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EDITORIAL

Is next-generation radiologist ready for the challenges?

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Radiology has been at the forefront of most rapidly evolving medical specialties. The enormous expansion of information available to the radiologist of today and the changing practice scenarios have led to a need for the radiologist of today to evolve continuously. There is a pressing need now for our beloved specialty to evolve to meet the imaging needs of the future.

The golden period for the specialty of radiology seems to be getting over fast in view of numerous challenges which threaten to take away the bread and butter of key areas of the radiology practice. These vary from encroachment by the suboptimally trained sonologists and self-learned subspecialists practically performing ultrasound examination of all regions/organs and interventional radiology to opening of diagnostic centers and outsourcing of radiology of hospitals by investors. In addition, rapid advancements in technology with introduction of newer applications being introduced practically every day place the present-day radiologists in a delicate position who not only have to excel in whatever modality he or she practices but also have to keep pace with changing scenario. In addition, the radiologist has to watch out for fragmentation and turf wars. The Indian Radiological and Imaging Association (IRIA) and subspecialty radiology associations should be prepared to negate attempts by clinical subspecialties to further encroachment of radiology. Recently, a notification of two-year fellowship in Neurovascular Interventions has been issued by the National Board of Examinations (NBE). The introduction of such fellowships will adversely affect the career prospects and practice of neuroradiologists with DM (Neuroradiology)/training in Neuroimaging and Neurointerventional Radiology. In fact, DM (Neuroradiology) is the only structured subspecialization training curriculum approved by the Medical Council India for comprehensive training in neuroimaging and vascular and nonvascular neurointerventional procedures. The immediate representation by the Indian Radiological Association of India led to this issue being referred back for reconsideration for the present. Now, it is to be seen whether IRIA and subspecialty associations would be able to convince NBE to withdraw this fellowship. Such issues will keep recurring and newer challenges will emerge which also need to tackled unitedly. There is a pressing need to proactively guard the leftover territory, else hardly any area would be available for next-generation radiologist to practice.

The previous editorials have largely focused on important issues faced by radiologists such as subspecialization, clinical culture in radiology, turf wars, teleradiology, and artificial intelligence. Rightfully, the IRIA has taken up the task of improving the radiology training of future radiologists and professional updating of practicing radiologists and is conducting high-quality academic programs and workshops across the length and breadth of the country especially with a focus on areas where there is urgent need like fetal radiology. The collaboration with subspecialization associations will provide specific and detailed information, knowledge, and training to radiology colleagues that subspecialized clinical colleagues require and expect from radiologists. However, to meet the emerging need of in-depth analysis of imaging, there is a need to subspecialize in the areas of choice to match up to clinical expectations. Unfortunately, radiology subspecialty degree (DM) is still restricted to very few subspecialties. Recent introduction of DNB (Endovascular and Interventional Radiology) and fellowship in Breast Imaging and Interventions by NBE to promote subspecialization in radiology is a step in the right direction.

The next thing we require is standardization and monitoring of training programs. Often, these programs are run according to the needs of the institution rather than the designated curricula, which stay mostly on paper. All institutions must strictly adhere to structured and standardized formats of curriculum training and a set schedule of rotations of each radiology trainee which should be informed at day 1 of the training. The regulatory body must periodically monitor and audit the performance of institutes in adhering to the defined program. National-level entry and exit examination will, however, ensure quality of the passing fellows/subspecialists.

We need to be able to convince the government to increase the investment to create enough opportunities for radiology training in the government sector uniformly across the country. At present, a lot of resident training is being accomplished in the private sector, which is more interested

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in delivery of medical care rather than training of residents. As a result, residents get inadequate exposure to all radiological modalities except in a few selected government institutions.

In addition, to train subspecialties, there is a need for subspecialist faculty. It is high time that we have certified subspecialists who are involved in training subspecialty fellows/trainees. Most of the courses are being run by the faculty merely based on work experience rather than being trained in a subspecialty. In addition, we need to have quality assurance program for the teaching faculty in the form of compulsory examinations every few years which will ensure that the teaching faculty stays updated.

It is high time that both government and radiology associations show commitment toward these issues. We need structured plans where the subspecialty evolution of radiology shall take place and suitable job opportunities to absorb the faculty as in all areas of medicine and surgery. This is must to prevent exploitation of radiologists by private centers/corporate hospitals which force even subspecialists to work according to their needs.

The next-generation radiologists will have to be well versed with regulatory compliances, ethical, and medicolegal issues. He or she should be ready to embrace artificial intelligence and radiomics in radiology practice to ensure delivery of high-quality, ethical radiology service to clientele and also protect themselves from harassment and charges of malpractice. The next-generation radiologists will also have to get adequate indemnity to take care of the litigation costs in the emerging times of mistrust between patients and medical profession.

Incentives is another area which has to be curbed strongly. This has to be accomplished through stringent regulations and initiative of government and radiology bodies. We must consider and take care of these issues or we will risk being overtaken in our own specialty.

Going by the current trend, the next-generation radiologist will have to be an iron man if he has to practice radiology!

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