

**RESEARCH IN RADIOLOGY:**

The (increasing) dependence on radiological investigations in clinical decision making has led to a phenomenal growth in the utilisation of radiological services. This growth has made radiology a very financially attractive and lucrative speciality, both for the radiologists as well as for the institutions for which they work. Over time radiology has become the major contributor to the bottom line surplus for these institutions. This financial dependence has been a major factor in making service provision and revenue generation the focus for a lot of departments at the inevitable cost of research and scholarly activity. This is true globally and applies as much to academic radiology departments in the west as well as here in Pakistan.<sup>1</sup>

Not only is research a relatively low priority for radiology setups the expense of setting up a basic science research program is prohibitive. Most basic science research in radiological sciences is undertaken under vendor sponsorship. A large number of the papers published in Radiology literature are either review/observational papers or validation studies. Very few outcome/hypotheses driven papers appear in these journals. This accompanied by the relatively small radiology community worldwide leads to very low impact factors for radiology journals. In a recent net search the highest impact factor for a Radiology based journal was that of Radiology with an impact factor of 3.3, with nuclear medicine journals having slightly better ratings. With a few exception academic radiology setups suffer from chronic underfunding when it comes to research funds. This leads to frustration and generally low morale.<sup>2,3</sup>

The issues in Pakistan are not very different from those that have been highlighted above. There is a dire shortage of trained man power in the country and therefore in the field of scholarly activity, the radiologists emphasis has been on education. The emphasis on education has meant that a research culture has not really developed within the speciality. The mentors who could guide junior faculty members in this area are few and far in between. There is a dearth of faculty members who are versed in research methodology. The expectations in terms of clinical performance are such that most faculty members find little if any time to sit down and think through a project let alone work on one. There is very little protected time available for scholarly activity. The equipment cycles are such that by the time the equipment is acquired, the validation studies have already been done. This accompanied by the reluctance of the equipment manufacturers to invest in Pakistan, have rendered significant amount of potential studies either redundant or too expensive to run.

The way forward will be clear once the realisation is made that hat future of clinical radiology is dependent on academic radiology. There have been global efforts to rehabilitate the academic departments.<sup>4</sup> Efforts such as these need to be replicated in Pakistan, because although the magnitude and the relative scale of problems vary across the world, the nature of these problems is the same. Time, resources and manpower. Unfortunately the only reason many of us publish is to get promotions. Doing research for the sake of promotion, the Publish or perish philosophy, encourages mediocrity. We as radiologists have to accept that discovery of new knowledge is as important for our speciality as for any other and engage in meaningful research activities.

**Zafar Sajjad**

Editor

**REFERENCES:**

1. Eschelman DJ, Sullivan KL, Parker L, Levin DC. The Relationship of Clinical and Academic Productivity in a University Hospital Radiology Department, AJR 2000; **174**:27-31.
2. Dodd GD , Fletcher TB, Thorwarth, WT. The Crisis in Academic Radiology: Will We Help Ourselves? Journal of the American College of Radiology Volume 3, Issue 4, April 2006, Pages 243-7.
3. Kelly A, Cronin P, Dunnick N Junior Faculty Satisfaction in a Large Academic Radiology Department. Academic Radiology, Volume 14, Issue 4, Pages 445-54.
4. Enhancing Research in Academic Radiology Departments: Recommendations of the 2003 Consensus Conference. AJR 2004; **183**:273-6.