Research in Pediatric Surgery: Who should light the flame?

Pediatric surgical specialty in India is progressing quite fast and the present strength stands at around 700-800 practicing and institutional pediatric surgeons. However, only 40 of the 200 Medical colleges have Pediatric Surgical services in the whole country catering to only about 10-15% pediatric surgical population. As 26 teaching departments produce only about 30 trained Pediatric Surgeons each year, it may take many centuries for our country to produce the desired number of at least 2 pediatric surgeons for a population of 1 million.

In any clinical subspecialty like ours, research is an inbuilt component of scientific basis of learning and patient care. As per the IAPS curriculum committee recommendations, not only the trainees but also the teachers should have adequate exposure, interest and contribution in pediatric surgical research, both in the clinical and the experimental fields.

Although the clinical surgical workload in pediatric surgery in India is immense and constituted by over 400 million children under 14 year of age, yet unfortunately, not many institutions have the infrastructure, experience and the temperament to conduct and promote experimental research. Research does not mean having lavish setup with state of the art laboratories, staff and equipment. Clinical research is equally important and rewarding. In fact, the factors for doing compulsive basic research in the West have largely been due to the non-availability of patient workload for clinical research, increasing density of pediatric surgeons with falling birth rate and minimal patient responsibilities.

At present, most symposia, CME programs and conferences are dedicated to the clinical aspects only. The teaching, training and research methodologies are hardly talked about. Most overseas annual conferences prefer to have a reasonable balance of clinical and research work. The International symposium on pediatric surgical research is one of the important groups holding its annual conferences. However, it is mostly dominated with the hard core research from the established centers in the world with a little scope for the beginners to present at that forum.

The scope of research in pediatric surgery should not be limited only to the medical colleges and the institutions. The corporate hospitals, nursing home and practitioners, with an extra efforts and interest can contribute scientifically. The need is to:

1. Expose the trainees, pediatric surgeons and the teachers to the research methodology to sensitize them to think and plan scientifically. Train them to maintain the clinical and follow-up records.
2. Maintain good data on the incidences, operative techniques, complications and follow-up records. Utilize inter-department expertise for collaborative research.
3. Think laterally to develop newer strategies for need based economic patient care, operative techniques and equipment.
4. Participate in conferences, workshops and CME programs at the national and the international levels to understand the current wave in the field.
5. To have an easy access to textbooks and Journals in the specialty, not only for learning and better patient care but also developing interest in research.

The pediatric surgical fraternity, especially those working in developing countries has the responsibility to promote research both in the clinical and experimental fields. Despite immense potential, very little projection has been made from India. The experimental research papers are practically non-existing except only from a few centers. Though there might be a difficulty in the available infrastructure especially for the experimental research, yet, collaborative research work can still be initiated at the intra and inter departmental level.

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