

Comparison of medical postgraduate training between public and private settings of Peshawar

Waseem Khan, Abdul Wahab, Mian Tayyab Shah, Zeeshan Ahmad, Hassaan Ahmad, Malik Waleed Zeb Khan, Jibran Akram, Eemaz Nathaniel

Submitted

January 20, 2024

Accepted

September 06, 2024

Author Information*Dr. Waseem Khan*PG trainee, Internal Medicine
Hayatabad Medical Complex,
Peshawar, Khyber
Pakhtunkhwa, Pakistan*Dr. Abdul Wahab*PG Trainee, Internal Medicine
Hayatabad Medical Complex,
Peshawar, Khyber
Pakhtunkhwa, Pakistan*Dr. Mian Tayyab Shah*PG Trainee, Internal Medicine
Khyber Teaching Hospital,
Peshawar, Khyber
Pakhtunkhwa, Pakistan*Dr. Zeeshan Ahmad*PG Trainee, Psychiatry
Hayatabad Medical Complex,
Peshawar, Khyber
Pakhtunkhwa, Pakistan*Dr. Hassaan Ahmad*House Officer, Rehman Medical
Institute, Peshawar, Khyber
Pakhtunkhwa, Pakistan*Dr. Malik Waleed Zeb Khan*Final Year MBBS, Khyber
Medical College, Peshawar,
Khyber Pakhtunkhwa, Pakistan*Dr. Jibran Ikram*Clinical Research Trainee,
Harvard School of Medicine,
Boston, USA.*Dr. Eemaz Nathaniel*Clinical Research Trainee,
Harvard School of Medicine,
Boston, USA.

(Corresponding Author)

Email: emazo064@gmail.com

Citation: Khan W, Wahab A, Shah MT, Ahmad Z, Ahmad H, Khan MWZ, et al. Comparison of medical postgraduate training between public and private settings of Peshawar. J Rehman Med Inst. 2024 Oct-Dec;10(4):15-8.**ABSTRACT**

Background: The quality of postgraduate medical training varies greatly according to whether it is obtained in Pakistan's public or private healthcare sector. This is particularly true with regards to Peshawar, Pakistan, where medical facility infrastructure is characterized by a combination of public and private hospitals.

Objective: To compare the postgraduate training environment in Peshawar's public and private tertiary sectors using the Postgraduate Hospital Education Environment Measure (PHEEM).

Materials & Methods: A cross-sectional survey was conducted from January 2023 to April 2023. The survey included 115 trainees specializing in medicine and allied specialties or surgery and allied specialties in two tertiary care units located in Peshawar. The survey involved trainees completing a comprehensive questionnaire addressing various facets, including employment contracts and training structures.

Results: The study showed that 36.5% of trainees in private hospitals had employment contracts, surpassing the 26.0% observed in public hospitals. Public hospitals afforded more opportunities for hands-on training, whereas private hospitals emphasized formalized training and provided superior working conditions.

Conclusion: Despite the implementation of similar induction programs in both settings, this study underscores the marked disparities in educational environments between public and private hospitals.

Keywords: Education, Medical, Graduate; Education, Professional; Education, Medical, Continuing; Hospitals, Public; Hospitals, Private; Hospitals, Teaching.

The authors declared no conflict of interest. All authors contributed substantially to the planning of research, data collection, data analysis, and write-up of the article, and agreed to be accountable for all aspects of the work.

INTRODUCTION

The clinical postgraduate training stage is crucial for medical professionals because it shapes their abilities, knowledge, and attitudes toward patient-centered care and clinical practice. Moreover, it plays a significant role in the development of clinical graduates as experts. This is especially true in Peshawar, a major city in Pakistan with a mix of public and private hospitals.

In a recent study by Zia et al.,¹ the perceptions of fellowship trainees in public and private tertiary care hospitals in Karachi were analyzed, revealing significant differences in their training experiences. Similarly, Shaikh et al.,² focused on the future goals of interns in public and private tertiary care hospitals in a large city, providing valuable insights into the desires and expectations of medical residents. Studies by Palec³ on the regional system and postgraduate medical training in Czechoslovakia, and Shiwani⁴ advocating for a structured and standardized national postgraduate medical training program, emphasize the need for a systematic approach to medical education. When comparing training in the public and private sectors, it is crucial to consider the structural disparities that can lead to inequalities in the quality of training and its outcomes. Simonetti and Sáez⁵ conducted a study on nurse satisfaction in the workplace, which can be compared to postgraduate medical training, as job satisfaction often depends on the quality of the training environment. Similarly, Shaikh et al.,² evaluated the medical training environment in hospitals in Karachi and provided a framework for assessing and comparing such environments in both the public and private sectors in Peshawar.

Haider et al.,⁶ discussed the entrepreneurial mindset of medical undergraduates, while Faisal et al.,⁷ assessed the writing skills of medical residents. These studies highlight the changing competencies of medical trainees. The development of these competencies may differ significantly between public and private training settings, which can impact the overall skill set of these graduates. Additionally, Crotty and Brown⁸ emphasize the urgent need for additional training opportunities for younger medical officers, which is relevant to both the public and private sectors.

In Portugal, Mouzinho's 2018 research on hand surgery highlights the importance of specialized components in postgraduate training, which can vary greatly depending on the institution.⁹ However, the differences between training environments in public and private settings, particularly in regions such as Peshawar, are not well understood. Although there is extensive literature on medical training worldwide, specific insights into the differences between public and private training in particular locations, including this region, are often lacking. This knowledge gap makes it challenging to develop targeted improvements and policy interventions that meet the unique requirements of each place. The purpose of this research is to enhance the quality of medical education and training, which is crucial for healthcare advancements. By conducting a comparative study in Peshawar, this research aimed to identify the strengths and weaknesses of postgraduate training in public and private healthcare facilities. The findings will guide decision-makers, educators, and healthcare institutions in making informed choices to improve training programs.

The objective of the study was to gain a deeper understanding of the standards, environment, and quality of postgraduate training in government and private postgraduate institutes of Peshawar.

MATERIALS & METHODS

A cross-sectional survey was conducted between January 2023 and April 2023 at two tertiary care units in Peshawar: the Rehman Medical Institute, and the Hayatabad Medical Complex. The study participants consisted of candidates receiving training for their FCPS part 2 examination in the fields of Medicine and Allied, or Surgery and Allied. These two hospitals were selected to ensure equal representation of participants, as they both provided the required postgraduate training. A convenience sampling technique was adopted to approach the trainees; 115 trainees who volunteered to participate were selected and administered a validated questionnaire adapted from the Postgraduate Hospital Education Environment Measure (PHEEM) questionnaire. The questionnaire was used to evaluate postgraduate medical training in public and private hospitals in Peshawar. It covered key areas like working conditions, supervision, and educational support.

Residents from basic sciences were excluded, and permission was obtained from the respective institutions' administration. Informed verbal consent was obtained from all participants before data collection. Data analysis was conducted using SPSS version 29, with relative frequencies measured for sex, marital status, hometown, income, and specialty type. The Chi-square tests were applied for comparisons, with a significance level set at $p \leq 0.05$.

RESULTS

The study included a total of 115 participants, 51(44.3%) of whom were trainees who were living at a private teaching hospital and 64(55.7%) of whom were working at a public sector training hospital. Among the residents, 51(44.3%) were enrolled for FCPS in Medicine and Allied, while 64(55.7%) were enrolled for FCPS in Surgery and Allied. The majority of employees received monthly stipends of more than PKR 50k. The

demographic characteristics of the study population are shown in Table 1.

Of a total of 115 trainees, 65(56.5%) were male and 50(43.5%) were female, indicating a relatively equal sex ratio among the trainees. Among these trainees, 61.7% were single, while 38.3% were married, suggesting that this age group represents the common age and life stage for trainees in postgraduate medical education. In terms of geographical distribution, 46.1% of participants came from Peshawar, while 53.9% were from outside the city, indicating that the training programs have a wide geographic reach. Regarding the monthly stipend, 43.5% of the 50 trainees received less than PKR 50k, while 56.5% received more than PKR 50k, reflecting the financial aspect of the trainees' lives. In terms of hospital affiliation, 44.3% of the trainees were from private hospitals, and 55.7% were from public hospitals, highlighting the comparative nature of this study between the two types of hospitals. Furthermore, 44.3% of the trainees were in Medicine and Allied specialties, while 55.7% were in Surgery and Allied specialties, indicating a greater proportion of surgery and allied specialties in this study.

Table 1: Demographic parameters of the study population (n=115).

Variables	f (%)
Gender	
Male	65 (56.5)
Female	50 (43.5)
Marital Status	
Single	71 (61.7)
Married	44 (38.3)
Hometown	
Peshawar	53 (46.1)
Outside Peshawar	62 (53.9)
Monthly stipend (PKR)	
Less than 50k	50 (43.5)
More than 50k	65 (56.5)
Type of Hospital	
Private	51 (44.3)
Public	64 (55.7)
Residency Specialty	
Medicine	51 (44.3)
Surgery	64 (55.7)

Table 2 highlights several disparities in educational practices between public and private teaching hospitals in Peshawar. In private hospitals, 36.5% of trainees had employment contracts, while only 26.0% had such contracts in public hospitals. This finding suggests that the structure of employment is more formalized in private settings than in public settings. However, both types of hospitals reported similar proportions of informative induction programs, with 36.5% in private hospitals and 39.1% in public hospitals.

Interestingly, a greater percentage of trainees in public hospitals (51.3%) felt that they had an appropriate level of responsibility than their counterparts in private hospitals (44.3%). On the other hand, more trainees in public hospitals (33.9%) reported being assigned inappropriate tasks than did those in private hospitals

(21.7%). Regarding structured training, 38.2% of the trainees in private hospitals had a training document, which was higher than the 29.5% reported in public hospitals. Additionally, 43.4% of the trainees in private hospitals reported having clear clinical protocols, while only 26.0% of those in public hospitals had such protocols.

The acceptability of working hours differed significantly between private and public hospitals, with 32.1% of trainees in private

hospitals finding their working hours acceptable compared to only 13.9% in public hospitals. In terms of continuity of care, 53.9% of trainees in public hospitals reported having this opportunity, while only 40.0% of trainees in private hospitals did. Protected educational time was more prevalent in private hospitals, with 33.9% of trainees having protected educational time compared to 21.7% in public hospitals.

Table 2. Percentage of agreement and comparative comparison regarding educational practices among public and private teaching hospitals of Peshawar (n=115).

Questions	Private		Public		p value
	Frequency	Percent	Frequency	Percent	
I have a contract of employment that provides information about hours of work	42	36.5%	30	26.0%	<.001
I have an informative induction program	42	36.5%	45	39.1%	0.432
I have the appropriate level of responsibility in this post	51	44.3%	59	51.3%	0.034
I have to perform inappropriate tasks	25	21.7%	39	33.9%	<.001
There is a document on structured training specifying core competencies to be acquired at different levels	44	38.2%	34	29.5%	<.001
I am called inappropriately	39	33.9%	20	17.3%	<.001
There are clear clinical protocols in this post	50	43.4%	30	26.0%	<.001
My working hours are appropriate	37	32.1%	16	13.9%	<.001
I have the opportunity to provide continuity of care	46	40.0%	62	53.9%	0.018
I feel part of a team working here	50	43.4%	51	44.3%	0.030
I have opportunities to acquire the appropriate practical procedures for my grade	50	43.4%	47	40.8%	0.004
My workload in this job is fine	37	32.1%	10	8.6%	<.001
The training in this post makes me feel ready to be a SpR/Consultant	43	37.3%	21	18.2%	<.001
My clinical teachers promote an atmosphere of mutual respect.	40	34.7%	41	35.6%	0.106
My clinical teachers set clear expectations	45	39.1%	44	38.2%	0.019
I have protected educational time in this post	39	33.9%	25	21.7%	<.001
I have good clinical supervision at all times	46	40.0%	38	33.0%	0.006
My clinical teachers have good communication skills	46	40.0%	33	28.6%	<.001
I can participate actively in educational events	46	40.0%	21	18.2%	<.001
My clinical teachers are enthusiastic	44	38.2%	15	13.0%	<.001
There is access to an educational program relevant to my need	40	34.7%	29	25.2%	<.001
I get regular feedback from seniors	39	33.9%	23	20.0%	<.001
my clinical teachers are organized	50	43.4%	30	26.0%	<.001
I have enough clinical learning opportunities for my need	37	32.1%	41	35.6%	0.118
My clinical teacher has good teaching skills	50	43.4%	49	42.6%	<.001
My clinical teachers are accessible	50	43.4%	48	41.7%	<.001
Senior staff utilize learning opportunities effectively	50	43.4%	40	34.7%	<.001
My clinical teacher encouraged me to be an independent learner	49	42.6%	51	44.3%	<.001
My clinical teachers provide me with good feedback on my strengths and weaknesses	44	38.2%	38	33.0%	0.016
There is ethnic or religious discrimination in this post	40	34.7%	47	40.8%	<.001
There is sex discrimination in this post	50	43.4%	40	34.7%	<.001
I have good collaboration with other doctors in my grade	51	44.3%	54	46.9%	<.001
I have suitable access to career advice	34	29.5%	21	18.2%	<.001
This hospital has good quality accommodation for junior doctors, especially when on-call	43	37.3%	11	9.56%	<.001
I feel physically safe within the hospital environment	50	43.4%	23	20%	<.001
There is a no-blame culture in this post	29	25.2%	17	14.7%	0.003
There are adequate catering facilities when I am on call	22	19.1%	10	8.69%	0.001
My clinical teachers have good mentoring skills	49	42.6%	36	31.3%	<.001
I get a lot of enjoyment out of my present job	26	22.6%	22	19.1%	0.062
There are good counselling opportunities for junior doctors who fail to complete their training satisfactorily	45	39.1%	23	20%	<.001

DISCUSSION

This comparative study of postgraduate medical training in public and private hospitals in Peshawar reveals a complex picture with subtle differences and similarities across various aspects of medical training. These findings, combined with those from other studies, provide a deeper understanding of the training environment in these settings. Notably, there was a relatively equal sex ratio among the trainees, which aligns with the findings of previous research on gender balance in medical training in Karachi.² This suggests that medical education is making progress toward achieving gender equality. Additionally, the geographical diversity of trainees, many of whom are located outside of Peshawar, aligns with the findings of another study, indicating the widespread popularity of these programs.³ This diversity not only enhances the training environment but also emphasizes the role that medical training institutions play in regional patterns.

The study focused on the financial aspects of medical training, specifically the discrepancies in stipends. This difference in stipends serves as an indication of the significant economic disparities in funding healthcare centers, as highlighted by Faisal et al.⁷ Haider et al.,⁶ also explore the entrepreneurial mindset among medical undergraduates and suggest a shift in the financial elements of medical education. These financial factors play a crucial role in shaping the experiences and preferences of medical trainees. A comparison of employment contracts and structured training reveals that a more formal approach is adopted in private hospitals, as supported by the findings of Zia et al.,¹ and Khan et al.¹⁰ These studies reveal that private hospitals offer better working conditions and security plans, which aligns with the idea that a structured approach in private clinics is preferable for institutions with formal employment relationships. This formalization of the training environment can potentially enhance harmony and standardization, significantly impacting the quality of medical studies.

Furthermore, the study also examines the differences between public and private hospitals in terms of working hours and

perceptions of acceptability. The trainees' perspectives on working hours in private hospitals align with the findings of Zia et al.,¹ who indicate that private hospitals offer longer but less demanding work schedules than their counterparts. Simonetti & Sáez⁵ discuss the connection between healthcare working conditions and nurses' job satisfaction. Another noteworthy observation pertains to the perceived accountability in public institutions and the potential for continuity of care. The research by Shaikh et al.,² offers valuable insights into the contrasting responsibilities between public and private hospitals, suggesting that public hospitals exhibit greater accountability. Khan et al.,¹⁰ also address aspects related to opportunities for continuity of care in public institutions. While public hospitals provide trainees with a broader range of clinical experience, they also subject them to higher levels of responsibility. Saqib SU, et al.,¹¹ while reviewing surgical postgraduate teaching and training in Pakistan emphasize the need to develop postgraduate (surgical) training and expertise in keeping with the increasing demands of quality healthcare in the country akin to international standards.

CONCLUSION

This comparative study reveals significant disparities in postgraduate medical training environments between public and private hospitals in Peshawar. The findings underscore the need for standardized training programs and improved working conditions in both sectors to enhance the quality of medical education.

RECOMMENDATIONS

To improve the learning environment, it is recommended that both sectors prioritize gender equity and geographic representation in their training programs. Public institutions should enhance financial assistance to reduce economic disparities among trainees while standardizing training structures in both sectors is essential to ensure consistent quality of education. Private hospitals should focus on providing comprehensive clinical experiences, and public hospitals should standardize training programs and improve working conditions to optimize the quality of medical postgraduate education.

REFERENCES

- Zia S, Onali MA, Yousuf H, Masoom A, Shahab A, Amjad N. Perceptions of fellowship trainees in public and private tertiary care hospitals of Karachi. *JIMDC*. 2020 Jan-Mar;9(1):28-34. doi:10.35787/JIMDC.V9I1.392.
- Shaikh S, Obaid M, Memon SH, Shaikh K, Siddiqui H. Future priorities of interns in public and private tertiary care hospitals of a mega city in a developing country. *J Pak Med Assoc*. 2017 Jan;67(1):100-4.
- Palec R. The regional system and postgraduate medical training in Czechoslovakia. *Milbank Q*. 1966;44(4):414-25. doi:10.2307/3348995.
- Shiwani M. A structured and standardized national postgraduate medical training policy: need of the time *J Pak Med Assoc*. 2007 Sep;57(9):472-4.
- Simonetti M, Sáez L. Determinants of job satisfaction among nurses from Chilean hospitals. *Invest Educ Enferm*. 2023 Nov;41(3). doi: 10.17533/udea.iee.v41n3e04.
- Haider I, Khan MS, Shafi M, Khan QA, Saeed R. Entrepreneurial mindset: perspective of medical undergraduates. *J Med Sci*. 2023;31(4):325-30. <https://doi.org/10.52764/JMS.23.31.4.14>.
- Faisal T, Naseem S, Ashfaq T, Hashmi F, Ullah A. An indirect evaluation of medical residents' research writing skills by research synopsis review. *J Pak Med Assoc*. 2022;72(7):1345-9. doi:10.47391/JPMA.3143.
- Crotty BJ, Brown T. An urgent challenge: new training opportunities for junior medical officers. *Med J Aust*. 2007 Apr 2;186(S7):S25-7. doi:10.5694/J.1326-5377.2007.TB00962.X.
- Mouzinho MM. Hand surgery in Portugal. *J Hand Surg Eur Vol*. 2018 Jan;43(1):107. doi: 10.1177/1753193417728715.
- Khan A, Shaikh S, Ahmed Z, Zafar M, Anjum MU, Tahir A, et al. Quality of post graduate medical training in public and private tertiary care hospitals of Karachi, Pakistan. *J Postgrad Med Inst*. 2014 Jan. 14;28(1):13-8. Available from: <https://www.jpmi.org.pk/index.php/jpmi/article/view/1551>.
- Saqib SU, Memon AH, Saleem O, Shariff A. Current standards of postgraduate surgical education and training in Pakistan: time to bridge the gaps in lieu of national necessity. *J Pak Med Assoc*. 2021 Jan;71(Suppl 1(1)):S56-S60.