Commentary

ICUs worldwide: Critical care in India

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Abstract

Critical care practices in India have evolved significantly over the past decade. Critical care initially began as a service in major hospitals, but with the formation of the Indian Society of Critical Care Medicine the development of this speciality has been very rapid. Regular conferences, updates, continuing medical education programmes and workshops have emerged, and postdoctoral training programmes have been developed. Scientific publications have begun to appear and in spite of the diverse problems and standards, meaningful speciality-related activities have begun. Future challenges include the development of guidelines, the consolidation of training activities and research on the outcome of critical tropical problems.

Keywords critical care, India, tropical medicine

As in most other developing nations, critical care medicine as a specialty has developed very slowly and only recently in India.

The coronary care units were developed in the early to mid-1970s. Perhaps the main pioneer of the field of critical care in India was Farokh E Udwadia, a brilliant physician with international training in pulmonology. In the mid 1970s, Udwadia developed the first respiratory care units in the country in two hospitals in Mumbai – a community hospital and a private one. The most major achievement of these units was not only to bring down the mortality of tetanus, but also to open the eyes of society to the need for critical care services.

Organized critical care training or programmes did not materialize, however, and it was left to individual interested trainees to go abroad and receive training. Although the speciality was being practiced in isolated foci of hospital practices, the first few ripples in this field were created by consultants returning to India after training abroad in the United Kingdom, in the United States, and in Australia. The initial centres of such activity were Mumbai, Pune and Chennai, and they still remain the centres of academic creativity and administrative ability.

These few enthusiastic, trained consultants came together in 1992 to discuss critical care on a common platform, and they formed the national Indian Society of Critical Care Medicine (ISCCM). The society had its teething troubles and has now established itself very firmly as a representative body of critical care consultants in India. The ISCCM has over 2000 members today, and has 16 city branches.

The current practice of critical care in India is a matter of as much diversity as the country itself. There are three types of hospitals in India that are delivering patient care in India.

Community hospitals are mostly run by the government and essentially result in no cost to the patients. Critical care is a branch that involves a lot of technology and therefore is dependent on finances. Hence, there have been limitations to the growth of this branch in community hospitals. There are currently about 200 medical colleges with hospitals attached to them in India. Additionally, there are more than 1000 district hospitals. Only a small proportion (<10%) of all these hospitals, however, will boast properly equipped or staffed intensive care units (ICUs). These hospitals thus contribute only a small proportion of the available ICU facilities.

ICU = intensive care unit; ISCCM = Indian Society of Critical Care Medicine.

Private tertiary care hospitals are managed by societies, trusts or companies. Patients are levied a charge for these services that is proportional to their income; there are also a small percentage of beds that are provided for free. As per the current estimation, 85% of patients are self-paying. ICUs in private tertiary care hospitals are usually very well equipped and thus form the most major contributor to the critical care facilities in the country, albeit at a higher cost to the patient.

Finally, an interesting segment of health care facilities in India consists of small hospitals or nursing homes. Modestly equipped, and managed mostly by medical professionals themselves, these are realities representing the vast middle and lower classes, and they contribute about 40% of available beds for the country. The patients also usually pay for the services here. The need and the viability of facilities for critical care are being acknowledged by this segment, and currently the facilities are on the upswing.

Manpower development of the specialists has been a major issue. Most of the current directors have been trained abroad, as previously mentioned. The certificate course in critical care, the first organized training activity in critical care medicine, was started 4 years ago by the ISCCM and has been evolving well. A number of hospitals have developed training modules, and more students are coming out of this training programme regularly. The ISCCM has also been very active in interacting with various medical councils in India. As a result, the PostDoctoral Fellowship in Critical Care Medicine conducted by the National Board of Examinations has recently been announced. With this, the first steps for training in critical care on a national level curriculum are now being taken. The training of nurses, technicians, and therapists has begun in some isolated foci but has not evolved into a meaningful training activity.

The patterns of medical problems seen in Indian ICUs are dissimilar to those seen elsewhere. These also change with the categories of the hospital. A number of tropical infections such as malaria, leptospirosis, tuberculosis, salmonellosis, etc. form a significant proportion of the patients. Polytrauma also ranks high in the occupancy charts.

Playing its part in the development of this new speciality, the ISCCM has taken the lead in the development of a number of other related issues. The CPR Training Project and the development of an independent, dedicated organization like the Resuscitation Council of India has been felt by many who have been working in this field. Along with other like-minded societies, the ISCCM has taken the initiative to develop this new independent body.

Development of guidelines for the working of ICUs has been another important issue that the ISCCM has taken up. The guidelines are currently being formulated. For a country that has it own set of problems, such independent guidelines will be very vital.

The *Indian Journal of Critical Care Medicine* is the official journal of the society and is the only mouthpiece of the organization. The society has redesigned and activated its website (www.isccm.org), so one can now have access to all the latest news on ISCCM activities

The Annual National Conference in Critical Care, conducted by the ISCCM, has been the high point of academic activities in this field. Held in different important cities, this event has been attracting not only the who-is-who in critical care in India, but also many international stalwarts over the past 8 years. Good quality original work has now started emerging, and is being accepted for publication by the prestigious international journals. At the recently held world congress, a multicentre study on scoring systems was presented on behalf of the ISCCM, and Indian ICUs are now being included in the upcoming international Simplified Acute Physiology Score (SAPS) III study. For the first time, India will be represented on the Executive Committee of the World Federation of Societies of Intensive and Critical Care Medicine.

Critical care in India is thus at the crossroads of development. The beginning has been made but there is still a long way to go. The field is full of a lot of dynamism, opportunity and challenges. One hopes that all the efforts will lead to a humane, scientific and meaningful service for the multitude of critically ill patients.

Competing interests

None declared.

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