

Original Article

Gender equity in healthcare academia: a qualitative comparison of faculty experiences in public and private medical colleges in Pakistan

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Abstract

Gender equity is important in healthcare academic institutions for operational effectiveness, quality medical education and workforce sustainability; however, the professional careers of faculty across the globe are influenced by gender-based disparities. This qualitative descriptive study explored and compared the perceptions and experiences of faculty members regarding gender equity in public and private medical colleges in Punjab, Pakistan. In-depth semi-structured interviews were conducted with 19 teaching faculty members from one public and one private medical college through purposive sampling to ensure variation in gender, academic rank, discipline, and years of experience. The interviews were audio-recorded, transcribed verbatim, and analyzed following Braun and Clarke's framework of thematic analysis. Data saturation was achieved at the tenth participant in the private sector and the ninth participant in the public sector college. Four major themes, namely, gendered career progression and promotion pathways, workplace culture and implicit gender bias, work-life balance and institutional support, and institutional context and sector-specific differences, emerged. Female faculty members reported promotional delays, inadequate leadership opportunities, and an uneven distribution of household responsibilities, whereas male faculty members outlined gender-based inequities as systemic rather than intentional. Although public and private colleges differed in terms of their governance and administrative structures, gender inequities were reported in both, marked by limited institutional support mechanisms and unclear promotion processes and informal practices across the system. By providing context-specific qualitative evidence, this study concludes that gender equity in healthcare academia is beyond the numerical representation of males and females in an institution and requires systemic as well as organizational reforms for the implementation of the concept in its true spirit.

Keywords

Gender equity; Healthcare academia; Healthcare faculty; Medical education; Public and private colleges; Punjab, Pakistan; Qualitative research

1. Introduction

Gender equity in the workplace has become an important concern in academic medicine for organizational effectiveness, workforce sustainability, and social justice [1]. Gender equity refers to unbiased recruitment, promotion, opportunities for professional

development and leadership, and supportive environments within institutions [2]. Gender disparities influence academic medical careers despite international organizations' global commitments to equity and inclusion in work. Scientific evidence highlights that women in academic medicine are underrepresented in leadership positions, obtain slower promotions, and encounter limited access to mentorship and decision-making in the workplace [3,4]. Conceptually, gender equity in academic medicine is grounded in frameworks of organizational justice and the theory of the "leaky pipeline," which describe how women are progressively lost from the academic career ladder through cumulative structural and cultural disadvantages rather than through any single barrier. While these dynamics are relatively well documented for students and the clinical workforce, evidence focusing specifically on teaching faculty in Pakistan and comparable low- and middle-income settings remains limited, and little is known about how these experiences differ between public and private sector institutions. Addressing this faculty-level knowledge gap in the Pakistani context is the specific focus of the present study.

The developed world also demonstrates gender inequity, particularly in health academic institutions, through a complex interaction of structural barriers, selection biases, and conventional career pathways established by organizations to favor one gender over the other. Working females usually face multiple challenges, including but not limited to work-life balance, an unequal distribution of domestic responsibilities, and limited institutional support, resulting in reduced academic productivity and slow career growth [5,6]. Gender equity in academic environments leads to faculty satisfaction, higher retention, better collaboration, and improved institutional performance; it prevents disengagement, burnout, and injustice [7]. Gender disparities at work are more obvious in low- and middle-income countries (LMICs), especially in healthcare academia with embedded sociocultural norms, firm hierarchical constructs, and limited institutional policies addressing gender equity [8]. Female faculty members at medical colleges manage the dual burden of professional responsibilities and traditional gender roles, with limited institutional support for flexible working arrangements, childcare and promotion pathways. The World Health Organization (WHO) has acknowledged that gender equity is a serious element in LMICs and has emphasized the need for specific guidelines for institutional and policy-level interventions to improve the situation [9].

In Pakistan, women now constitute a substantial proportion of entrants to healthcare academia and medical graduates nationally, yet gender equity remains poorly embedded in practice [10,11]. Punjab, the country's most populous province, has a large number of public and private sector institutions operating under rigid administrative, financial, and governance structures; such variation has the potential to influence workplace culture, career pathways, and faculty experience [12]. Despite this extensive network of institutions, qualified graduates and faculty, gender equity is not reflected in healthcare academia, where women's participation in senior faculty positions, leadership roles and governance remains limited [13].

Scientific evidence from Pakistan remains limited despite the growing debate on the importance of gender equity in healthcare academia. The focus of the available scientific literature has been limited to medical students' quality of life, the workforce in clinical settings, or gender disparities in healthcare delivery services, with little consideration given to the experiences of faculty members within healthcare institutions [14]. Furthermore, qualitative research addressing faculty member experiences of gender equity and how these experiences may differ between public and private sector healthcare academic institutions is lacking [15]. As healthcare faculty members play important and central roles in shaping educational environments, mentoring future physicians, and contributing to institutional leadership and governance, addressing the gap in gender policies

in healthcare academia is essential for improving overall organizational culture [16]. Therefore, this study aims to explore and compare the perceptions and experiences of gender equity among faculty members working in healthcare academic institutions in Punjab, Pakistan.

2. Methodology

2.1. Study design and settings

This qualitative descriptive study was conducted at two medical colleges in Sargodha, Punjab, including Sargodha Medical College, which is a public-sector healthcare academic institution, and Niazi Medical College, which is a private-sector healthcare institution.

2.2. Ethical considerations

Ethical approval was obtained from the Ethical Review Committee of the Central Institute of Family Medicine (No. CIFM-ERC-24009), and administrative permission to approach the faculty and collect data was additionally obtained from the relevant authorities of both participating colleges. Furthermore, written informed consent was obtained from all participants of the study. The confidentiality of the participants was maintained by anonymizing the transcripts, and the audio files and transcripts were stored on a password-protected institutional drive accessible only to the research team. Participation in the study was voluntary, and participants were informed about the right to withdraw from the study at any stage without any consequences.

2.3. Sample size and sampling technique

A sample size of 15 to 20 interviews was considered sufficient on the basis of qualitative research parameters and the diverse nature of the participants [17]. Data saturation was deemed to have occurred when no new themes or significant insights emerged from consecutive interviews, and this guided the final sample size. A purposive sampling technique was used to select faculty members from the selected institutions. In total, 24 faculty members were approached, of whom 5 declined or were unavailable, yielding 19 participants (10 from the private sector and 9 from the public sector college). The final sample included both male and female faculty spanning basic sciences and clinical departments and a range of academic ranks (from lecturer/demonstrator to professor) and years of teaching experience.

2.4. Participant recruitment

All full-time faculty members, including males and females with at least one year of teaching experience in basic sciences or clinical departments who were willing to provide participation consent, were included in the study. However, the study did not include faculty members who were non-Pakistani nationals or visiting faculty or who were on long-term leave during the data collection period.

2.5. Study instrument

An interview guide was developed in line with the study objectives following a detailed review of the national and international literature on healthcare academia. The guide was pilot tested with two faculty members from a healthcare institution to assess the clarity, relevance, and sequencing of the questions and to estimate the interview duration. Minor changes were made to the guide on the basis of feedback from the pilot

interviews, which were not included in the analysis. The full interview guide is provided in Supplementary File S1.

2.6. Study measures

The finalized interview guide included questions related to perceptions of gender equity at the workplace; recruitment and promotion experiences; leadership and decision-making roles; opportunities for mentorship and professional development; the work-life balance of faculty members; institutional support; organizational culture; and perceived gender-based facilitators and barriers.

2.7. Data collection

Permission for data collection was obtained from the relevant authorities of both institutions. In-person semistructured interviews were conducted by a member of the research team with experience in qualitative research and healthcare academia. Each interview lasted 45 to 60 minutes and was conducted in English or Urdu in a private, quiet setting; the interview guide was used to reduce potential bias. Probing questions were applied uniformly, and participants were encouraged to express their views freely. After the participants provided consent, the interviews were audio-recorded, and brief field notes were made. Audio recordings were transcribed verbatim, reviewed for accuracy, and anonymized by removing identifying information to maintain confidentiality. The interviews conducted in Urdu were translated into English by bilingual researchers experienced in qualitative research. To ensure linguistic accuracy and preserve the original meaning, a back-translation process was undertaken, whereby selected transcripts were translated back into Urdu and compared with the original recordings. Any inconsistencies were discussed by the research team and resolved through consensus. Special attention was given to preserving the contextual meaning and nuances of participants' expression during translation.

2.8. Data analysis

Data were analyzed by using thematic analysis following the six-step framework proposed by Braun and Clarke [18] and included initial familiarization with the data through repeated reading of transcripts, generation of initial codes, organization of codes into potential themes, review and refinement of themes, definition and naming of themes, and development of the final analytical narrative. Coding was conducted inductively, allowing themes and subthemes to emerge from the data, while the findings were constantly compared across participants and between public and private healthcare academic institutions. Themes and subthemes were refined iteratively to ensure coherence, internal consistency, and relevance to the study objectives. During the data analysis, the themes were reviewed and discussed among the research team to ensure that the interpretations were grounded in the data rather than the preconceptions of the researcher. Furthermore, saturation in the data were monitored throughout the data collection and analysis process. Emerging codes and themes were reviewed constantly after each interview, and a comparison of successive transcripts indicated that no substantially new themes or conceptual insights were being generated.

2.9. Reflexivity

In line with the reflexive nature of qualitative research, the research team acknowledges that their own positionality shaped data collection and interpretation. The interviews were conducted by a female member of the research team who holds a faculty po-

sition within a healthcare academic institution and has prior experience in qualitative research on medical education. Her gender and academic background may have facilitated openness among female participants when they discussed sensitive experiences of implicit bias while also requiring conscious effort to avoid leading male participants or projecting personal assumptions during probing. To mitigate these influences, the interviewer maintained a reflexive journal and used a standardized interview guide, and the wider research team (comprising both male and female members from public and private sector backgrounds) reviewed coding decisions to reduce the effect of any single researcher's perspective on the analysis.

2.10. Trustworthiness and data saturation

Trustworthiness was addressed following the criteria of Lincoln and Guba [19]. Credibility was supported through verbatim transcription, back-translation of Urdu interviews, and team-based review of codes and themes. Dependability and confirmability were strengthened by maintaining an audit trail of coding decisions and an explicit reflexive account. To determine data saturation, an operational saturation matrix was constructed in which the number of newly emerging codes was recorded after each interview for each sector. No new codes were generated in the final interviews conducted in each sector—the ninth in the public sector college and the tenth in the private sector college—indicating that saturation had been reached. Transferability was supported through a detailed description of the study context and participants, enabling readers to judge the applicability of the findings to comparable settings.

3. Results

A total of 19 faculty members from different disciplines and varying degrees of experience participated in the study, including both male and female participants from public and private colleges. Data saturation was achieved at the tenth participant in the private sector college and the ninth participant in the public sector college, after which further interviews did not yield new themes or insights. Thematic analysis produced four major themes and multiple subthemes across both sectors.

3.1. Theme 1: Gendered career progression and promotion pathways

Most of the participants from both sectors described gender disparities in career pathways, especially in terms of promotion timelines and access to leadership roles in healthcare academia. Female faculty members reported delayed promotions and limited career progression opportunities despite comparable qualifications, whereas male faculty members acknowledged these disparities as systemic rather than intentional.

“I don’t think anyone sits down and decides to hold women back. It is more that the system has always worked this way, and no one questions why the senior positions are almost always filled by men” (Male, public sector, clinical).

One female faculty member from a public sector healthcare academic institution described her experience as follows:

“Even when qualifications and responsibilities are similar among all faculty members, females often have to wait longer to progress in the workplace. Sometimes it feels as though we, females, need to prove ourselves repeatedly before being considered for opportunities that are more readily available to our male colleagues.”

Sub-themes included perceived lack of transparency in promotion criteria and underrepresentation of female faculty members in leadership roles and decision-making positions at healthcare academic institutions.

3.2. Theme 2: Workplace culture and implicit gender bias

The participants reported that workplace culture is influenced by implicit gender norms that shape professional interactions, perceptions of competence, and the authority of personnel in academic and clinical settings in healthcare academic institutions. Female faculty members frequently reported the need to employ additional effort to establish professional credibility, while male faculty members observed these dynamics retrospectively.

A female participant highlighted the challenge of establishing professional credibility in the workplace:

"I have noticed that my opinions are questioned more frequently than my counterparts are, and I often need to provide additional justification for decisions that might be accepted without much discussion when proposed by male colleagues. Over time, this creates a feeling that you constantly have to demonstrate your competence at the workplace."

Subthemes included varying expectations for male and female faculty members and exclusion from informal networks where many professional decisions were shaped. These patterns were reported more significantly by junior and middle-career female faculty members across both sectors.

3.3. Theme 3: Work-life balance and institutional support

Work-life balance emerged as a key issue, especially among female faculty members of both public and private healthcare academic institutions. The participants highlighted that institutional expectations usually did not reflect the additional domestic and caregiving responsibilities that are commonly borne by female faculty members. Male faculty members in both sectors also acknowledged this inequality, describing it as a structural feature that is often taken for granted within healthcare academic settings.

The participants also emphasized the burden of balancing professional, personal and domestic responsibilities and limited support mechanisms for females at academic healthcare institutions:

"The institution expects the same level of productivity from everyone, including male, female, single and married faculty members, but outside work life responsibilities are very different. Managing family commitments alongside academic duties can be challenging, especially when there are limited support mechanisms available at healthcare academic institutions."

Subthemes included the dual burden of professional and household roles and limited formal support mechanisms for faculty members, such as flexible schedules and working arrangements, childcare support, or family-friendly policies. Furthermore, institutional responses contrasted among the participants to highlight these challenges.

3.4. Theme 4: Institutional context and sector specific differences

The participants highlighted differences between the public and private colleges that shaped the experiences of gender equity at the institutions. Public healthcare academic institution faculty members highlighted job security and stability, bureaucratic ri-

gidity and slower institutional change. In contrast, private healthcare academic institution faculty members described performance-driven environments with greater flexibility but also noted the persistence of informal power structures influencing advancement.

Participants also reported that professional growth and development as well as access to opportunities in the workplace were not always perceived to be based solely on the criteria of formal healthcare academic institutions. Some faculty members at healthcare academic institutions described the influence of informal professional networks, personal relationships, and managerial discretion on decisions related to leadership opportunities, committee membership, and career progression and professional development. A summary of the four main and subtheme-interpreted domains from both public and private healthcare academic institutions, along with the number of participants quoting the theme, is specified in Table 1.

Table 1. Themes, subthemes, illustrative quotes, interpreted domains, and participant counts.

Theme (N = 19)	Subtheme	Illustrative Quote	Interpreted Domain	Participants Contributing to Theme (n)
Gendered career progression and promotion pathways	Perceived inequities in promotion criteria	<i>"You fulfill all the requirements, but promotion still takes longer for women."</i> (Female, public sector, basic sciences)	Structural and institutional determinants of equity	16
	Leadership opportunities and decision making	<i>"Women are present in large numbers, but senior roles are still mostly male."</i> (Female, private sector, clinical)		
Workplace culture and implicit gender bias	Differential expectations and credibility	<i>"Being a woman means you're questioned more before being accepted."</i> (Female, public sector, clinical)	Organizational culture and informal practices	14
	Informal networks and exclusion	<i>"Decisions happen in spaces where women are not always included."</i> (Female, private sector, basic sciences)		
Work-life balance and institutional support	Dual professional and domestic roles	<i>"At work expectations are equal, but home responsibilities are not."</i> (Female, public sector, basic sciences)	Gendered distribution of roles and responsibilities	15
	Limited flexibility and support	<i>"Support depends on individual supervisors, not policy."</i> (Female, private sector, clinical)		
Institutional context and sector specific differences	Public sector stability and bureaucracy	<i>"Change happens very slowly here, including gender related change."</i> (Male, public sector, clinical)	Governance structures and organizational constraints	12
	Private sector efficiency and informal power	<i>"Performance matters, but informal dynamics still affect advancement."</i> (Female, private sector, basic sciences)		

4. Discussion

This study explored and compared the perceptions and experiences of faculty members regarding gender equity using in-depth qualitative interviews and an interview guide. The findings highlight that gender inequities strongly exist across public and private healthcare academic institutions and influence faculty members' career pathways and progression, workplace culture, work-life balance, and leadership opportunities. Although both male and female faculty members recognized the existence of such inequities, their indications differed by gender and institutional sector. This highlights the

role of organizational structure and sociocultural customs in supporting inequalities in healthcare academic environments.

The participants described gendered disparities in career pathways, with female faculty members reporting slower professional development and limited access to leadership roles despite having comparable credentials and workloads at institutions. These findings are consistent with international scientific literature reporting continual underrepresentation of female faculty members in senior academic and leadership positions, even in organizations where female faculty members constitute a considerable proportion of the total workforce [3,4,5,20,21]. Richter et al. reported that promotion gaps in healthcare academic institutions cannot be explained only by differences in productivity but are influenced by healthcare academic institutional practices and are vulnerable to bias [4]. In the same manner, participants in the current study reported promotion criteria as nontransparent and unofficially functional, supporting the concerns of participants highlighted in previous scientific literature on structural inequities [5,22].

Workplace culture and gender bias emerged as other major themes determining professional integrity and basic daily interactions among faculty members and staff. Female faculty members frequently described intense scrutiny protocols and the need to repeatedly establish competence at healthcare academic institutions. These findings align with scientific evidence establishing how inherent norms disadvantage women in academic settings [3,6,23]. Male faculty members also acknowledged these patterns, suggesting that such bias practices are normalized within academic institutions rather than being actively acknowledged or critically addressed by the management of healthcare academic institutions. The scientific literature on inclusive workplace environments supports the narratives of participants in both sectors and suggests that such cultural dynamics directly influence collaboration, engagement, and institutional effectiveness [6,24].

Challenges related to work-life balance and limited institutional support were progressively reported by participants, especially female faculty members, highlighting the gendered distribution of the domestic and caregiving responsibilities of women, which are also documented globally and within LMICs [7,8,9,25,26]. Within the Pakistani sociocultural context, these responsibilities are usually strengthened by traditional gender norms and patriarchal family structures in the country, where women are generally expected to assume primary caregiving and household roles irrespective of their professional commitments and work life [27,28]. In particular, the cultural norm of purdah and the expectation of female modesty and segregation can constrain women's participation in informal professional networks, after-hours activities, and mixed-gender decision-making forums so that prevailing notions of "professionalism" and availability in the Pakistani workplace are implicitly shaped by norms that disadvantage female faculty. The participants emphasized that the absence of flexible working schedules, childcare support, and family-friendly policies disproportionately controlled the career progression of female faculty members; however, the expectations of healthcare academic institutions regarding productivity were described as gender-neutral in policy documents, although participants suggested that its application in practice may not always reflect this neutrality. These findings are comparable to the available scientific evidence linking inequitable workplace structures to burnout, disengagement, and attrition among faculty members of healthcare academic institutions [7,29]. The acknowledgment of these discrepancies among male faculty members suggests a growing awareness of the issue while also highlighting the need for healthcare academic institutional responses rather than relying on individual-level regulations.

The faculty of public healthcare academic institutions highlighted job security and stability along with bureaucratic inflexibility and slow policy reforms, whereas the faculty of private healthcare academic institutions reported situations driven by performance but promoted informality and subjective decision-making within the institution. These findings are consistent with the global scientific literature highlighting that health system structures traverse with gender norms to influence leadership pathways and professional opportunities within healthcare institutions [8,9,30]. Furthermore, similar patterns of inequity were observed across both public and private sector institutions, suggesting that these settings reflect broader systemic and societal influences rather than institution-specific factors in either sector and that gender-equitable practices are not yet consistently rooted within institutional structures. This study also highlights the limited availability of scientific literature on gender equity in healthcare academic institutions in the country and other similar LMIC settings. Previous scientific evidence from local settings has focused mainly on medical students or the clinical workforce, with limited attention given to the experiences of teaching faculty within healthcare academic institutions [8,9,14,28,31,32].

The findings highlight that addressing gender inequity in healthcare academic institutions requires more than achieving numerical balance, both at the level of policy and in practice. There is an obvious need for transparent promotion criteria, structured mentorship and sponsorship opportunities, leadership development pathways for female faculty members, and institution-wide initiatives to improve awareness of gender bias. Furthermore, integrating family-friendly policies and flexible work arrangements into institutional frameworks may help support faculty across genders and better accommodate caregiving responsibilities.

The strengths of this study include the following: addressing a literature gap, its comparative public-private design, the inclusion of the perspectives of male and female faculty members, and the use of a rigorous qualitative methodology and thematic analysis to highlight the underexplored area of medical education. However, the study findings are limited by its focus on two medical colleges within a single city, which may affect the generalizability of the results to other healthcare academic institutions in the country. In addition, the sensitive nature of the topic may have introduced social desirability bias, and the interpretive nature of thematic analysis means that coding decisions were inevitably shaped by the research team; these decisions were mitigated through team-based coding and an audit trail but cannot be eliminated. Accordingly, the findings are presented as analytically transferable to comparable healthcare academic settings rather than as statistically generalizable.

5. Conclusions

Gender-based differences in career pathways, leadership opportunities, workplace culture, and work-life balance are embedded within institutional structures. Both male and female faculty members acknowledged these inequities, although they were reported more frequently by women. While the public and private sectors differ in terms of their governance and administrative processes, gender inequity persists in both. Informal practices, nontransparent promotion mechanisms, and limited institutional support systems continue to shape faculty members' professional experience in both sectors. Addressing these challenges requires transparency, standardized promotion criteria, structured mentorship and leadership development opportunities, particularly for female faculty members, and family-friendly institutional policies, including flexible work arrangements and childcare support.

Specifically, institutions and regulators should consider (1) mandatory, standardized gender-bias sensitization training for members of institutional selection and promotion committees, as well as for external inspectors of the Pakistan Medical and Dental Council (PM&DC) during accreditation visits; (2) publishing transparent, time-bound promotion criteria together with the sex-disaggregated composition of faculty at each academic rank in institutional annual reports; and (3) providing institution-supported childcare facilities and formal parental-leave and flexible-scheduling policies that apply equally to male and female faculty. Such concrete, measurable measures are more likely to translate the principle of gender equity into everyday institutional practice than broad aspirational statements alone are.

Abbreviations: LMICs, Low- and middle-income countries; PM&DC, Pakistan Medical and Dental Council; WHO, World Health Organization.

Supplementary materials: The following supporting information can be accessed through the embedded link: [Supplementary File S1](#). Semistructured interview guide.

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