduate students (PGS) in imparting education and sharpening their skills.\(^1\) All healthcare personnel are supposed to be updated on the evidence-based practices that keep on changing with newer information. The latest knowledge, evidence-based practices and fine skills encourage the PGS, and help them to behave ethically.\(^2\) Hence, the National Medical Commission (NMC), in its guidelines for post-graduate training programmes, specifies that PGS should attend conferences to advance their clinical knowledge and skills.\(^3,4\)

Academic benefits of CME programmes and conferences

The PGS of any stream are of adult age group, hence educational activities should be focused on adult learning principles. The four basic concepts of adult learning theory are motivation, reinforcement, retention and transference. The PGS should be motivated to attend the CME programmes and conferences. These academic activities add new knowledge as well as reinforce the existing knowledge. There should be some techniques to test the retained knowledge. It is said that the topics that transform the practice of PGS shall improve the healthcare delivery in the country.\(^5\) CME programmes are low-cost, small-group meetings at the doorstep of PGS, and are focused on a specific topic. These are easy ways to disseminate knowledge. One-to-one interactions among colleagues and peers in CME programmes and conferences provide an opportunity to improve communication and interpersonal skills. Literature states that attending CME programmes can produce a change in biological outcome and physician and patient satisfaction.\(^6\)

Conferences are important major platforms or events where the students can present their work. The strength and limitation of this work can be discussed with experts and pioneers in the field of anaesthesia. As a consequence, more novel ideas are born and help to take the research onto the next level. PGS can present papers, posters on various podiums and participate in state and national level quiz competitions at the conferences. Appreciation of work in the form of awards at such competitions motivates them to continue with conducting research and find newer techniques of providing anaesthesia and improve the present-day practice. The knowledge attained from the conferences and CME programmes helps them to qualify the various board examinations and helps in research and innovations. Nevertheless, the importance of CME programmes and conferences in post-graduate education is recognised by the NMC, which mandates that the PGS should present at least one paper and one poster during their residency training in state or national level conferences.

In workshops, PGS get hands-on chance to learn specific tasks or research methodology. The Review and Refresher Courses are aimed towards frequently asked topics in postgraduate examinations. The workshops focus on difficult airway management, monitoring, ventilation, instruments, workstations, ultrasonography and so on, and include discussions on new drugs, recent products or techniques, which may not be available for use in everyday practice.

The competency-based training (CBT) programme for postgraduation in Anaesthesia aims at developing specialists who are aware of the recent advances pertaining to his/her speciality and research for the delivery of high-quality healthcare. Nevertheless, new skills and knowledge can be obtained by listening to the lectures presented in the CME programmes by expert faculties in the field.

Ultrasound-guided regional anaesthesia is one of the most rapidly evolving techniques with the help of which major surgeries can be conducted. Workshops conducted on such topics in conferences using a phantom-based training programme can help PGS to develop their skill sets. The pivotal part of anaesthesia is airway management, and this can be taught in a simulated workshop. The difficult airway scenarios in these workshops are helpful in enhancing the decision-making skills of the PGS.

The latest techniques, guidelines, equipments and advancements in the field of anaesthesia are very well discussed in the CME programmes and conferences. Although the present era offers many sources of information such as podcasts, PubMed, the internet, YouTube and so forth, CME programmes provide...
a unique learning platform and opportunities for career-building by learning directly from experiences and the “trials and errors” of others.

**Other miscellaneous benefits of conferences**
Conferences allow meeting new people and gaining contacts with the PGS of other institutes. This networking will help by providing information regarding professional job vacancies, future research collaborations for conducting a multicentre study and even setting up of a hospital. Trade and Exhibition are an important component of every conference. All devices are not available in every medical college; so students get an opportunity to gain hands-on experience in using them at various stalls in the exhibition. The trade exhibition enhances the knowledge of latest products and devices too. But, the involvement of commercial interest of pharmaceutical industry in the conferences, and the scientific judgement on drugs and devices has to be considered cautiously.

Communication skills tops the list of fundamental skills needed for the success in the workplace. The clear communication starts with active listening. Communication skills are proven to be important for better team-work. The interaction of PGS among colleagues from different parts of the country at CME programmes and conferences will improve their communication skills.

Besides, attending a conference is an astonishing and exciting experience for the PGS; sight-seeing and travelling with postgraduate colleagues during academic-free time serves as a stress releaser. The conferences also provide an opportunity to savour the experience of variable cuisines and cultural programmes.

**Duration of CME programmes and conferences**
The structured CME activities vary widely between one and five days. Pre-course tests and post-course evaluation are important to assess the basic knowledge and effectiveness of the programme. The post-course evaluation information is also important to modify subsequent sessions of the meeting. The CME programmes are usually conducted at different places with the intent to benefit the users, and they are held at weekends to get maximum participation of PGS when elective surgeries are relatively less in number.[7]

**Role of Societies and Organisations in the conduct of CME programmes, workshops and conferences**
The Indian Society of Anaesthesiologists (ISA) National routinely organises annual conferences or CME programmes through its various state and city branches. The annual event at the national level is the most eagerly awaited event for most anaesthesiologists. City branches at their levels, frequently hold one–two-day updates, with CME credits applicable depending on the type of event and sponsorships affecting the decision of accreditation bodies. Besides the enhancement of scientific knowledge, attending conferences would enhance the knowledge of the PGS regarding the importance and functioning of various programmes run by the societies including various inland or international fellowships offered to the PGS by the ISA. The PGS also gain knowledge about various superspecialities in anaesthesia and also about opportunities and careers after completion of postgraduation in anaesthesia.[8-11] This can boost up their confidence and morale.

**Funding and support for programmes**
As there is a huge cost associated with organising a CME activity, registration fees are applicable and the cost should be borne by the postgraduates themselves. Only few institutions in India are currently providing leaves and financial support to attend such academic activities.[7,12,13] Societies often offer reduced registration fees for student members. We propose that the NMC or institution should include the provision of leaves and financial support for the PGS to attend CME programmes or conferences during training.

**CME programmes and conferences in the coronavirus disease (COVID)-19 era**
In the era of travel restrictions forced by COVID-19, most CME programmes and conferences were continued on virtual mode. The plethora of opportunities for learning has significantly increased, and so has the attendance at these events. The cost of organisation has significantly come down and a larger audience can be reached. While we are waiting for life to return to the pre-pandemic era, the role played by virtual platforms for the dissemination of knowledge will always be acknowledged.

**SUMMARY**
Conferences and CME programmes, either virtual or physical, are an excellent way of imparting education and improving the clinical, technical and non-technical skills of PGS. Faculty should encourage PGS to attend conferences and CME programmes and help them to apply the knowledge thus gained.
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Conflicts of interest
There are no conflicts of interest.

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