

PROMOTION OF CLINICAL RADIOLOGY RESEARCH IN OUR TEACHING HOSPITALS: VIEWPOINT FROM PAKISTAN

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Dear Sir,

Today, evidence based medicine is the standard for clinical practice in radiology.^{1,2} This evidence is retrieved from research studies and scientific medical literature – signifying the importance of research in clinical radiology. Akhtar W. et al reported low productivity of research among radiologists in Pakistan both in quantity and quality.³ This may be secondary to lack of enough funding, training skills, and facilities in teaching hospitals.^{3,4} Although research production was reported to be low, current status of research promotion in our radiology departments is unknown. We primarily aimed to determine the current status of academic radiology in Pakistan. A component of our project intended to determine the current level of research promotion in clinical radiology in Pakistan. Using self-administered questionnaires, we surveyed radiologists and residents of four major teaching hospitals in Karachi, Pakistan. We recruited all available radiologists and residents from two private and two public teaching hospitals (N=95).

A high level of research promotion was observed among all respondents (N=70/95, 74%). It was significantly higher for radiologists than residents (97% vs. 57%). Research promotion was significant among respondents at both private and public teaching hospitals (chi square value 11.596 df= 2, p-value 0.003 and chi square value 9.209 df=2, p-value 0.010 respectively). Private teaching hospitals promote radiology research significantly as compared to public teaching hospitals (80% vs. 62%). Fellows and residents were the most preferred groups for research in private and public teaching hospitals, respectively. This can

be explained by lack of enough fellowship positions in public institutes. (Fig. 1) shows the preferences of both kinds of institutes for involvement of participants in radiology research.

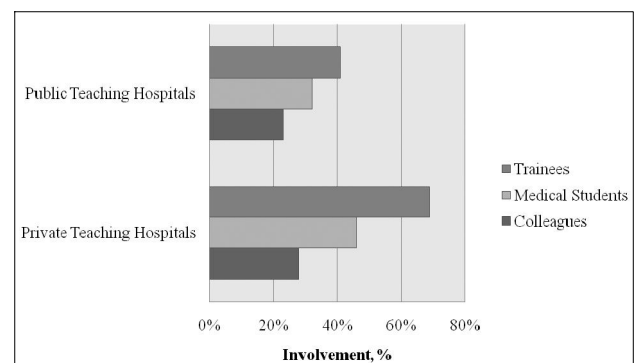


Figure 1: Preferences for trainees, medical students, and colleagues for radiology research in public and private teaching hospitals in Pakistan.

(Tab. 1 and 2) compares research promotion activities among radiologists and residents in private and public teaching hospitals.

Factors	Radiologists (n=31)		Residents (n=30)		P-values
	n	Percentage (%)	n	Percentage (%)	
Overall research promotion at department level	30	98	19	63	*0.003
Fellows	21	68	3	10	NA
Residents	18	58	Nil	Nil	NA
Medical Students	13	42	15	50	§0.35
Colleagues	14	45	3	10	NA

*Pearson chi square test used for statistically significant; value: 11.596 and df: 2
NA: not applicable;
§Not statistically significant

Table 1: Status of research promotion in radiology by radiologists and residents in private teaching hospitals.

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Factors	Radiologists (n=08)		Residents (n=26)		P-values
	n	Percentage (%)	n	Percentage (%)	
Overall research promotion at department level	08	100	13	50	*0.01
Fellows	02	25	05	19	NA
Residents	07	88	Nil	Nil	NA
Medical Students	03	38	08	31	NA
Colleagues	01	13	07	31	NA

*Pearson chi square test used for statistically significant; value: 9.209 and df: 2
NA: not applicable;

Table 2: Status of research promotion in radiology by radiologists and residents in public teaching hospitals.

An almost equal number of radiologists in private and public teaching hospitals involve medical students in radiology research projects (42% vs. 38%). However, residents in private teaching hospitals are more likely to involve students in their research than their colleagues in public teaching hospitals (50% vs 31%). Three sub-groups of medical students were identified in our survey: students rotating in radiology clerkships, volunteers, and elective medical students. The latter group was least preferred by the researchers. This may be explained by their shorter duration of contact with faculty and residents while they are on elective rotations, compared to other two sub-groups.

Although a low level of radiology research production from Pakistan has been reported,⁴ we observed a high level of promotion of research activities in our participating teaching hospitals. This may suggest a discrepancy in promotion of research, and production of results from our research projects. Research was promoted significantly higher in private institutes compared to public institutes. This is consistent with a previous study which assessed clinical radiology research in Pakistan.⁴

In conclusion, a high level of research promotion in radiology has been observed in our teaching hospitals. Research was promoted significantly higher in private institutes. Fellows and residents are significantly preferred than medical students for such purposes.

References

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