ORIGINAL ARTICLE

EXPERIENCES, PERCEPTIONS, AND RECOMMENDATIONS FOR FACULTY DEVELOPMENT PROGRAMS IN HEALTH PROFESSIONS EDUCATION: A QUALITATIVE STUDY

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Background: Faculty development programs (FDPs) in health profession education (HPE) impact teaching in different ways. There has been limited literature on the impact of such programs in developing countries. This qualitative study explores the experiences, perceptions, and recommendations of faculty attending these FDPs. **Methods:** A qualitative case study involving purposively selected public and private medical college faculty members were enrolled. Semi-structured interviews were conducted with 14 faculty members across the country. Thematic analysis was done using ATLAS. **Results:** The study revealed three main themes. The first, "experiences with FDPs," has three subthemes, i.e., faculty limited engagement, key areas of FDPs and the need for interactivity and collaboration. The second theme is based on "participants' perception", with two subthemes: key indicators and how teaching skills are improved and some challenges versus recommendation, as the third theme emerged from the data analysis. **Conclusion:** In the current context, FDPs, as experienced by medical professionals, emphasise the need for administrative facilitation, tailored and technology-driven flexible programs that foster faculty exposure, interactivity, and collaboration. The perceptions ensued in using innovative strategies within the FDPs with feedback and evaluation. However, recommendations target the national accreditation bodies or institutions and individual schools to devise training centres as per needs assessment. Future studies should develop and validate a tool based on key indicators for the proper evolution of the effectiveness of FDPs.

Keywords: Faculty development; Teaching; Health Professions Education; Developing Countries

INTRODUCTION

Faculty Development Programs (FDPs), in the context of health professions education (HPE), are organised efforts to improve teachers' pedagogical competence, knowledge, and skills in medical teaching institutes.[1] These initiatives seek to advance intellectual endeavours, enhance the efficacy of teaching, and foster the professional development of faculty members. FDPs can include various customised activities to meet medical educators' unique requirements, such as developing curricula, improving teaching quality, mentoring programs, and leadership development.[2] The ultimate purpose of FDPs is to guarantee that faculty members are prepared to provide high-quality, evidence-based training while also keeping up with the ever-evolving terrain of medical education.

International studies have highlighted the significance of FDPs in empowering medical teachers with the knowledge and skills required for their varied roles, including administrator, mentor, leader, and researcher.[3] According to a mixed-methods study, FDPs can boost teachers' confidence, student-centred approaches, empathic education, and reflective teaching.[4] Another research stressed establishing an empirical knowledge of faculty developer competency by investigating faculty developers' experiences and perceptions.[5] Zehra T's study recommended that FDPs should be tailored to the institute's specific needs, and such research gaps shall be further explored. These studies lead to the research gap for the current paper.[4–6]

Faculty Development Programs affect the quality of teaching in HPE and are scarcely explored through a qualitative approach.[7–9] It is crucial to understand medical teachers' sound experiences and perceptions regarding the FDPs and their impact on their teaching roles. Therefore, there is a need for a qualitative study to explore the faculty's experiences and perceptions about FDPs, particularly in the context of a developing nation, which can provide valuable insights for

developing tailored and effective faculty development initiatives in the country.

The theoretical frameworks put forward by Steinert (2010)[10] and Guskey (2002)[1] serve as the foundation for the current study. These frameworks were carefully chosen because they provide insightful information on the dynamics of faculty development, including the effectiveness of FDPs. Guskey's teacher professional development model emphasises the importance of evaluating the effectiveness of FDPs through multiple levels, including participants' reactions, learning, behaviour, and results. Steinert's framework for faculty development programs highlights the need for tailored programs that align with the specific needs of participants. Based on these frameworks, the interview guide was prepared with a slight modification of focusing on FDPs' impact on teaching quality, hoping to fill the research gap.

This qualitative study aims to explore the experiences and perceptions of health professionals related to faculty development programs and their impact on teaching quality in medical education. It also aims to offer recommendations for optimising faculty development programs to continuously enhance teaching quality in the medical education context. The insights gained from this study will contribute to developing recommendations for practical approaches within FDPs, thereby improving teaching quality in medical education.

MATERIAL AND METHODS

A case study research design was employed for this qualitative study, as it is particularly well-suited for in-depth explorations of complex and context-specific phenomena.[11] This design makes it possible to analyse FDPs of all kinds in great detail, with a primary focus on the quality of teaching in the context of HPE in developing countries like Pakistan.

The study involved purposive sampling, with participants who have either secured certification in HPE or have attended more than ten different FDPs, irrespective of gender and age but are involved in medical education from four provinces in Pakistan. They were chosen for their valuable insights. Newly appointed (less than one year of service) and non-teaching faculty were excluded. The sample size was decided using the data saturation principle, which states that data collection should continue until no added information or themes arise from the interviews.[12]

After obtaining the ethical approval (No. 01-ERB/024), online semi-structured interviews were conducted through Zoom®, allowing for an open and in-depth discussion with participants about their experiences with FDPs and their teaching quality assessments. All types of FDPs, like workshops and training sessions, were included to have a broader input on the study's objective. The interview guide was designed based on the frameworks provided by Guskey (2002)[1] and Steinert (2010)[10], ensuring that the discussions were focused on understanding the experiences and perceptions of faculty related to FDPs and teaching quality. These interviews were audio-recorded and transcribed verbatim for subsequent analysis.

Thematic analysis was used to evaluate the qualitative data using ATLAS. ti software, as described by Braun and Clarke (2006).[13] The study followed a methodical procedure of detecting repeating themes and patterns in the data, allowing valuable insights from the interviews to be extracted. The coding approach was both inductive, allowing for the development of unexpected themes, and deductive, guided by Braun and Clarke.[13] To guarantee the rigour and validity of the study, various steps of coding, evaluating, and revising the identified themes were used.[14]

Techniques such as member verification and peer debriefing were used to improve the study's credibility.[13,14] The early findings were shared with participants to validate the correctness and completeness of their contributions. Peer debriefing entailed talks with colleagues or specialists in qualitative research to confirm data and the interpretation of findings.

RESULTS

Following the principle of data saturation, a total of 14 participants (cases) from different institutes of Pakistan were interviewed, Table-1. Their transcripts were analysed as per the study protocol, and three main themes (experiences, perception, and recommendation) with 3,2,3 subthemes respectively emerged, primarily focusing on a comprehensive understanding of the experiences of medical teachers about FDP in HPE.

Table-1: Descriptive details of the participants (n=14)

Parameters		Frequency	Percentage
Gender	Male	8	57
	Female	6	43
Institute	Private	5	36
	Public	9	64
Year of service	2–5 years	3	21
	6–10 years	5	36
	>11 years	6	43
Province/ State	Punjab (P)	4	29
	Sindh (S)	3	21
	KP (K)	5	36
	AJK (AJK)	2	14

Theme: Experiences with FDPs.
Subtheme a: Limited Engagement and Exposure: A few respondents experienced little involvement in faculty development initiatives, which might influence how well they felt these initiatives improved the quality of teaching. Like MP#6 said, "I haven't had a lot of experience with programs for faculty

development. I haven't been heavily active in these initiatives, even though I have attended a few workshops and seminars." This seems like a challenge the faculty faces, but owing to its importance, a separate theme is extracted from the transcripts.

Subtheme b: Key areas of FDPs: Based on the experience of the interviewees, they focused on the need to create creative teaching strategies, strengthen assessment and evaluation, and increase teaching effectiveness as determined by the FDPs' objectives. As explained by MK#11: "These programs have aimed to improve the quality of instruction via the implementation of new and creative teaching techniques, their evaluation, and the promotion of an ongoing learning culture." FAJK#10 explained the main area of FDPs as: "Research, teaching skills, specialised training, and the promotion of a culture of continuous development with rigorous assessment have all been important areas promoting effective teaching in the classroom."

Subtheme c: Interactive and collaborative FPDs: The interviewees experienced the beneficial aspect of FDPs in improving teaching quality, with a focus on the interactive and collaborative aspect of the programs, the introduction of novel teaching methods, and the use of technology to deliver lectures as evident by MS#2 saying "As I experienced, these applications' interactive and collaborative aspect has been very beneficial in improving teaching quality. Participating in peer conversations and sharing best practices has resulted in a lively interchange of ideas and creative teaching methodologies."

Theme: Based on participants' perceptions:

Subtheme a: key indicators: Interviewees consistently perceived student engagement, and outcomes, and the ability to adapt to ever-shifting educational demands as critical indicators of FDPs promoting teaching quality in HPE. An FPD focused on teaching quality shall always have instructions on how to engage students with a focus on improved student outcomes. According to FK#5, "Student engagement, assessment outcomes, and the capacity to adjust to evolving educational requirements are all important indications of teaching quality."

Subtheme b: success of teaching quality: Faculty development efforts have been observed to have a demonstrable and beneficial impact on teachers' teaching quality. Several respondents thought that FDPs improved their teaching skills and quality, as observed by feedback, such as higher student satisfaction, better assessment success rates, and the application of more student-centered teaching approaches. For example, said MS# 2: "I think, these were FDPs, I attended and have resulted in enhanced student satisfaction, higher assessment success rates, and the adoption of more student-centred teaching approaches, found through student's feedback".

Theme: Barriers and recommendations:

Subtheme a: Challenges and Opportunities: While FDPs have significance, they bring about challenges, such as limited resources, time constraints, and resistance to change. According to MK#11, "One of the most prevalent obstacles is the limited resources accessible to faculty development programs." These problems, however, coincide with great opportunities, like creating a culture of continuous learning and leveraging technology for more effective teaching. As MK#1 said, "There are also lots of possibilities connected to these programs, including the opportunity to learn novel methods of teaching through advanced technology, creating a lifelong learning culture."

Subtheme b: Context-Specific Considerations: Interviewees in the context of a developing nation, emphasised the need for creativity, flexibility, and locally relevant FDPs customised to their environment. MK#11: "This has given important insight into how these programs offer flexibility, and novelty and are customised to the particular requirements and environments of various kinds of institutions."

Subtheme c: Recommendations for Optimisation: FDPs should be optimised by promoting a culture of lifelong learning, offering educators committed time and resources, and tailoring programs for particular situations. Respondent MP#6 recommended that "It's crucial to give teachers the time and tools they need to pursue lifelong learning if you want to maximise staff growth."

Note: Pseudonyms are assigned to interviewees. For example, MP, M=male, F=female, P=Punjab, K=Khyber Pukhton Khwa, AJK=Azad Jammu Kashmir, S=Sindh

DISCUSSION

This study explores the experiences, perceptions, and recommendations of FDPs and their impacts on teaching quality in HPE of resource-constrained regions. The findings fill a significant literature gap through experiences and knowledge of faculty involved in FDPs and provide substantial recommendations. The limited involvement and exposure of faculty to FDPs are key areas of effective FDPs, including two valuable aspects, i.e., interactivity and collaboratively generated from participants' experiences. Another theme, as per the participants' perceptions, identified quality indicators and what caused the success of quality teaching. The findings offer other valuable insights into FDPs and suggest detailed recommendations, discussed below.

The busy schedules and other faculty responsibilities hinder their exposure and involvement in FDPs.

Existing literature, particularly studies by Steinert Y and Cheng X, acknowledges the limited engagement in FDPs.[9,15] The literature suggests that this limitation can be attributed to factors such as time constraints and competing professional responsibilities.[16] Some argue that targeted interventions, such as flexible scheduling and online platforms, can enhance engagement.[17] This emphasises the need for tailored strategies to address limited engagement, considering faculty members' diverse circumstances.

The current study explored the key areas of FDPs, signifying the need to include creative teaching strategies and proper evaluation. Decades ago, Koerin B said that the FDPs must always be evaluated for the goals they deemed they could achieve.[18] This study ensued into research, teaching skills, specialised training, and promoting a culture of continuous development as fundamental areas in the current context. This seems based on institute or culture-specific, and the literature provides the notion that fundamental areas such as research, skills, and training sessions are essential elements of successful FDPs.[19] This calls for a nuanced approach in designing FDPs that address the unique requirements of either faculty members or an institute.

The usefulness of FDPs in enhancing teaching quality can be optimised by integrating interactive and collaborative elements, incorporating new teaching methods, and leveraging technology. Research suggests that such approaches enhance participant engagement, adaptability to diverse learning preferences, and the creation of innovative learning experiences.[9,15] However, challenges, including the need for robust technological infrastructure, should be considered. These strategies, aligned with existing literature, underscore the potential of FDPs in advancing teaching quality.[7–9,12,20]

Faculty Development Programs should train the faculty to become flexible to adaptation, engage students in the classroom, and ensure enhanced student learning outcomes. As identified in the current study, the key quality indicators, i.e., the ultimate impact of FDPs on student performance through engagement, have also been quoted elsewhere.[21] Literature, including studies by Irby DM and Cintra KA, emphasised the importance of student engagement and desired learning outcomes as key indicators of teaching quality.[22,23] Similarly, training the faculty about the significance of student engagement and improving outcomes in FDPs will generate knowledgeable, skilful, and adept graduates to the community, as reported by Gore J and Cintra KA.[7,23] The quest for better teaching methods and producing better graduates continues to revolve around these markers.

Effective FDPs significantly enhance teaching quality, resulting in higher student satisfaction and academic performance.[25] Feedback is the best way to evaluate the students' satisfaction and assessment success rate after teaching sessions. According to the current study, faculty who have improved teaching skills through effective FDPs had higher student satisfaction and academic performance. This is evidenced by research highlighting FDPs' positive impact on faculty knowledge, skills, and professional competence.[26] Students express increased satisfaction due to the faculty's enhanced perception of competence.[20] However, to comprehensively understand FDPs' effectiveness in improving teaching quality, assessing changes in teaching practices and course evaluations is crucial.[26] Overall, the positive relationship between FDPs and teaching quality is evident, emphasising their pivotal role in fostering an effective learning environment.

The current study identified limited resources, time constraints, and faculty resistance to change as recognised challenges in implementing effective FDPs. This aligns with research findings by Kohan M, Shrivastava S, and Cintra KA.[2,4,23] These challenges pose a significant hurdle, hindering the implementation and effectiveness of FDPs. Studies emphasise the importance of adequate funding, infrastructure, flexible scheduling, and support for faculty training programs to yield optimal results.[27] Context-specific considerations as per the current study emphasise the need for specific provisions of FDPs that are creative and flexible, answering the research gap of this study. The literature supports the idea that innovative, flexible, and customised or need-based FDPs are crucial for their effectiveness in improving FDPs and teaching quality.[28]

Successful FDPs provide faculty with real-world course creation experiences, allow for flexibility as adult learners with hectic schedules, and foster a feeling of connectedness and collegiality amongst faculty participants.[3] Providing various and flexible alternatives that meet different learning styles, interests, and faculty availability is critical to cultivating a continual learning and improvement culture.[2,17,25] However, precise professional development requirements will result in discontent; thus, teachers should be able to choose their training based on their preferences and needs. As a result, a customised approach that considers faculty members' specific requirements and circumstances is required to guarantee that FDPs are effective at improving teaching quality. Furthermore, FDPs should be clearly defined, task-centred, and focused on immediate application, such as course creation, instructional strategies, and assessment.

Overcoming these challenges is crucial for designing FDPs that adapt to faculty needs and foster positive changes in teaching quality. Opportunities are abundant, even despite obstacles like time and resource constraints.[24] Challenges notwithstanding, opportunities for growth and program optimisation remain promising. However, "Integrated FDP centers" by national accreditation bodies, continuous FDPs evaluations by FDPs organisers and becoming tech-savvy trainers can elevate the promising obstacles. At a smaller scale, like individual institutes, tailoring faculty development to the unique needs of faculty or various programs by developing "specialised FDP units" or joining awarding programs can further refine the FDPs in the current context.[21,29,30]

Limitations:
It is essential to consider the limitations of this study. The study's scope was limited to a particular aspect of FDPs, which may have limited the applicability of the results in other contexts. Second, the study mostly used qualitative data, which could not accurately reflect the general population. Last but not least, the study neglected to investigate the possible influence of FDPs on other areas of HPE, such as assessment, feedback, curricular integration, clinical Practice, and research.

CONCLUSION

In the context of a developing country, the experience of medical faculty underscores the imperative for robust facilitation by stakeholders, using creative strategies and customised, tech-driven FDPs that not only boost the exposure but also foster interactivity and collaboration, with a parallel evaluation of the effectiveness of these programs. Some modifications in the FDPs as perceived in the current context include innovative teaching strategies employing technology and student feedback indicating more engagement in studies, higher satisfaction, and higher success rates, identified as fundamental areas and key indicators.

Recommendations reinforce the need for administrative assistance, need-based, tech-savvy, flexible and customised program design with a proper mechanism of thorough evaluation. Using these recommendations, national accreditation bodies and institutes are encouraged to develop centralised FDPs units for universal training and individual institutes are advised to devise specialised FDP units.

Quantitative studies to develop and validate tools on fundamental areas and key indicators of effective FDP, as mentioned above, are recommended for researchers. Future studies should examine how FDPs affect other parts of HPE, such as assessment, curricular integration, research, and clinical Practice. Furthermore, investigating the efficacy of particular components within distinct types of FDPs can provide a more nuanced view of their impact on HPE. The research also highlights the importance of comprehensive assessment to understand the multifaceted nature fully.

Conflict of interest:
The authors declare no conflict of interest, and no part of this manuscript is funded, supported, or influenced by financial or personal relationships.

AUTHORS' CONTRIBUTION

MJK: Literature search, study design, data collection and analysis, write-up. AS: Study design, critical review and proofreading. SK: Literature search, data collection and analysis. ML: Data collection, analysis, manuscript preparation and submission.
ZH, NA: Data collection, transcription, analysis, result, proofreading.

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