

Educational Environment of Trainees regarding Postgraduate Gynaecology/ Obstetric Educational Environment in Allied Hospitals of Rawalpindi Medical College, Rawalpindi

Irum Kalsoom¹, Sumreena Mansoor²

Medical Education Department, Rawalpindi Medical College¹, Rawalpindi. Department of Biochemistry, Shifa College of Medicine, Shifa Tameer-i-Millat University², Islamabad.

Abstract

Background: The workplace environment greatly influence the learning and professional performance of postgraduate medical trainees in hospital settings. This learning aspect has not been explored yet, therefore, current study was planned to explore its effect in departments of Gynaecology/ Obstetrics of Allied Hospitals of Rawalpindi Medical College, Rawalpindi.

Objective: To assess the academic environment of postgraduate trainees working in Gynecology/ Obstetrics departments of Allied Hospitals of Rawalpindi Medical College, Rawalpindi.

Study type, settings and duration: A cross-sectional descriptive study was conducted at Gynecology/ Obstetric units of all three Allied Hospitals of Rawalpindi Medical College i.e., Holy Family Hospital (HFH), Benazir Bhutto Hospital (BBH) and District Head Quarters Hospital (DHQH) during September 2017.

Methodology: The study was carried out among 100 postgraduate trainees who were doing their postgraduate training in Gynecology/ Obstetric units of all three Allied Hospitals. The data was collected using intercontinentally authorized Postgraduate Hospital Educational Environment Measure (PHEEM) questionnaire.

Results: On PHEEM analysis, total score was premeditated to be 107.29±55.73. About 81.4% trainees were satisfied with the self-sufficiency prevailing to them during training while 88.4% were satisfied with teaching opportunities offered during training. However, social funding provided to them was confirmed to be 72.1%.

Conclusion: Over all learning environment of our clinical trainees was satisfactory regarding their clinical coaching and endowment of self-government to them in their corresponding units. However social support availability to the trainees is a factor that demands due consideration.

Key words: PHEEM, postgraduate trainees, Gynecology/ Obstetric departments.

Introduction

Educational climate is of dominant standing not only for undergraduate medical students but also for the postgraduate trainees. As medicine is a very inexpensive field, this requires for the provision of great training.¹ Educational environment has

been prioritized by numerous intellectuals for promotion of quality medical education.²

Cross et al highlighted the consequence of learning climate in efficacious career choice. Regular checking of educational environment is also obligatory to side step its aberration from well-defined standards.³ Wisdom milieu is a key reason that not only distresses the variety of any correction for training but also stimulates the undertaking of certain marks for accomplishment of brilliance in any institution.¹

Factors promoting conducive educational climate of trainees are very critical to augment their learning. Fundamentally there are three portions of learning situation that should be given due consideration.⁴ First is physical situation which includes facilities at the workplace counting security of the trainees, food, shelter etc. Second is warm climate which covers sustenance of the trainees by

Corresponding Author:

Irum Kalsoom

Medical Education Department
Rawalpindi Medical College, Rawalpindi.
Email: luckyeroo@gmail.com

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Authors Contribution

IK & SM conceptualized the project & did the statistical analysis and drafting, revision & writing of manuscript. IK also did the data collection and the literature search.

their pensioners. Last but not the least is intelligent environment that is essentially having learning openings with the patients and practicing suggestion based medicine.⁴

A deleterious and non-conducive clinical learning environment in our health care institutes not only hinders the learning of our residents but also a major hindrance in getting equipped with managerial skills in their profession. This factor is considered to be one of the major reasons for increased burnout of our residents.⁵

Postgraduate trainees are confronted with various problems during their residency. Apart from managing the patients in healthcare settings, they are also worried to get through their exams while learning in stressed educational climate. So, educational climate of trainees is of paramount importance to them for facilitation of their learning process.^{6,7}

Perception of the trainees affecting their educational climate at various permitted institutes is also reread by UK General Medical Council. Such inspections are very informative as they simplify the examination of professions and faintness of diverse drills and local programs.⁸

Multiple tools for calculation of educational environment were premeditated by Soemantri et al during 2010. These apparatuses were calculated ownership in view their aptness for different educational settings and these were shown to be binding as well as reliable in judging an educational climate.⁹

The assessment of educational environment was done by using Postgraduate Hospital Educational Environment Measure (PHEEM), a tool that was demonstrated to be having high degree of internal reliability for evaluation of educational climate of interneers.¹⁰ In addition, PHEEM valid in measuring postgraduate hospital educational environment.¹¹ The current study was proposed to evaluate learning environment of postgraduate trainees who were doing postgraduate training from Gynecology/ Obstetric units of all three Allied Hospitals; Holy Family Hospital (HFH), Benazir Bhutto Hospital (BBH) and District Head Quarters Hospital (DHQH) of Rawalpindi Medical College, Rawalpindi. This research findings will not only represent the strengths and weaknesses of postgraduate training in respective of surgical units of Allied Hospitals but also assist the decision makers in development of policies for improvement in future.

Methodology

A cross-sectional descriptive study was carried out among 100 postgraduate trainees who

were doing their postgraduate training in five Gynaecology/ Obstetrics units of three Allied Hospitals (Holy Family Hospital (HFH), Benazir Bhutto Hospital (BBH) and District Head Quarters Hospital (DHQH) attached with Rawalpindi Medical College, Rawalpindi. Universal sampling was done. The data was collected by using internationally validated PHEEM questionnaire during September 2017. It was a self-administered questionnaire. All enrolled students were briefed in a 10 minutes lecture on how to fill in questionnaire. Informed consent was taken from all the trainees following clarification of the purpose of study. The study was approved by Ethical Review Board of Rawalpindi Medical College.

PHEEM is a 40 item questionnaire that is encompassed of 3 categories. First one aimed to measure the perception of role autonomy of residents, teaching and social support provided to them throughout their training.⁷ Each item of PHEEM questionnaire scores 0-4 on 5 point Likert scale. Maximum score was 160.¹² Data was analyzed using SPSS version 20. The quantitative variables like scores of PHEEM were presented as mean $\pm$ SD. The score for PHEEM was compared by using Kruskal Wallis test and chi square test between residents for different hospitals. p -value ≤ 0.05 was considered as significant.

Results

The study was done on 100 postgraduate trainees of Gynae/ Obstetrics in all three teaching hospitals. There were 56 residents enrolled from Holy Family Hospital (HFH), 23 from Benazir Bhutto Hospital (BBH) and 21 from DHQ hospital, Rawalpindi. The overall individual mean item score for perception of role autonomy was presented in Table-1.

The perception of role autonomy showed 69.3%, perception of teaching showed 67.6% while perception of social support showed 63.4% maximum score (Table-2).

Among perception of role autonomy the individual question of "My workload in this job is fine" showed least score (1.97 ± 1.25), while in perception of teaching the least score was shown in "I have protected educational time during my training" i.e., 2.28 ± 1.16 and among perception of social support showed least score regarding "There is a no-blame culture in this post" having score of 2.17 ± 1.13 (Table-3).

Table 1: Mean and standard deviation of individual items of PHEEM Questionnaire. (Max=4)

1. Perception of role Autonomy	Mean±SD
1. Work description with clear working hours	2.53±1.46
4. Induction program that is informative	2.60±1.16
5. Training program having certain responsibility level	3.49±1.32
8. Irrelevant tasks to be performed	2.96±1.27
9. Handbook for House officers available	2.75±4.33
11. Inappropriately Bleeped	2.73±1.09
14. Protocols are clear in this post	2.77±1.09
17. Working hours are in line to the regulations of internship	2.59±4.30
18. Continuous Care Providing Opportunities Available	3.02±1.25
29. Team Work Environment	2.93±1.35
30. For acquiring grades, practical procedures opportunities available	3.11±1.29
32. Fine Workload job	1.97±1.25
34. Training is in line to start up further higher studies	2.67±1.35
40. Mutual Respect atmosphere is promoted by the teachers	2.69±1.33
Cumulative scores of above items out of 56	38.81
2. Perception of Teaching	Mean±SD
2. clear expectations are being set by teachers	2.32±1.24
3. Educational time Protected during the training	2.28±1.16
6. Clinical supervision is Good each and every time	2.65±1.25
10. Communication skills of teachers is good	2.70±1.22
12. Actively Participate in events that are educational	2.47±1.10
15. Enthusiastic teachers	2.69±1.19
21. Accessing Relevant Educational Program	2.49±1.15
22. Seniors regularly give feedback	3.02±1.31
23. Well Organized Clinical Teachers	2.92±1.26
27. Learning Opportunities are enough according to needs	2.81±1.19
28. Teaching skills of teachers is good	2.97±1.24
31. Easy Accessibility towards teachers	3.11±1.36
33. Effective utilization of learning opportunities by senior staff	2.88±1.31
37. Encouragement to become independent learner by teachers	2.99±1.33
39. Strengths and weaknesses feedback is good	2.87±1.40
Cumulative scores of above items out of 60	40.57
3. Perception of Social Support	Mean±SD
7. Element of Racism exists	2.27±1.11
13. Found some sex discrimination	2.48±1.19
16. Collaboration is good with other colleagues (doctors)	3.21±1.22
19. Accessibility to careers advice is suitable	2.81±1.24
20. Accommodation within hospital for junior doctors is good	2.22±1.34
24. Environment of the hospital being physically safe	2.56±1.35
25. Culture of no blame exists	2.17±1.13
26. During Call facilities of catering are adequate	2.22±1.07
35. Mentoring Skills of teachers are good	3.10±1.09
36. Present job gives me enjoyment	2.59±1.31
38. Opportunities of Counselling Available for Junior Doctors failing to successfully completing their training	2.28±1.13
Cumulative scores of above items out of 44	27.91

Table 2: Percentage scored in each component of PHEEM.

Components of PHEEM	Mean	SD	% of Max. Score
Perception of role autonomy (56)	38.81	23.84	69.3
Perception of teaching (60)	40.57	18.71	67.6
Perception of social support (44)	27.91	13.18	63.4
Total score(Max = 160)	107.29	55.73	

Postgraduate trainees of Gynae/ Obs working in DHQ hospital were disappointed both with their working hours (76.2%) as well as with their workload (85.7%). Maximum dissatisfaction was observed among apprentices of gynae/ obs HFH from their clinical direction during training

(57.2%) and provision of feedback (42.8%) from their mentors. The opinion of trainees working in all three teaching hospitals with respect to reinforcement for independent learning is shown below in Table-4 with p -value =0.023.

Table 3: Items with lowest scores in PHEEM.

Components of PHEEM	Items with lowest mean±SD	Mean	SD
Perception of role autonomy	Fine Workload	1.97	1.25
Perception of teaching	Educational time Protected during the training	2.28	1.16
Perception of social support	Culture of no blame exists	2.17	1.13

Table 4: Frequency Distribution of perception regarding “encouragement to become independent learner by teachers” among studied training hospitals.

Hospital	Agree	No response	Disagree	Total	Chi Square (p-value)
HFH	20 (35.7%)	12 (21.4%)	24 (42.9%)	56	11.32 (0.023)
BBH	10 (43.5%)	08 (34.8%)	05 (21.7%)	23	
DHQH	15 (71.4%)	02 (9.5%)	04 (19.1%)	21	
Total	45	22	33	100	

There was overall significant difference present among the residents of three allied hospitals regarding overall perception as measured by PHEEM score (Table-5).

Table 5: Comparison of overall perception among different facilities using kruskal wallis test.

PHEEM	Facility	N	Mean Rank	Chi Square	df	p-value
PHEEM Score	HFH	56	44.33	6.944	2	0.031*
	BBH	23	53.80			
	DHQH	21	63.33			

*Significant Value, HFH= Holy Family Hospital; BBH= Benazir Bhutto Hospital; DHQH= DHQ Hospital

Discussion

Although PHEEM was firstly designed by experts of United Kingdom to measure clinical learning environment of young doctors¹³ but Brazil, Singapore, Australia and many other countries have also validated this tool.^{14,15}

In current study, perception of postgraduate trainees regarding provision of role autonomy to them during their residency in Gynecology/ Obstetric departments of all three Allied Hospitals was found to be 45.57/56 (81.4%) while another study carried out in Gynecology/ Obstetric departments of Taibah University of Saudi Arabia depicted cumulative score of 24.1/56 (43.03%).³ Deceptively results of our surroundings are much improved and make us feel proud of providing enlightening environment to the trainees.

In our study, authorization of occupied hours to practicum regulations was high (3.01±1.24) as compared to that scored in study conducted in Taibah University (1.00±0.6).³ A research among residents of Saudi University medical school showed low scores (29.6±8.1) concerning their role independence during residence as associated to that of contemporary study.⁷

The findings revealed that most of our apprentices working in Gynae/Obs departments of Holy Family Hospital were agreed both with their duty hours (19.7%) and workload (21.4%). Discontent with workload was observed to be highest (85.7%) among trainees of Gynecology/

Obstetrics unit, DHQ Hospital Rawalpindi which was still less than that observed (88.1%) among trainees of Postgraduate Medical Institute at Lady Reading Hospital, Peshawar.⁸ The degree of discontent among trainees inducted in Gynaecology/ Obstetrics DHQ Hospital is thought bothersome and should be given due consideration by policy makers.

In present study, opinion of trainees regarding their education in their distinct units was scored to be 53.02/60 while among residents of Taibah University, this category of PHEEM still displayed poor score 29.3/60.⁴ Similarly among people of Saudi University Medical School this related score was calculated to be 33.5 /60.¹⁶

Although trainees in our clinical settings were found to be satisfied with teaching in their Gynecology/ Obstetrics departments, but inter hospital and interdepartmental comparison of few items of this component (perception of teaching) concluded that 19.6% and 60.9% trainees of Gynecology/ Obstetrics HFH and BBH respectively claimed of having good clinical supervision all the times and availability of regular feedback from their seniors respectively. In addition, 81.2% trainees of Gynecology/ Obstetrics, HFH assured of being encouraged by their clinical teachers for independent learning and timely provision of feedback. On the other hand, 60.9% trainees of Gynecology/ Obstetrics BBH affirmed that their supervisors are very well equipped with teaching skills. Contrary to the results of our study, 46.9% residents of Lady Reading Hospital, Peshawar were dissatisfied with their clinical teaching.¹⁷ These results are not depicted for criticism but to facilitate our postgraduate trainees for better learning in their respective units.

Total PHEEM score in our study was computed to be 107.29±55.73, while in the study done by Amjad Mahmood Khan et al., the perceptions of Gynae/ Obs residents revealed total PHEEM score equal to 90.05±19.3,¹⁸ although this comparison is depicting provision of sufficient role autonomy, social support and teaching of the residents of our Allied hospitals but still our postgraduate hospital educational environment entails due consideration because our total score was much far from 160.

In current study, social support provided to our trainees was originated to be more (63.4%) contrary to both inhabitants of Taibah University (60%) 3 and persons of Saudi University Medical School (51.1%)¹⁶. Similarly another global study exposed poor social support to residents (59%)¹⁹ as compared to what was provided to the apprentices of Allied Hospitals of Rawalpindi Medical College. Almost 57.1% of the apprentices of Gynecology/ Obstetrics, DHQ hospital were satisfied with the mentoring of their clinical teachers. No doubt, supervisors and teachers of our Allied Hospitals are very devoted and loyal but their insufficient mentoring strength might be due to their busy time table, amplified patient load in their healthcare settings and time restrictions.

Postgraduate trainees were found to be content with their role autonomy in their respective departments followed by their teaching during their drills. However social support given to them is a factor that is lagging behind and needs proper contemplation to amplify their knowledge, skills as well as their sympathy with the patients.

Conflict of interest: None declared.

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