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Research Article

**AN INVESTIGATION TO CREATE, EXECUTE, AND ASSESS  
ANOTHER RADIOLOGY CLERKSHIP FOR THE NECESSARY  
CLINICAL CLERKSHIP YEAR OF CLINICAL SCHOOL**<sup>1</sup>Dr. Adeel ur Rehman, <sup>2</sup>Tahawwur Zubair, <sup>3</sup>Muhammad Hammad Nisar<sup>1</sup>Rawalpindi Medical University**Article Received:** August 2020**Accepted:** September 2020**Published:** October 2020**Abstract:**

**Aim:** The creators played out this investigation to create, execute, and assess another radiology clerkship for the necessary clinical clerkship year of clinical school.

**Materials and Methods.** A mandatory radiology internship experience has been added to the required clinical internships in the form of 10 free half-day educational meetings. These meetings were distributed as one meeting for each current internship in a consistent manner. To allow for progression and association, online educational materials were planned and updated as part of the radiology practicum. Our current research was conducted at Services Hospital, Lahore from October 2018 to September 2019. The new internship was evaluated using perceptions, pre- and post-test measures with a reference group, organized and unstructured studies of the understudy and workforce, and individual and small group interviews.

**Results.** The course was effectively developed and executed. 95 understudies completed the course. Their mean post-test score (85.9) was essentially higher than their mean pre-test score (57.9, P .002) and the mean score of the reference group (56.8, P .002). The understudy students rarely used the web page. Obstacles to the dispersal of internships were identified.

**Conclusion:** An internship in radiology circulating among existing internships is feasible but presents many obstacles. Understudies lean heavily toward live orientation, and web-based educational materials are more important to the workforce and principals than understudies.

**Keywords:** Create, Execute, Assess Another Radiology Clerkship.

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**INTRODUCTION:**

Another 4-year undergraduate clinical training program was implemented in the fall of 1998 within our organization [1]. This educational program emphasizes a problem-based methodology and a close combination of each educational movement [2]. The clinical understudy students who completed the new training program arrived in May 2000 at the required clinical clerkship year, called "Stage 3". While the Phase 3 schedule excluded a radiology time block, a

mandatory radiology clerkship experience was added to the required clinical clerkships in the form of a 14 half-day progression of meeting presentations, which were dispersed as one meeting per existing clerkship in a consistent manner [3]. To enable progression and association, online educational materials were planned and implemented as a fundamental part of the radiology clerkship [4]. Here we describe the development, use and evaluation of this radiology training program from May 2000 to April 2001 [5].

Figure 1:

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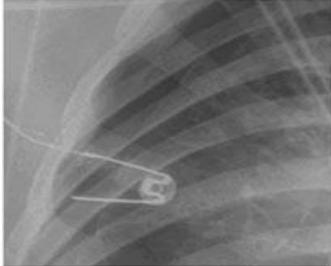
**Session 9  
Chest Radiology**

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**Faculty**

Caroline Chiles, M.D.  
Thomas S. Harle, M.D.

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**Educational Objectives**

1. The student should be able to recognize the following disease processes on CXRs:
  - Congestive heart failure
  - Pneumonia
  - Pneumothorax
2. The student should be familiar with the terminology used in the

a.

**Wake Forest University**

**Phase 3 Radiology**

Home Text Prior Next

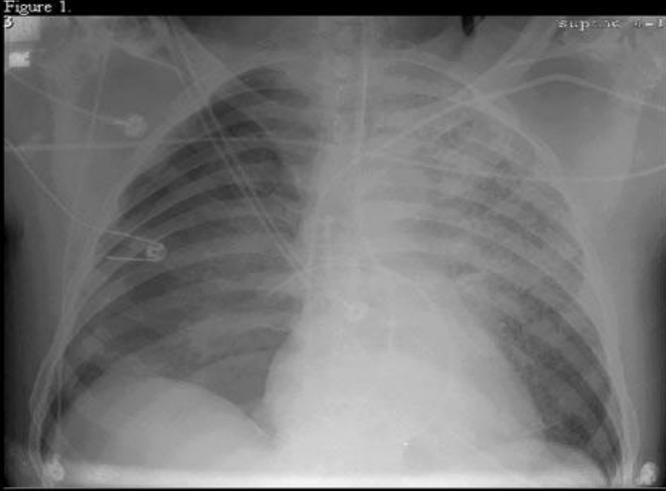
**Chest, Case 3**

Fig. 1. AP portable chest radiograph  
Fig. 2. Detail of right hemithorax

**History:**

65-year-old MICU patient, with worsening hypoxia.

Figure 1.  
AP portable chest radiograph



b.

**METHODOLOGY and RESULTS:**

The main plaza included two 8-week hospitalization pivots: medication and medical procedure. The second block contained four 4-week hospitalization pivots: obstetrics as well, gynecology, pediatrics, psychiatry and nervous system science - restoration. The third block contained four 4-week mobile towers: women's wellness, pediatrics, family medication and mobile medication. The first schedule in Phase 3 excluded a time square for a radiology rotation. After an exchange cycle, each program leader of the 12 existing scheduled rotations agreed to devote half a day to each rotation pivot to give time for a radiology experience called "Stage 3 Radiology". An arrangement of independent half-day meetings of instructional radiology exercises was thus circulated among the 10 clerkship pivots. All of the understudies in a clerkship block (approximately 37 understudies) attended these radiology teaching exercise meetings, regardless of their particular clerkship task. Hence, there were 12 separate radiology exercises with themes related to the substance of the three clerkship blocks (Table 1). Our current research was conducted at Services Hospital, Lahore from October 2018 to September 2019. Each teaching exercise meeting was held several times during the year, as the understudies passed through the three clerkship blocks. In this way, the full educational workload of the Radiology Division for Phase 3 Radiology was 30 half-day meetings. Trainees were required to attend one radiology training meeting for each rotation period during the year. A trainee who met all the requirements for Phase 3 earned 50 academic credits. The 10 Phase 3 radiology meetings were worth a total of one academic credit. The Phase

3 Radiology trainees, who wrote the alternating exams, were students from the class of 2002. The general points selected for the educational exercise meetings were very much related to the skills of the accessible employees. It was likewise important to spread the showing load among the various segments of the radiology office and for every instructional exercise meeting to relate expressly to its related clerkship block. In spite of the fact that understudies might have thought that it was more helpful to have numerous meetings about grown-up chest radiology instead of two meetings each about pediatric radiology and neuroradiology, the encouraging burden would have fallen lopsidedly on the chest segment. Furthermore, the presence of two separate pediatric clerkships ordered two instructional exercises about pediatric radiology, and the presence of independent nervous system science and psychiatry revolutions commanded two instructional exercises about neuroradiology. A necessities examination overview of the underlying third year clinical understudy control gathering helped direct individual employees in deciding the particular substance of their separate instructional exercises. Instructive accentuation was put on commonsense case based learning works out, advancement of verbal and visual jargon, and realizing when and where to look for more data. The instructional exercise meetings occurred in the radiology office's 52-seat auditorium. This auditorium was furnished with PC projection and 35-mm slide projection and had a live organization association for the teacher. Singular seats were not wired for network access.

**Table 1:**

Undergraduate major	Percent of sample ( <i>n</i> = 56)	Mean pretest (SD)	Mean posttest (SD)	Delta (SD)
Chemistry or biochemistry	5.4	27.33 (4.16)	30.33 (2.87)	+3.00 (4.36)
Biology or zoology	53.6	16.90 (6.08)	27.87 (3.98)	+10.97 (4.16)
Other science	8.9	20.60 (7.43)	25.60 (5.32)	+5.00 (3.00)
Education	7.1	12.25 (5.56)	22.25 (5.12)	+10.00 (2.94)
Various other majors	25.0	13.28 (8.24)	25.00 (4.40)	+11.72 (8.08)
All participants	100.0	16.55 (7.33)	26.68 (4.53)	+10.13 (5.56)

Table 2:

	Pretest	After lecture	After lecture-tutorial	Gain from lecture alone	Gain from lecture and lecture-tutorial
<b>Item #</b>	<b>N=144</b>	<b>n<sub>lecture</sub>=49</b>	<b>n<sub>L.T</sub>=72</b>		
<b>1</b>	65	69	92	0.14	0.77
<b>2</b>	8	20	44	0.14	0.4
<b>3</b>	30	22	42	-0.11	0.17
<b>4</b>	17	41	78	0.28	0.73
<b>5</b>	15	29	38	0.16	0.26
<b>6</b>	28	27	65	-0.03	0.52
<b>7</b>	17	8	25	-0.11	0.09
<b>8</b>	28	20	39	-0.1	0.15
<b>9</b>	53	71	82	0.4	0.62
<b>10</b>	21	22	36	0.02	0.19
<b>Average</b>	24.1	32.9	54.1	0.08	0.39
<b>Standard Error</b>	±4.1	±6.7	±7.3	± 0.05	± 0.08

Table 3:

Table 1  
Pretest-posttest data for the comparison of three groups

Subject	Group	Pretest	Posttest	Gain
1	1	48	60	12
1	1	70	50	-20
1	1	35	41	6
4	1	41	62	21
5	1	43	32	-11
6	1	39	44	5
7	2	53	71	18
8	2	67	85	18
9	2	84	82	-2
10	2	56	55	-1
11	2	44	62	18
12	2	74	77	3
13	3	80	84	4
14	3	72	80	8
15	3	54	79	25
16	3	66	84	18
17	3	69	66	-3
18	3	67	65	-2

Table 4:

Fixed effects				
Predictor	Estimate (SE)	t Ratio <sup>a</sup>	p Value	Hedges's g
Intercept, $\beta_0$	95.53 (0.70)	138.37	<.001	
Condition, $\gamma_{010}$	-0.41 (0.79)	-0.75	.606	-0.03
GMRT pretest, $\beta_{10}$	0.63 (0.02)	26.54	<.001	
LD <sup>b</sup> , $\beta_{20}$	-7.15 (1.30)	-4.71	<.001	
Condition, $\gamma_{210}$	4.86 (2.11)	2.00	.026	.52
SPED_Other <sup>b</sup> , $\beta_{30}$	-1.68 (1.44)	-1.54	.243	
Random effects				
	Variance (SD)	t Ratio <sup>a</sup>	p Value	% of total variation
Level 1 (individual)	62.22 (7.89)	2.433	<.001	88.52
Level 2 (teacher)	5.92 (2.43)	2.43	.005	8.42
Level 3 (school)	2.15 (1.47)	1.47		3.06

### DISCUSSION:

Indicative radiology plays a central role in state-of-the-art clinical medication practice and hence all clinical studies at the end of the studies should have useful information on analytical imaging [6]. Clinical school schedules and requests for the time of third-year clinical placements pose challenges in establishing the ideal schedule for radiology education [7]. We have shown that while the time spent does not appear on the schedule, a radiology teaching program adapted to the different clerkships can be effectively integrated into a necessary clinical clerkship year. We distinguished considerable loads, but counting was identified as a challenge, removing understudy students from understanding the consideration assignments to go to radiology meetings, trying to maintain a small progression between scenes of education, firm booking and complex organization [8]. Understudy students are enthusiastic about learning radiology whenever they see radiological images in a clinical setting, but it is impossible to teach indicative radiology to huge gatherings of clinical understudies in this context. When planning an appropriate radiology practicum and organizing a specific radiology teaching exercise meeting for each practicum rotation, it was decided that the radiology teaching exercises would complement the clinical experience and a solitary radiology square or lap [9]. The trainees found that the instructional exercises did not fit well with their clinical rotations. Despite the fact that there was an instructional exercise meeting with a related teaching substance for each clinical practicum, pragmatic considerations blocked the introduction of these instructional exercise meetings at

the time each trainee actually took the corresponding practicum [10].

### CONCLUSION:

All things considered, a web-based clinical understudy radiology training program, delivered over the course of a year of necessary clinical clerkship, is feasible, while it carries many of the burdens one would think of with a solitary square pivot. Understudies lean incredibly towards live teaching, and web-based teaching materials are more important for staff and managers than for understudies. There are many limitations to the use of web-based materials by understudy students during clinical placements.

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