

Assessment of Educational Environment at a Public Sector Medical College in Kashmir

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ABSTRACT

Background: Educational environment of any institution is important as it supports the post-graduate residents (PGR's) and helps to develop better future consultants. The most commonly used measure for this purpose is Postgraduate Hospital Educational Environment Measure (PHEEM).

Aim: To assess the educational environment of PGR's using PHEEM in our hospital.

Methods: This cross-sectional study was conducted at Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur. The total span of study was 2 months, from December, 2016 to January, 2017. All the PGR's working in our hospital were included in this study. A questionnaire was circulated among them and was filled at spot. In this study, data were analyzed by SPSS version 20.

Results: A total of 82 PGR's participated. The mean age of PGR's was 27.92 ± 2.10 years. Most of the PGR's included in this study were male (70.7%). The mean PHEEM total score was found as 90.49 ± 15.44 in this study. Most of the residents labelled educational environment into level 3 (71.3%). According to subscales, maximum score was for teaching and autonomy subscales. According to speciality, maximum score was found for Medicine, followed by Paediatric medicine, Gynaecology & Obstetrics and Surgery. Mean PHEEM score was not significantly different for gender, year of residency and marital status of PGR's.

Conclusion: We concluded that educational environment is on a positive aspect in our hospital, however it needs some improvement.

Keywords: PHEEM; educational environment; medical college, residents

INTRODUCTION

“Learning depends on engaging the learner, which is determined by motivation and perception of relevance”. Educational environment is defined as a set of factors that describe what it is like to be a learner within an organization¹. It is an important measure which directs the success and aptitude of an institute as well a residency programme. Post-graduate Residents (PGR's) have to strive in a competent environment along with all the other stress factors including their routine emergency and indoor duties and low pay structure, particularly in our country. In this stressful routine, they are also supposed to pass an examination at the end of their training. They have to get an extra time for their self study and to keep their knowledge up-to-date to cope with the evolving medical knowledge and the recent advances in their own field. This all can be done if an ambient and comfortable environment is available to them. So the educational environment of an institution, particularly for residents, is important for creating good future consultants^{2,3,4}.

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The educational environment may be measured by many tools, however, the most commonly used measure for this purpose is Postgraduate Hospital Educational Environment Measure (PHEEM). It is a validated tool which has been assessed in many setting, countries and languages^{5,6,7}. The objective of this study was to assess the educational environment of PGR's using PHEEM in our hospital.

MATERIALS AND METHODS

This cross-sectional study was conducted at Mohtarma Benazir Bhutto Shaheed Medical College, Mirpur. The total span of study was 2 months, from December, 2016 to January, 2017. Approval from ethical committee for index study was obtained. All the PGR's working in our hospital were included in this study. A questionnaire was circulated among them and was filled at spot. It was anonymous questionnaire, so no formal permission was obtained from PGR's. Our designed questionnaire had tool for assessment of educational environment i.e. PHEEM. PHEEM is a validated questionnaire for this purpose having 40 questions, and each question has score from 0 to 4, making a maximum score of 160. It assesses the educational environment and

categorizes it into 4 global scaled according to the score (Table 1). PHEEM assess educational environment into 3 subscales, namely teaching, autonomy and social support. Of 40 questions, 15 questions were for teaching subscale, 14 questions for autonomy and 11 questions for social support subscales. In this study, data were analyzed by SPSS version 20.

RESULTS

In this study, in total of 82 PGR's participated. The mean age of PGR's was 27.92±2.10 years. Most of the PGR's included in this study were male (70.7%). All the demographic details of residents are summarized in table 1.

The mean PHEEM total score was found as 90.49±15.44 in this study. When categorized into global scales, most of the residents labelled educational environment into level 3(71.3%). According to subscales, maximum score was for teaching and autonomy subscales (Table 2).

According to speciality, maximum score was found for Medicine, followed by PaedsMedicine, Gynaecology& Obstetrics and Surgery. Further in this study, mean PHEEM score was stratified for gender, year of residency and marital status of PGR's (Table 4).

Table 1: Global scales of Educational environment using PHEEM

Score	Global Scales
0-40	Poor
41-80	Plenty of problems
81-120	More positive than negative but room for improvement
121-160	Excellent

Table 1: Demographic details of PGR's in this study

Age	27.92±2.10 years
Male	58 (70.7%)
Female	24 (29.3%)
Year of residency	
1 st year	21 (25.6%)
2 nd year	19 (23.2%)
3 rd year	16 (19.5%)
4 th year	22 (26.8%)
Marital status	
Single	51 (62.2%)
Married	31 (37.8%)
Department	
Internal Medicine	25 (30.5%)
General Surgery	18 (22%)
Paediatric Medicine	20 (24.4%)
Gynaecology& Obstetrics	19 (23.2%)

Table 2: Mean PHEM score and its subscales

Subscales	Score (Mean ± SD)
Teaching	38.91 ± 7.16
Autonomy	30.23 ± 5.99
Social Support	21.62 ± 5.80
Total PHEEM score	90.76 ± 15.68

Table 3:

	PHEEM Score Mean ± SD	p-value
Gender		
Male	91.24±15.23	0.674
Female	89.6±17.01	
Year of residency		
1 st year	93.90±14.13	0.466
2 nd year	92.3 ±16.40	
3 rd year	91.06±18.72	
4 th year	86.92±14.41	
Marital Status		
Single	92.6±16.87	0.175
Married	87.74±13.21	
Speciality		
Internal Medicine	93.8±17.31	0.463
General Surgery	86.16±11.65	
Paediatric Medicine	91.8±12.73	
Gynae& Obstetrics	90.05±19.3	

DISCUSSION

PHEEM was developed in UK by Roff et al, to evaluate various aspects of the clinical learning environment for junior doctors³. It scores three dimensions of the clinical learning environment; perception of autonomy, perception of teaching and perception of social support³. The main objective of this study was to determine the educational environment for our residents.

Overall mean PHEEM score calculated was 90.49±15.44 which is more positive showing good and satisfactory education environment for PGR's in our hospital. Similar mean score ranging from 82 to 102 has been reported from several studies in developed and developing countries⁴. Most of the residents labelled education environment into level 3(71%) suggestive of positive environment requiring enhancements and improvements. Similar level was reported in a study conducted in Karachi Pakistan⁴.

Maximum score was for teaching subscale, followed by autonomy and social support. Female residents, senior 4th year residents and married ones gave significantly low score on few aspects of social support including gender discrimination, less calibration with other doctors, physical insecurity and no counseling opportunities for junior doctors. Similar results were shown by a study where 42% residents

think their workplace to be unpleasant in terms of social support⁹ while another study conducted in twin cities of Pakistan showed that private teaching hospital residents give high scores to perception of social support, which may be due to low patients load and high literacy rate of patients coming to private hospitals¹⁰.

In our study, male residents reported a better score than female residents, which may be attributed to children and family responsibilities that females have to face in a developing country like Pakistan. Similar negative score was reported by females in study conducted in Saudi Arabia and Karachi Pakistan^{1,11}. Also 4th year residents reported low PHEEM score as compared to junior residents which may be because of lack of advanced technology and equipments in country like us⁴.

On the basis of this study, we conclude that educational environment is on a positive aspect in our hospital, however it needs some improvement. So we recommend more qualitative and quantitative trials over the topic in order to observe the need of the residents and measures to address them.

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