

Build-A-Pelvis, a Low-Cost Modelling Activity to Improve Understanding of Female Pelvic and Perineal Anatomy



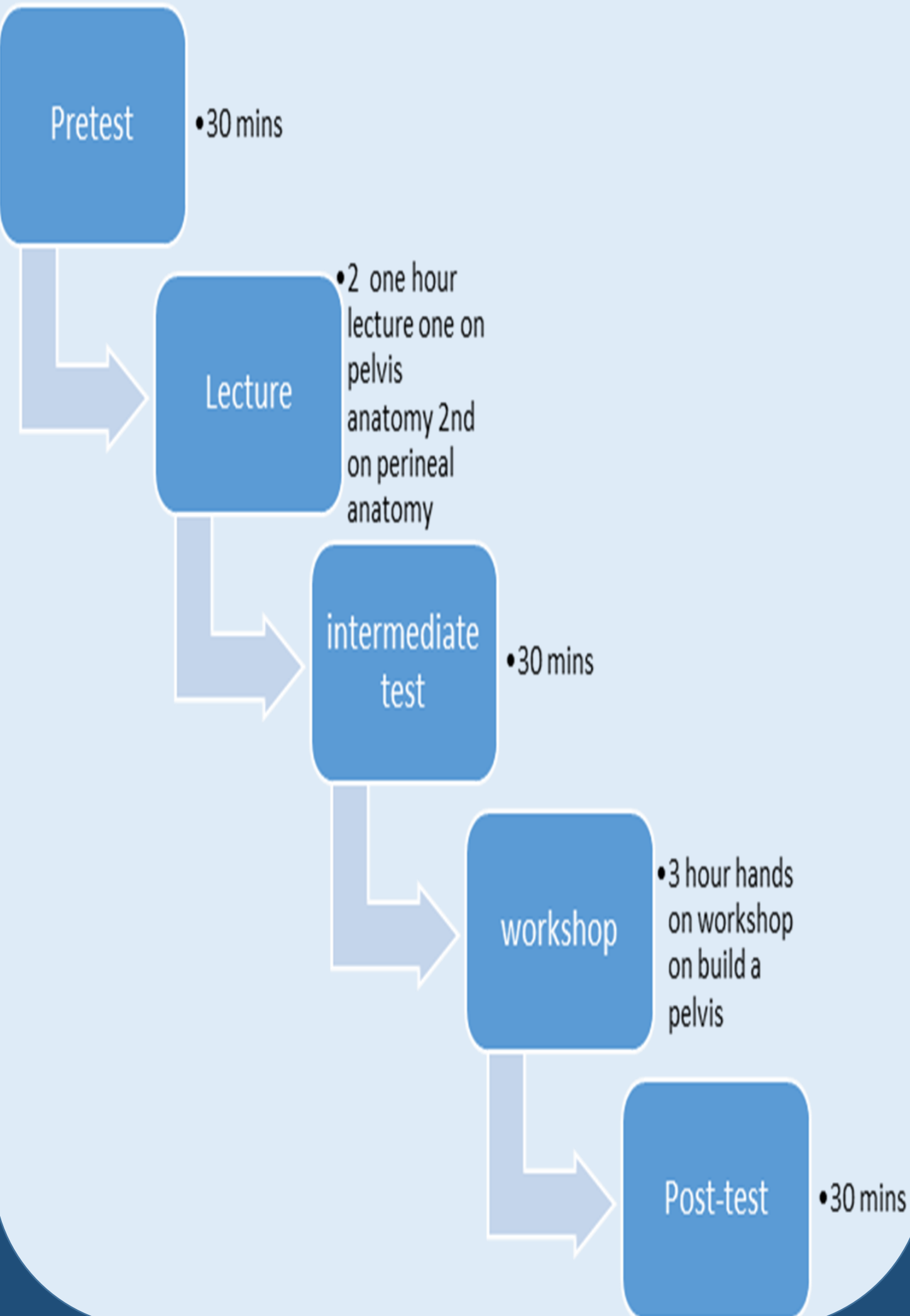
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Objective

The present study aimed to assess the improvement in residents' understanding of female pelvic and perineal anatomy by comparing standard teaching strategies using lectures to a simulation-based anatomy workshop using a low-cost model

Material and methods

A retrospective observational study was conducted at the department of Obstetrics and gynecology, Aga Khan Hospital. A hands-on workshop was developed for the residents to improve residents' comprehension of the anatomy of the Female pelvic and perineum. All participants attended 2 one-hour lectures: one on pelvic anatomy and the second on perineal anatomy. A pre-test was conducted before lectures and an intermediate test was taken (which acted as a post-test after the lecture series and a pre-test before the hands-on workshop). A 3-hour session was conducted to build a pelvis using simple office supplies designed to teach pelvic floor and perineal anatomy. Post-test was conducted at the end of the workshop. Test scores were compared



Results

Table 1. Mean test scores and differences

	Mean $\pm$ Std	Std error	p-value
Pre-test score	7.14 $\pm$ 2.34	0.498	
After standard lecture	10.68 $\pm$ 2.1	0.448	
After hands-on workshop	14.77 $\pm$ 1.88	0.4	
Difference between pretest & lecture	3.55 $\pm$ 2.84	0.606	<0.0001
Difference between lecture & workshop	4.09 $\pm$ 2.89	0.617	<0.0001
Difference between pretest & workshop	7.64 $\pm$ 2.85	0.608	<0.0001

A total of 22 participants were enrolled in the study. A mean pre-test score of 7.14 ± 2.34 was calculated. The mean score increased to 10.68 ± 2.1 after the standard lecture while to 14.77 ± 1.88 after the hands-on workshop. These differences in the pre-, post-lecture, and post-hands-on workshop were statistically significant ($p < 0.0001$). The mean feedback score for the overall assessment from the residents was 4.9 ± 0.32 out of a total of 5.

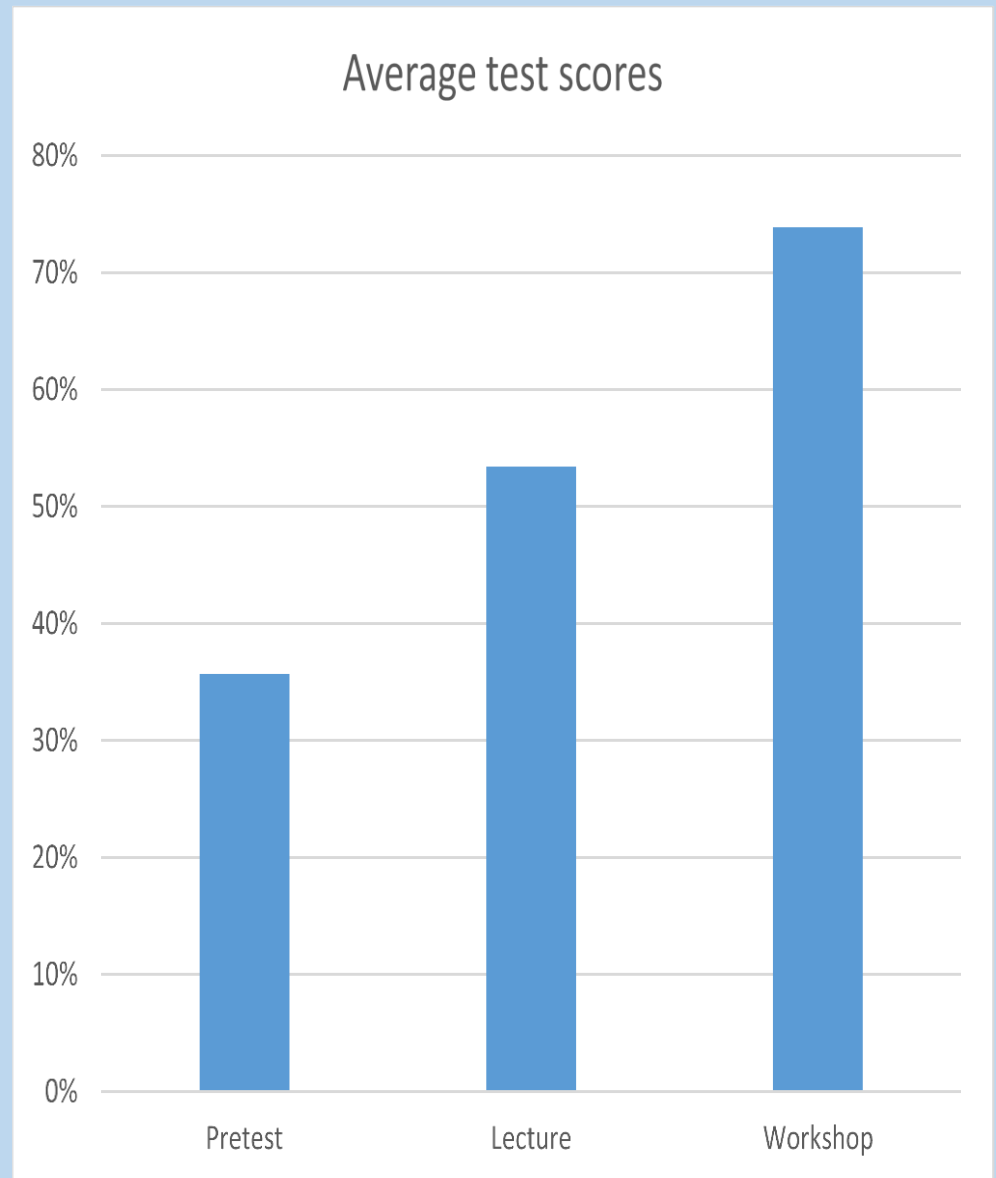


Figure 2. Showing the average test score in the pre-test, after the lecture, and after the workshop

Table 2. Resident feedback

	Mean $\pm$ Std
Objectives of the activity	4.74 $\pm$ 0.45
Acquired new knowledge	4.84 $\pm$ 0.37
Time management	4.84 $\pm$ 0.37
Queries responded	4.9 $\pm$ 0.32
Overall assessment	4.9 $\pm$ 0.32
Relative to where you were	
25% to 50%	1 (5.26%)
50% to 75%	8 (42.1%)
75% to 100%	10 (52.6%)

Conclusion

This study, in concurrence with previous literature, provides further evidence that low-budget teaching modalities may be just as impactful as their more expensive technological counterparts.

Acknowledgement

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