Original Article

Open Access

Institutional barriers to continuous professional development (CPD) programs

Laraib Qamar^a, Maaz Ahmad ^b, H.M. Owais Nasim ^c, Rab Nawaz Lodhi ^d, Usman Ashraf ^c, Saeed Shafi ^e

^aSenior Demonstrator, School of Health Professions Education, CMH LMC & IOD, Lahore.
 ^bDemonstrator, Department of Oral Biology, Sharif College of Dentistry, Lahore.
 ^cAssistant Professor, Science of Dental Materials, CMH LMC & IOD, Lahore.
 ^dAssociate Professor, Hailey College of Commerce, University of the Punjab, Lahore.
 ^eProfessor, Department of Anatomy, Shifa Tameer e Millat University, Lahore.
 Correspondence: * maazahmad499@gmail.com

ABSTRACT

BACKGROUND & OBJECTIVE:Continuous Professional Development (CPD) Programs aim to support the career progression of faculty members by leveraging their professional experiences, theoretical knowledge, research, and professionalism with colleagues. These programs enhance skills, knowledge, and competencies throughout a faculty career. However, institutional barriers such as heavy workloads and limited resources can hinder the effectiveness of CPD programs. Faculty training enables them to address concerns, be aware of their teaching assumptions, and foster a positive educational environment. It requires reflection, openness to new ideas, and intellectual work for professional growth. This study's objective was to determine the frequencies of Institutional Barriers faced by faculty to Continuous Professional Development (CPD) Programs.

METHODOLOGY: In this research, we used an observational study design. Purposive sampling was employed to collect the responses. A total of 229 participants responded. Data were entered and analyzed using IBM SPSS version 26 software. A pilot study was conducted to measure reliability. Frequencies were measured, and associations between categorical variables were determined using the Pearson Chi-Square Test.

RESULTS: Significant associations of almost all the identified institutional barriers were observed with academic positions whereas the majority of the barriers demonstrated no association with gender and specialty.

CONCLUSION: Academic position is the most important factor identified in our study, showing strong associations with almost all the institutional barriers studied. By creating a supportive environment and promoting continuous learning, institutions can empower faculty members to engage in CPD activities and enhance their professional development.

KEYWORDS: Healthcare, Continuing Medical Education, Leadership, Academic training, Institutional barriers.

INTRODUCTION

Continuous Professional Development (CPD) programs promote faculty responsibilities toward career progression, addressing errors in professional experiences, theoretical knowledge, research, and professionalism with colleagues. Academic training for effective medical faculty requires skills and professionalism in continuing medical education. CPD programs help faculty enhance their skills, knowledge, and competencies throughout their careers. These programs have many advantages, but several institutional obstacles may make them less effective and harder to implement. Most faculty have high workloads and hectic schedules,

leaving little time for CPD activities. They may find it challenging to devote enough time to these programs due to institutional impediments such as strict deadlines, and restrictive work structures. Faculty members may also face financial difficulties if their institutions do not provide sufficient rewards or if they lack the personal funds to invest in their professional development [1].

CPD programs help faculty to become mindful of their underlying theories and assumptions about the understanding of teaching. This training helps faculty to encourage a positive educational environment [2]. It requires a process, reflection, different ways of thinking, exposure to new ideas and information, and intellectual work for a good professional individual [3].

How to cite this: Qamar L, Ahmad M, Nasim OH, Lodhi NR, Ashraf U, Shafi S. Institutional barriers to continuous professional development (CPD) programs. Journal of University Medical & Dental College. 2024;15(3):878-883.



Attribution 4.0 International (CC BY 4.0)

878 J Uni Med Dent Coll

CPD programs have been developed to improve teaching skills, beginning with the first work of Miller and colleagues in the mid-1950s ^[4]. Fortunately, in past years, several programs have been designed to aid them in performing this challenging duty. Faculty have the challenging and reflective responsibility to transfer knowledge of recent practices ^[5]. In the present era, it is observed that faculty need to be more skilled as educationists and administrators, even though most of them are fabulous in their specialties. With formal training and teaching, medical and dental faculty are more effective and innovative^[6].

CPDs have progressed as a new discipline, establishing innovative roles and responsibilities for teaching professionals and clinicians ^[7]. To organize a new team of competent instructors, researchers, and professionals to face the requirements and challenges of CPD programs. It is not a stress-free task, for it necessitates commitment, provision of suitable resources, and additional acknowledgment to the Faculty undergoing developmental activities ^[8].

The culture within an institution can significantly impact the uptake of CPD Programs. In some workplaces, there may be a lack of emphasis on continuous learning, professional growth, and skill development. If the institutional culture does not prioritize these programs, faculty may be discouraged or face resistance when seeking opportunities for development. However, such activities certainly benefit educationists and faculty. In addition, it has an encouraging impression on faculty performance and attitude [9].

At the institutional level, resistance to change by decision-makers in medical institutions is a significant barrier, and their participation at the initial stage of development is critical. An effective CPD requires administrative and financial support from management. The decision-makers should develop a process to relieve faculty from their clinical duties to ensure their participation in CPDs. Another important barrier is the faculty's attitude and mistaken belief that the administrative benefits of a training program on their performance for future progress and development are not appreciated.

Faculty may not be aware of the CPD Programs available to them or may lack information about their benefits. Institutions may fail to effectively communicate the value and relevance of these programs, leading to a lack of participation and engagement. Certain work environments, particularly those with rigid schedules and inflexible work structures, can make it challenging for faculty to engage in CPD activities. Shift-based or on-call work, for example, may restrict individuals' ability to attend workshops, conferences, or training sessions.

Institutional barriers can arise when faculty do not receive adequate support or resources for their CPD endeavors. This could include limited access to mentors, coaches, or subject matter experts and a lack of resources such as libraries, research databases, or technological tools necessary for learning. When these programs are not recognized, acknowledged, or rewarded within an institution, faculty

may feel demotivated to engage in continuous learning. The absence of incentives, such as promotions, salary increments, or career advancement opportunities, can disincentive faculty to invest time and effort into these activities^[10-12].

METHODOLOGY

In our research, we used observational study design. The purposive sampling was used to collect the responses. A total of 229 participants responded. The pilot study was performed, and the reliability was measured. Cronbach Alpha of the pilot study was 0.922. Demographic data was collected from the faculty of medical, dental, and allied. Five-point Likert scale was used where 1= not at all, 2= not much, 3= somewhat, 4= strong, 5= very strong. Descriptive analysis and Pearson Chi-Square Test was done using IBM SPSS version 26 software.

Frequencies and associations of Academic positions, specialties, and gender were studied with institutional barriers, and their significance was analyzed. Faculty of MBBS, BDS, and Allied Health Sciences, who attended workshops, seminars, conferences, or certification for professional development were included in this study. Faculty who had experience of less than one year, unfilled questionnaires, and individuals who were not willing or did not give informed consent to participate were excluded. This study did not involve individuals from the administration and organizers of CPDs. Many individuals hesitated to fill out the questionnaire because the study involved barriers in it. This study was completed in ten months from March to December 2022. Approval to conduct this study was obtained by the Ethical Review Committee of CMH LMC & IOD Case#.673/ERC/CMH/LMC.

RESULTS

The total number of faculty who participated in the study was 229; 71 were males (31%), and 158 were females (69%). A total of 83 out of 229 (36%) were senior faculty (professors, associate professors, and assistant professors), while 146 (64%) were junior faculty (demonstrators/lecturers). The participating faculty included 111 from MBBS (48%), 103 from BDS (45%), and 15 from Allied (7%).

Males and females faced equal barriers, as no significant association between institutional barriers and gender was observed (Table I). However, inadequate opportunities for faculty showed a significant association with gender, with 37.6% of females strongly or very strongly believing they faced inadequate opportunities, compared to 19.2% of males.

When institutional barriers were studied in relation to academic positions, demonstrators and senior demonstrators faced more inadequate institutional support, with 25.8% expressing the opinion of strong/very strong inadequacy. Similarly, they also had the same strong/very strong opinion of having inadequate departmental support (25.3%), inadequate management (31.4%), inadequate

budget (34.1%), inadequate qualified academic faculty (30.6%), inadequate staff support (30.6%), inadequate communication (32.3%), inadequate opportunities for faculty (34.1%), inadequate administrative support (33.6%), inadequate focus on professional community facilities (33.2%), inadequate clear expectations (32.8%), inadequate colleagues' support and interest (31%), inadequate leadership (31%), inadequate focus on administrative roles of faculty (34.1%), inadequate integration of technology (36.7%), inadequate facility (31.9%), and inadequate multiculturalism and diversity (29.3%). In comparison, assistant professors, associate professors, and professors faced significantly fewer barriers, with the following strong/very strong opinions: inadequate institutional support (8.3%), inadequate departmental (7.9%), inadequate management (10.9%), inadequate budget (12.2%), inadequate qualified academic faculty (10%), inadequate staff support (10%), inadequate communication (10%), inadequate opportunities for (13.5%), inadequate administrative

(10.9%), inadequate focus on professional community facilities (13.1%), inadequate clear expectations (12.7%), inadequate colleagues' support and interest (9.2%), inadequate leadership (10.5%), inadequate focus on administrative roles of faculty (10.5%), inadequate integration of technology (13.5%), inadequate facility (11.8%), and inadequate multiculturalism and diversity (11.4%). Only an inadequate variety of information sources was found to have no association with academic position.

When institutional barriers were studied in relation to specialty, it was found that the MBBS, BDS, and Allied faculty faced the majority of institutional barriers equally (Table 1). However, when compared to BDS and Allied faculty, it was observed that MBBS faculty had a significantly higher frequency of strong/very strong opinions regarding inadequate departmental support (20.1%), inadequate management (24.5%), inadequate opportunities for faculty (22.7%), and inadequate focus on administrative roles of faculty (23.1%).

Table-I: Association of institutional barriers with gender, academic position **, and specialty ***.

Sr.No	Institutional Barriers:			
	Inadequate	Gender	Academic Position	Specialty
1	Institutional Support	0.191	0.026*	0.493
2	Departmental Support	0.297	0.020*	0.035*
3	Management (Decision-Making Process)	0.607	0.008*	0.030*
4	Budget	0.209	0.001*	0.208
5	Qualified Academic Faculty	0.949	0.002*	0.993
6	Staff Support	0.228	0.011*	0.913
7	Communication	0.112	0.001*	0.117
8	Opportunities For Faculty	0.008*	0.020*	0.034*
9	Administrative Support	0.468	0.002*	0.561
10	Focus On Professional Community Facilities	0.297	0.014*	0.730
11	Variety Of Information Sources	0.304	0.115	0.061
12	Clear Expectations	0.323	0.032*	0.359
13	Colleagues' Support And Interest	0.173	0.002*	0.874
14	Leadership	0.426	0.010*	0.519
15	Focus On Administrative Roles Of Faculty	0.094	0.001*	0.006*
16	Integration Of Technology	0.791	0.013*	0.107
17	Facility	0.289	0.037*	0.723
18	Multiculturalism And Diversity	0.204	0.046*	0.055

^{*}p-value ≤ 0.05 is considered statistically significant

^{***}Specialty is categorized as medical, dental, and allied.

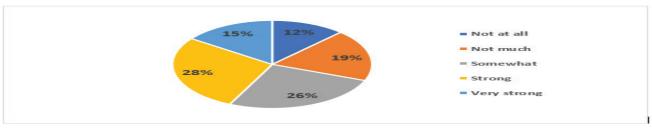


Figure 1: Responses (%) of all study participants for all (18) the studied Institutional barriers

880 J Uni Med Dent Coll

^{**} Academic Position is categorized as junior faculty (demonstrator/ senior demonstrator) and senior faculty (Assistant professor and above).

DISCUSSION

The demographic breakdown of our study provides a comprehensive overview of the diverse composition of the faculty surveyed. This study highlighted significant gender representation and a balanced mix of senior and junior academic staff across various medical disciplines. Literature indicates that institutions with diverse faculty demographics tend to foster more collaborative and interdisciplinary research efforts [13]. Similarly, another study highlighted that junior faculty often bring fresh ideas and innovative teaching methods, which can complement the experience and mentorship provided by senior faculty [14]. Furthermore, the inclusion of different specialties, as seen in the surveyed group, aligns with recent trends advocating for interdisciplinary approaches in medical education and research, which have been shown to improve patient outcomes and advance healthcare practices [15].

Our study revealed no significant association between institutional barriers and gender, suggesting that males and females faced similar challenges. However, there was a notable disparity in only one barrier: in perceived opportunities. A significant proportion of females strongly believed they faced inadequate opportunities compared to males. Our finding is consistent with recent research indicating ongoing gender inequities in academia. According to a study, women in academia continue to face significant barriers to career advancement, including fewer opportunities for professional development and mentorship compared to their male counterparts [16].

The analysis of institutional barriers relative to academic positions showed that junior faculty members reported significantly higher levels of lack of institutional support compared to senior faculty members. The lack of association between academic position and the inadequacy of information sources was the only exception. These findings align with recent studies emphasizing the unique challenges faced by junior faculty [17]. A study highlighted that junior faculty often encounter significant barriers due to limited institutional support, which can impact their career development and job satisfaction [18]. Senior faculty, on the other hand, benefit from more established support networks and resources, reducing their perception of institutional barriers [19].

According to a study, faculty in large, resource-intensive programs like MBBS are more likely to face significant administrative and departmental challenges compared to those in smaller, less resource-intensive programs such as BDS and Allied Health. The complexity and scale of MBBS faculty can contribute to these heightened perceptions of inadequate support ^[20]. However, if colleagues are disinterested or unsupportive, it can impede progress. Strong leadership that actively participates in CPD program initiatives is crucial for success. In international studies, Leadership support and commitment inspire others and drive progress ^[21]. Institutions that excessively burden faculty members with administrative tasks may

limit their ability to engage in continuous improvement Balancing administrative responsibilities efforts. with opportunities for improvement is important [22]. Integrating innovative teaching methods and technologies into traditional teaching approaches in international studies can enhance faculty learning experiences. However, resistance to change or a lack of support for innovation can hinder this integration. Adequate and well-maintained facilities, including faculty development rooms, laboratories, and other learning spaces, are essential for effective teaching and learning. Inadequate facilities can hinder CPD Programs [23]. Embracing multiculturalism and diversity within an institution fosters a broader range of perspectives and ideas, enriching continuous improvement initiatives. A lack of diversity or inclusivity can limit the innovation potential [24].

CONCLUSION

This study highlights the pervasive nature of institutional barriers across gender, academic position, and specialty within the faculty. While gender does not significantly influence the perception of most institutional barriers. However, in only one barrier, female faculty members report significantly fewer opportunities than their male counterparts. Junior faculty face higher levels of inadequacy in institutional support compared to senior faculty, reflecting challenges in career progression and satisfaction. Additionally, MBBS faculty report more significant barriers in specific areas compared to their BDS and Allied counterparts. Addressing these disparities requires targeted institutional reforms to enhance support systems, career opportunities, and resource allocation across all faculty levels and specialties.

The results of this study suggest that removing the institutional constraints is essential to improving the efficiency and accessibility of CPD Programs. The creation and execution of effective CPD programs can be made possible by improvements in areas including institutional and departmental support, funding allocation, communication, and leadership. A varied and inclusive atmosphere, incorporating cutting-edge teaching techniques, and encouraging a feeling of community and collaboration among faculty members can be considered critical elements for removing obstacles linked to CPD programs.

ACKNOWLEDGEMENT: We are thankful to Dr. Abdul Samad Khan, Imam Abdulrahman Bin Faisal University, and Dr. Salman Aziz, CMH LMC & IOD for their continuous support.

CONFLICT OF INTEREST: None.
GRANT SUPPORT AND FINANCIAL DISCLOSURE:
None.

REFERENCES:

- O'Brien Pott M, Blanshan AS, Huneke KM, Baasch Thomas BL, Cook DA. Barriers to identifying and obtaining CME: a national survey of physicians, nurse practitioners, and physician assistants. BMC Medical Education. 2021;21(1):168.Doi: 10.1186/s12909-021-02595-x
- Papapanou M, Routsi E, Tsamakis K, Fotis L, Marinos G, Lidoriki I, et al. Medical education challenges and innovations during the COVID-19 pandemic. Postgraduate Medical Journal. 2022; 98 (1159):321-327. Doi: 10.1136/postgradmedj-2021-140032
- Ricotta DN, Richards JB, Atkins KM, Hayes MM, McOwen K, Soffler MI, et al. Self-directed learning in medical education: training for a lifetime of discovery. Teaching and Learning in Medicine. 2022;34(5):530-540. Doi: 10.1080/10401334.2021.1938074
- 4. Jason H. Celebrating 40 years of Medical Teacher: As the "last man standing" I look back to help us look forward. Medical Teacher. 2018;40(4):331-336.Doi:10. 1080/0142159X.2018.1425383
- Orland-Barak L, Wang J. Teacher mentoring in service of preservice teachers' learning to teach: conceptual bases, characteristics, and challenges for teacher education reform. Journal of Teacher Education. 2021;72(1):86-99. Doi: 10.1177/0022487119894230
- Bergmark U. Teachers' professional learning research-based when building education: a context-specific, collaborative and teacherdriven professional development.Professional Development in Education. 2023;49(2):210-224. Doi: 10.1080/19415257.2020.1827011
- 7. de Carvalho-Filho MA, Tio RA, Steinert Y. Twelve tips for implementing a community of practice for faculty development. Medical Teacher. 2020;42(2):143-149. Doi: 10.1080/0142159X.2018.1552782
- **8.** Ahmad I, Gul R, Kashif M. A qualitative study of workplace factors causing stress among university teachers and coping strategies a qualitative study of workplace factors. Human Arenas. 2022:1-23.Doi: 10.1007/s42087-022-00302-w
- Bowman MA, Vongkulluksn VW, Jiang Z, Xie K. Teachers' exposure to professional development and the quality of their instructional technology use: The mediating role of teachers' value and ability beliefs. Journal of Research on Technology in Education. 2022;54(2):188–204. Doi:10.1080/15391523.2020.1 830895
- 10. Öcek Z, Batı H, Sezer ED, Köroğlu ÖA, Yılmaz Ö, Yılmaz ND, et al. Research training program in a Turkish medical school: challenges, barriers, and opportunities from the perspectives of the students and faculty members. BMC Medical Education. 2021;21(1):1-14. Doi:10.1186/s12909-020-02454-1

- 11. King R, Taylor B, Talpur A, Jackson C, Manley K, Ashby N, et al. Factors that optimise the impact of continuing professional development in nursing: A rapid evidence review. Nurse Education Today. 2021;98:104652. Doi: 10.1016/j.nedt.2020.104652
- 12. Algahtani H, Shirah B, Aldarmahi A, Alshawwa L, Tekian A, Norcini J. Barriers to faculty development program for medical education: experience from Saudi Arabia. Dr Sulaiman Al Habib Medical Journal. 2020;2(3):101-105. Doi: 10.2991/dsahmj.k.200515.001
- 13. Trinh MP, Kirsch R, Castillo EA, Bates DE. Forging paths to interdisciplinary research for early career academics. Academy of Management Learning & Education.2022;21(2):318-335.Doi:10.5465/amle.2019.0386
- **14.** Murray S, Crowley J, Gooderham MJ, Kivitz A, Chandran V, Péloquin S, et al. Healthcare providers face numerous challenges in treating patients with psoriasis: Results from a mixed-methods study. Journal of Psoriasis and Psoriatic Arthritis. 2022;7(1):35-43. Doi:10.1177/24755303211062887
- **15.** Riman KA, Annis A, Cámpoli M, Courtwright SE, DeGuzman PB, Dixon J, et al. Investing in the future of nursing: insights from the academyhealth interdisciplinary research group on nursing issues preconference. Journal of Nursing Regulation. 2024;15(2):57–60. Doi:10.1016/S2155-8256(24)00056-5
- 16. Zakaras JM, Sarkar U, Bibbins-Domingo K, Mangurian CV. Not just surviving, but thriving: overcoming barriers to career advancement for women junior faculty clinician-researchers. Academic Psychiatry. 2021;45:180-184. Doi: 10.1007/s40596-020-01361-3
- 17. Ransdell LB, Lane TS, Schwartz AL, Wayment HA, Baldwin J.A mentoring new and early-stage investigators and underrepresented minority faculty for research success in health-related fields: an integrative literature review (2010–2020). International Journal of Environmental Research and Public Health. 2021;18(2):432. Doi: 10.3390/ijerph18020432
- 18. Sarfaraz S, Nisar MK, Adnan S, Masood S, Khurshid Z. Perception of dental faculty on face-to-face and virtual programs of faculty development; a cross-sectional study. Journal of Bahria University Medical and Dental College. 2022;12(01):35–40. Doi: 10.51985/JBUMDC2021087
- **19.** Stergiopoulos E, Fragoso L, Meeks LM. Cultural barriers to help-seeking in medical education. JAMA Internal Medicine. 2021;181(2):155-156. Doi: 10.1001/jamainternmed.2020.7567
- **20.** Tuma F, Nassar AK, Kamel MK, Knowlton LM, Jawad NK. Students and faculty perception of distance medical education outcomes in resource-constrained system during COVID-19 pandemic. A cross-sectional study. Annals of Medicine and Surgery. 2021;62:377–382. Doi: 10.1016/j.amsu.2021.01.073

882 J Uni Med Dent Coll

- **21.** Leslie K, Baker L, Egan-Lee E, Esdaile M, Reeves S. Advancing faculty development in medical education. Academic Medicine. 2013;88(7):1038–1045. Doi: 10.1097/ACM.0b013e318294fd29
- **22.** Guraya SY, Chen S. The impact and effectiveness of faculty development program in fostering the faculty's knowledge, skills, and professional competence: A systematic review and meta-analysis. Saudi Journal of Biological Sciences. 2019;26(4):688–697. Doi: 10.1016/j.sjbs.2017.10.024
- 23. Lee RS, Son Hing LS, Gnanakumaran V, Weiss SK, Lero DS, Hausdorf PA, et al. INSPIRED but Tired: How Medical Faculty's Job Demands and Resources Lead to Engagement, Work-Life Conflict, and Burnout. Frontiers in Psychology. 2021;12: 609639 .DOI: https://doi.org/10.3389/fpsyg.2021.609639
- 24. Algahtani H, Shirah B, Subahi A, Aldarmahi A, Algahtani R. Effectiveness and needs assessment of faculty development programme for medical education: experience from Saudi Arabia. Sultan Qaboos University Medical Journal. 2020;20(1):e83-e89. Doi: 10.18295/squmj.2020.20.01.012

Submitted for publication: 11-08-2023 Accepted after revision: 15-08-2024

Authors' Contribution:

Laraib Qamar: Substantial contributions to the conception and design of the work.

Maaz Ahmad: Drafting the work.

H.M. Owais Nasim: The acquisition and analysis of data for the work.

Rab Nawaz Lodhi: Interpretation of data for the work.

Usman Ashraf:Reviewing it critically for important intellectual content.

Saeed Shafi-: Final approval of the version to be published.