

RAISING LEVEL OF AWARENESS AND KNOWLEDGE OF INTERVENTIONAL RADIOLOGY AMONG MEDICAL STUDENTS IN PAKISTAN: NEED OF THE HOUR

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Introduction

In the setting of relentless development in worldwide healthcare, the role of radiology is constantly changing.

Interventional radiology (IR) has transformed the core of radiology from being a solely diagnostic entity a therapeutic specialty as well. The introduction of IR has changed therapeutic procedures, to become less invasive and more immaculate with decrease in the number and extent of post-operative complications, shortened hospital stay, cost as well as markedly decreased mortality and morbidity.^{1,2}

IR has established strong roots in the developed nations but in Pakistan this field is in its developing stage. Vital to its growth, Interventional radiology requires a sustainable supply of large number of radiologists who are dedicated to the training and practice of IR. Therefore, medical students, the forthcoming professionals need to be aware of this emerging medical field. But unfortunately radiology teaching and particularly IR is highly under represented in medical undergraduate core curricula. Moreover, referrals from clinicians who acknowledge the need for IR specialists are also very crucial.³

to a third world country, the most fundamental issue is the lack of funding. At the institutional or governmental level, there is limited funding allocated to encourage research training and installation of IR equipment at every hospital.

Secondly, financially non-affording people are unable to undergo IR procedures due to procedural costs.

Only a few hospitals in the country are specialized enough to practice IR with availability of proper infrastructure-care coordinators, clinical space and admitting privileges.

There are even fewer individuals with specialized training to impart teaching and care where resources are present.

Lack of formal fellowships, human resources and training programmes are impeding the progress of this growing subspecialty.

Another major factor is the lack of support from referring clinicians, who may not be willing to 'outsource' the patients to IR specialists and allow them to perform procedures, and instead keep them in their care and opt for procedures which are no longer considered the standard of care in the west. So, this requires building rapport and trust on their part to encourage their outdoor clinic patients for undergoing IR procedures.

Problems

Interventional Radiology may have a core role to play in healthcare nowadays, however belonging

Solutions

Given these issues, the promotion of IR seems to be difficult, however active multidimensional approach

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towards the targeted issues may accelerate the advancement of this subspecialty.

Foremost is increasing awareness, which encompasses teaching at undergraduate level as well as exposure to IR at earlier stage in the medical education.⁴

Currently medical students have a mandatory radiology rotation of about two weeks during the five year study programme. Increasing the duration of rotation and assessment tests at the end of rotations may help them perceive a better image of IR and its role in healthcare.

Altering the design of curriculum of these rotations may inculcate interest among our medical students. These may include improving the teaching methodology by addition of interactive PBL sessions, small group discussions, hand on simulations, web based teaching and complimentary audiovisual aids and teaching modules. Students should be given the opportunity to have clinical exposure to interesting cases and their IR management.

There must be active career counseling to clear the misconceived notions about radiology being a very intellectually and physically less demanding field and to highlight the knowledge, income, quality of life and intellectual challenges faced by radiologists, will have a very positive impact on the awareness level at this stage and increased interest in radiology.^{5,6,7}

Support from clinicians in all related sister fields and a symbiotic relationship between clinicians and interventional radiologists necessitating respect of interventional radiologist's need for appropriate referral practice is also much required.

Reforms should be introduced at institutional or governmental level to provide funding for IR practice in all hospitals as well as for postgraduate education, research and certification.

Funds should be allocated for making IR treatments feasible among general patients.

Supporting Evidence based studies along with surveys highlighting the benefits of performing interventional procedures will significantly improve awareness regarding IR among general population.

Conclusion

Interventional radiologists can offer outpatient services and play a pivotal role to hospital's effective function. Improvement in the current status of IR in Pakistan can be achieved by multidisciplinary efforts of our radiologists, interventional radiologists, members of radiology societies as well as curriculum advisors and medical college boards. Raising knowledge and awareness of IR among medical students at the undergraduate level and educating future clinicians about its impact at large can enable this novel developing field to flourish in Pakistan.

References

1. Becker GJ. 2000 RSNA Annual Oration in Diagnostic Radiology 1: The Future of Interventional Radiology. *Radiology*. 2001; **220(2)**: 281-92.
2. Baerlocher MO. Pulse: Canada's slow adoption of new technologies adds burden to health care system. *CMAJ: Canadian Medical Association Journal*. 2007; **176(5)**: 616.
3. O'Malley L, Athreya S. Awareness and level of knowledge of interventional radiology among medical students at a Canadian Institution. *Academic radiology*. 2012; **19(7)**: 894-901.
4. Branstetter BF, Faix LE, Humphrey AL, Schumann JB. Preclinical medical student training in radiology: the effect of early exposure. *AJR Am J Roentgenol*. 2007 Jan; **188(1)**: 9-14.
5. Lefevre JH, Roupret M, Kerneis S, Karila L. Career choices of medical students: a national survey of 1780 students. *Med Educ*. 2010 Jun; **44(6)**: 603-12.
6. Teitelbaum HS, Ehrlich N, Travis L. Factors affecting specialty choice among osteopathic medical students. *Acad Med*. 2009 Jun; **84(6)**: 718-23.
7. Newton DA, Grayson MS, Thompson LF. The variable influence of lifestyle and income on medical students' career specialty choices: data from two U.S. medical schools, 1998-2004. *Acad Med*. 2005 Sep; **80(9)**: 809-14.