

EXPLORING THE ROLE OF SOCIAL MEDIA AND NETWORKING PLATFORMS IN ADVANCING WOMEN'S LEADERSHIP IN HEALTH

Original Research

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ABSTRACT

Background: Social media and professional networking platforms are increasingly influential in shaping career development and leadership trajectories across various sectors. In the context of Pakistan, where gender disparities in health leadership persist, these platforms may offer valuable opportunities for empowerment and visibility among women in health professions.

Objective: This study aimed to explore the extent, patterns, and perceived impact of social media and networking platform usage on the leadership development of Pakistani women in the health sector.

Methods: A cross-sectional survey design was employed, targeting women aged 30 and above, working or studying in health-related fields across Pakistan. A total of 210 respondents participated via a structured online questionnaire. Descriptive statistics were used to analyze platform usage frequency, perceived leadership benefits, barriers, and enabling factors.

Results: LinkedIn (58.1%) and Twitter/X (46.2%) were the most commonly used platforms for professional purposes. Respondents reported high perceived impact in areas such as mentorship access (mean score = 4.2), policy advocacy (4.3), and networking (4.1). Key barriers included cultural restrictions (52.4%) and fear of online harassment (48.1%), while enablers included access to professional communities (51.4%) and supportive institutional policies (41.9%).

Conclusion: Social media platforms play a crucial role in advancing women's leadership in health by providing access to mentorship, advocacy spaces, and professional networks. Strategic interventions such as digital literacy training and institutional support are essential to overcome existing barriers and foster gender-equitable leadership in Pakistan's health sector.

Keywords: Women in healthcare, leadership, social media, Pakistan, digital networking, gender equity, professional development.

INTRODUCTION

In recent years, social media and networking platforms have emerged as transformative tools in the professional development of individuals across various sectors, including healthcare.¹ In Pakistan, where gender disparities persist in leadership roles, particularly in the healthcare sector; these platforms offer a unique opportunity for women to overcome traditional barriers to leadership and career advancement.² Despite significant progress in women's education and workforce participation, women's representation in healthcare leadership roles in Pakistan remains disproportionately low.³ This gap can be attributed to multiple factors, including societal norms, gender biases, limited access to mentorship, and a lack of professional networks that are critical for career progression. The role of social media and networking platforms in bridging this gap is becoming increasingly significant.⁴ Platforms such as LinkedIn, Twitter, and Facebook provide women with the opportunity to build professional networks, access mentorship from experienced leaders, advocate for gender equality, and engage in health policy discussions that influence their professional trajectory.⁵ Moreover, these platforms enable women to establish a visible presence in the global healthcare community, facilitating collaboration, knowledge exchange, and leadership opportunities that were previously less accessible in the traditional healthcare environment.⁶

The healthcare sector in Pakistan is experiencing a growing need for leadership that is both diverse and inclusive, especially as the country faces complex health challenges ranging from communicable diseases to rising non-communicable diseases.⁷ Empowering women to take on leadership roles in this context is not only important for addressing gender imbalances but also for improving the effectiveness and inclusivity of the healthcare system.⁸ Social media platforms, with their ability to transcend geographical boundaries, provide an effective means for women to navigate the barriers they face in Pakistan's healthcare system, connect with like-minded professionals, and elevate their roles as leaders.⁹ Despite the increasing global recognition of women's contributions in healthcare, Pakistani women remain significantly underrepresented in leadership positions within the health sector. Cultural norms, gender biases, and limited access to traditional leadership development pathways continue to hinder their professional advancement. However, the rise of social media and networking platforms has introduced new opportunities for visibility, mentorship, advocacy, and collaboration. While anecdotal evidence suggests that these digital tools may empower women and amplify their leadership potential, there remains a lack of empirical research specifically examining how Pakistani women in health utilize these platforms for professional growth and influence. Understanding this dynamic is essential to address the digital gender divide and foster inclusive leadership in healthcare. So, our study aims to explore the frequency and perceived impact of social media and networking platform usage among Pakistani women engaged in the health sector, particularly in relation to their leadership development. Furthermore, the findings will contribute to global discussions on the intersection of technology, gender, and leadership in healthcare, with specific relevance to the socio-cultural and professional context of Pakistan.

METHODS

This study adopts a cross-sectional survey design aimed at exploring the frequency and perceived impact of social media and networking platform usage among Pakistani women engaged in the health sector, particularly in relation to their leadership development. This was the multicenter study and conducted during the period of two months (January 2025 to February 2025). Ethical approval was sought from an Institutional Review Board (IRB). Informed consent was obtained electronically before participation. Data confidentiality and anonymity was maintained throughout. The target population includes Pakistani women currently working or studying in various health-related fields, including but not limited to medicine, public health, pharmacy, nursing, health administration, and allied health sciences. Participants from public and private sectors, as well as academia were included. A non-probability purposive sampling method was used to recruit participants who are female, Pakistani nationals, aged 30 and above, currently working or studying in the health sector, and active on at least one social media or networking platform (e.g., LinkedIn, Twitter, Facebook, WhatsApp groups, ResearchGate). Samples of approximately 210 respondents were targeted to ensure adequate representation and statistical reliability. The final size will depend on response rates. A structured, self-administered online questionnaire will be developed using tools such as Google Forms. The questionnaire included closed-ended (multiple choice, Likert scale) questions, divided into the such as demographics (age, profession, work setting, region, years of experience, education level), social media use (frequency and type of platform used for professional engagement), leadership development (perceived role of social media in networking, mentorship, career visibility, advocacy, and skill-

building), and barriers and facilitators (challenges faced in using digital platforms, and enablers that enhance usage). Data was analyzed using descriptive statistics (frequencies, percentages, mean scores) using SPSS or Microsoft Excel. Key variables such as platform usage, frequency, and leadership impact were summarized.

RESULTS

Table 1 presents the demographic characteristics of the 210 respondents included in the study. The age distribution was relatively balanced, with the largest group being 30–39 years old (38.1%, n=80), followed closely by respondents aged 40–49 years and those aged 50 years and above, both comprising 31.0% (n=65) of the sample. In terms of professional background, medical doctors made up the largest proportion of participants (41.4%, n=87), indicating a strong representation from clinical medicine. Public health professionals accounted for 23.8% (n=50), while nurses and paramedics represented 14.3% (n=30). Pharmacists constituted 11.9% (n=25) of the respondents, and 8.6% (n=18) were from allied health fields or other related professions. Regarding sectoral affiliation, nearly half of the respondents (45.7%, n=96) were working in the government sector, while 27.6% (n=58) were from the private sector, and 26.7% (n=56) were engaged in academia or training institutions. This distribution reflects a diverse mix of professional roles and work settings among Pakistani women in the health sector, providing a comprehensive foundation for analyzing social media engagement in leadership development.

Table 1: Demographic Characteristics of Respondents (n = 210)

| Variable | Category | Frequency (n) | Percentage (%) |
|------------|----------------------------|---------------|----------------|
| Age | 30–39 years | 80 | 38.1 |
| | 40–49 years | 65 | 31.0 |
| | 50+ years | 65 | 31.0 |
| Profession | Medical Doctor | 87 | 41.4 |
| | Public Health Professional | 50 | 23.8 |
| | Nurse/Paramedic | 30 | 14.3 |
| | Pharmacist | 25 | 11.9 |
| | Allied Health/Other | 18 | 8.6 |
| Sector | Government | 96 | 45.7 |
| | Private | 58 | 27.6 |
| | Academia/Training | 56 | 26.7 |

In Figure 1, the analysis of social media platform usage among Pakistani women in the health sector revealed notable trends. LinkedIn emerged as the most commonly utilized platform, with 58.1% of respondents (n=122) engaging with it for professional purposes. This was followed by Twitter/X, used by 46.2% (n=97), and WhatsApp Groups at 41.9% (n=88), highlighting a strong inclination towards both formal and informal networking tools. Facebook was used by 38.1% (n=80) of the participants, while ResearchGate—a more academically oriented platform—was the least used, with 29.5% (n=62) of respondents reporting engagement. Regarding frequency of usage, a significant portion of participants (34.3%, n=72) reported using these platforms a few times per week, while 27.1% (n=57) accessed them daily, suggesting consistent engagement. About 21.9% (n=46) used them a few times per month, whereas 16.7% (n=35) indicated rare usage. These findings underscore the relevance of digital platforms in supporting professional activities and leadership development among women in the Pakistani health sector, with varied intensity and preferences in platform engagement.

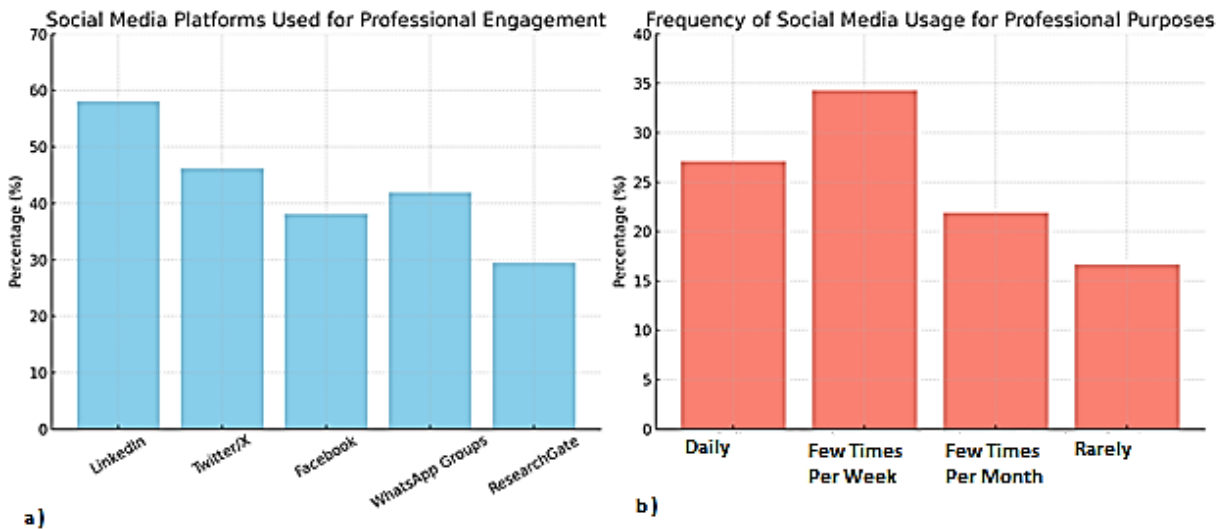


Table 1a,b: Frequency of Social Media and Networking Platform Usage for Professional Engagement

Table 2 illustrates the perceived impact of social media and networking platforms on various dimensions of leadership development among Pakistani women in the health sector, based on mean scores rated on a 5-point Likert scale. Respondents reported the highest perceived benefit in policy advocacy engagement, with a mean score of 4.3 ± 0.5 , suggesting that digital platforms are significantly empowering women to participate in shaping health policies and promoting gender equity. Mentorship access was also highly rated (4.2 ± 0.6), indicating that social media facilitates meaningful professional relationships and guidance, which are crucial for career advancement. Networking opportunities followed closely with a mean score of 4.1 ± 0.7 , reflecting that platforms like LinkedIn and WhatsApp groups effectively support peer interaction and professional connection. Career visibility had a mean score of 4.0 ± 0.8 , highlighting that digital presence enhances recognition and professional standing, albeit with slightly more variation in perception. Meanwhile, skill development via online learning scored somewhat lower (3.8 ± 0.9), indicating that while online resources are beneficial, they may be perceived as less central to leadership growth compared to mentorship or advocacy. Overall, the findings underscore the multifaceted value of social media in empowering women leaders in health.

Table 2: Perceived Impact on Leadership Development (Mean Scores out of 5)

| Leadership Dimension | Mean Score (±SD) |
|---------------------------------------|------------------|
| Networking Opportunities | 4.1 ± 0.7 |
| Mentorship Access | 4.2 ± 0.6 |
| Career Visibility | 4.0 ± 0.8 |
| Skill Development via Online Learning | 3.8 ± 0.9 |
| Policy Advocacy Engagement | 4.3 ± 0.5 |

Figure 2 presents the perceived barriers faced by Pakistani women in the health sector when using social media and networking platforms for leadership development. The most frequently cited barrier was cultural and societal restrictions (52.4%), indicating that deeply rooted gender norms and expectations continue to limit women’s digital visibility and professional engagement online. This finding reflects broader societal challenges that constrain women’s leadership potential in public and professional domains. Fear of judgment and online harassment was the second most reported barrier (48.1%), highlighting concerns around digital safety, privacy, and the emotional toll of engaging in potentially hostile online environments. This is a significant deterrent that undermines women’s confidence and willingness

to participate in digital spaces. Time constraints were cited by 43.8% of respondents, reflecting the demanding roles many women play both professionally and domestically, which may limit their capacity to consistently engage with online platforms for leadership activities. A notable portion of participants (36.2%) pointed to limited digital training or skills, suggesting a need for targeted capacity-building initiatives to enhance women’s digital literacy and effective use of social media tools. Finally, lack of role models online was identified by 31.0% of respondents, underscoring the importance of visible female leadership on digital platforms to inspire and guide emerging women leaders. Overall, these barriers emphasize the need for structural, educational, and cultural interventions to foster a more inclusive and supportive digital environment for women’s leadership in health.

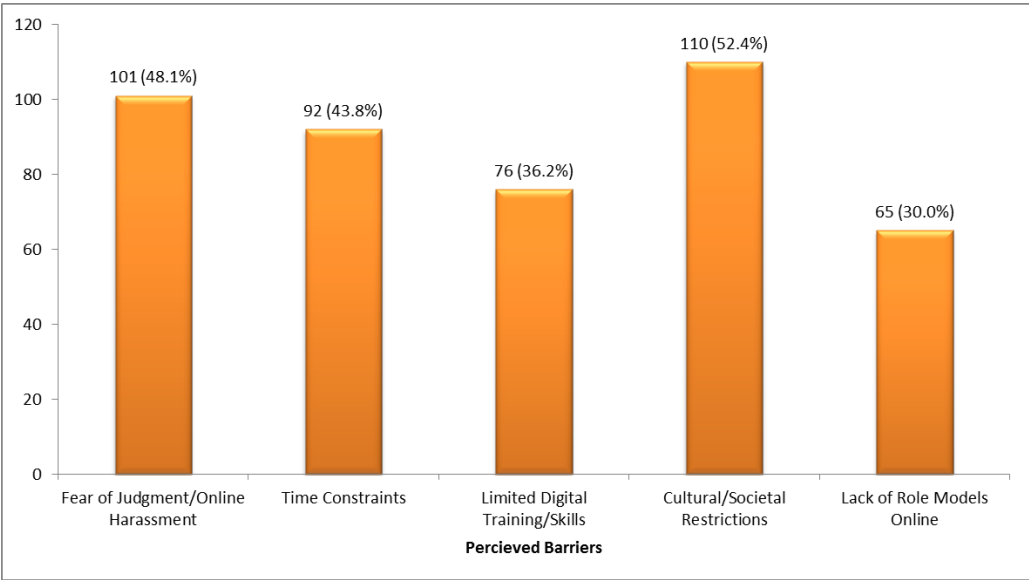


Figure 2: Perceived Barriers to Using Social Media for Leadership

Table 3 outlines the key enablers that support Pakistani women in the health sector to utilize social media and networking platforms for leadership development. The most commonly reported enabler was access to professional communities (51.4%), emphasizing the value of being part of networks that offer collaboration, peer support, and shared opportunities for career advancement. These communities help foster a sense of belonging and amplify professional visibility in the digital space. Supportive institutional policies were identified by 41.9% of respondents, indicating that when workplaces promote and recognize digital engagement as a legitimate tool for leadership and professional growth, women are more likely to actively participate on such platforms. Digital literacy workshops were noted by 34.8% of participants as important facilitators, pointing to the effectiveness of structured training in enhancing users’ confidence and technical proficiency, thereby improving their ability to navigate digital platforms strategically. Additionally, the presence of mentors and role models online was seen as a motivator by 31.4% of respondents. Visibility of successful women leaders in the digital sphere can inspire others, provide guidance, and reinforce the idea that online engagement can translate into real-world leadership growth. These enablers collectively highlight critical leverage points for policy and practice aimed at empowering women in healthcare through digital engagement.

Table 3: Enablers That Facilitate Platform Usage

| Enabler | Frequency (n) | Percentage (%) |
|--|---------------|----------------|
| Access to Professional Communities | 108 | 51.4 |
| Supportive Institutional Policies | 88 | 41.9 |
| Digital Literacy Workshops | 73 | 34.8 |
| Presence of Mentors/Role Models Online | 66 | 31.4 |

DISCUSSION

This study provides valuable insights into how Pakistani women in the health sector engage with social media and networking platforms to foster their leadership development. The findings indicate a strong presence on professional platforms like LinkedIn (58.1%) and Twitter/X (46.2%), with a significant portion of respondents using these platforms multiple times per week. This aligns with global trends observed by Ventola (2014), who highlighted that healthcare professionals increasingly utilize digital platforms for professional development, networking, and education.¹⁰ Importantly, the perceived benefits of social media for leadership development were strongly supported by participants. Dimensions such as mentorship access (mean score 4.2), networking opportunities (4.1), and policy advocacy engagement (4.3) suggest that digital platforms are critical tools for enhancing visibility and influence in the health sector. These findings are consistent with research by George et al. (2020), which emphasized that social media can help women bypass traditional hierarchical barriers and amplify their voices in male-dominated professional environments.¹¹ However, notable barriers such as cultural restrictions (52.4%) and fear of online harassment (48.1%) remain prominent concerns. These constraints reflect broader societal norms and challenges identified in studies such as those by Rizvi et al. (2022), who documented how gender norms and digital safety concerns hinder women's digital participation in South Asia.¹² The presence of such barriers calls for institutional support and policy interventions that create safer and more inclusive digital environments. The enablers identified—such as access to professional communities (51.4%) and supportive institutional policies (41.9%)—mirror recommendations from prior studies. For example, a scoping review by Raj et al. (2021) found that mentorship, digital literacy, and inclusive organizational practices were central to advancing women's leadership in global health (13,14). Overall, the findings underscore the transformative potential of social media in empowering Pakistani women in healthcare, especially when institutional frameworks and digital infrastructures are aligned to support such efforts. Nevertheless, further longitudinal and qualitative studies are recommended to explore the sustainability and depth of such digital engagements over time.

CONCLUSION

This study underscores the increasingly pivotal role of social media and networking platforms in supporting the professional and leadership development of Pakistani women in the health sector. The findings demonstrate that these digital tools are not only widely used but are also perceived as highly beneficial for enhancing networking, mentorship, visibility, and engagement in policy advocacy. However, significant barriers—such as cultural norms, fear of online harassment and limited digital literacy—continue to hinder the full realization of their potential. Despite these challenges, the presence of enabling factors such as access to professional communities and institutional support signals promising opportunities for advancing women's leadership through digital engagement. To harness this potential, it is essential that healthcare institutions, professional bodies, and policymakers implement gender-sensitive digital policies, invest in digital literacy, and create safe online spaces. Doing so will contribute meaningfully to bridging gender gaps in health leadership and fostering a more inclusive, empowered, and connected health workforce in Pakistan.

AUTHOR CONTRIBUTION

| Author | Contribution |
|-----------------|--|
| Rabia Zulfiqar* | Substantial Contribution to study design, analysis, acquisition of Data |
| | Manuscript Writing |
| | Has given Final Approval of the version to be published |
| Saima Bukhari | Substantial Contribution to study design, acquisition and interpretation of Data |
| | Critical Review and Manuscript Writing |
| | Has given Final Approval of the version to be published |

REFERENCES

1. Boniol M, McIsaac M, Xu L, Wuliji T, Diallo K, Campbell J. Gender equity in the health workforce: analysis of 104 countries. Geneva: World Health Organization; 2019. Available from: <https://iris.who.int/handle/10665/311314Iris+1Zhiyanbao+1>

2. World Health Organization. Gender equity in the health workforce: Analysis of 104 countries [Internet]. Geneva: WHO; 2022 [cited 2025 Apr 12]. Available from: <https://www.who.int/publications/i/item/9789240063600>

3. Ahmed S. Digital sisterhood: Social media communities and the empowerment of women in Pakistan. *J Digit Cult Stud*. 2023;6(2):45–58.
4. Muhammad Din N. Digital connectivity as a springboard: Social media groups of Pakistani women. *IQAS*. 2023;54(4):1–28. Available from: <https://hasp.ub.uni-heidelberg.de/journals/iqas/article/view/21080/24500hasp.ub.uni-heidelberg.de+1SSOAR+1>
5. Bano S, Raza S. Cyberbullying and digital exclusion: Barriers to women's leadership in online professional networks in Pakistan. *Pak J Cyber Law Soc*. 2022;5(3):87–102.
6. Nighat Dad: She escaped an abusive marriage—now she helps women battle cyber harassment. *WIRED*. 2024 Dec 5. Available from: <https://www.wired.com/story/nighat-dad-digital-rights-foundationWIRED>
7. Ali F, Sultana R. Gendered spaces and digital advocacy: How Pakistani women in health use social media to lead. *Asian J Commun*. 2023;33(4):521–38.
8. Sustaining the sisterhood: Soul Sisters Pakistan (SSP). *Emerald Emerging Markets Case Studies*. 2023;13(1). doi:10.1108/EEMCS-06-2021-0203
9. Peter John, Irina Yang & Aparna Goel (2022). A Systematic Literature Review of Importance of Emotional Competence in Healthcare Management. *Dinkum Journal of Medical Innovations*, 1(01):19-26.
10. Ventola CL. Social media and health care professionals: benefits, risks, and best practices. *Pharmacy and Therapeutics*. 2014;39(7):491-520. [PMCID: PMC4103576]
11. George AS, Morgan R, Larson E, LeFevre AE, Mpembeni R, Benova L. Gender dynamics in digital health: overcoming blind spots and biases to seize opportunities and responsibilities for transformative health systems. *J Glob Health*. 2020;10(2):020307. doi: 10.7189/jogh.10.020307
12. Rizvi A, Qureshi MM, Saeed A. Gender digital divide and online safety: A study of women's experience in Pakistan's digital sphere. *IT for Change*. 2022. Available from: <https://itforchange.net/sites/default/files/add/Gender-Digital-Divide-in-Pakistan.pdf>
13. Raj A, Kumra T, Darmstadt GL, Freund KM. Achieving gender and social equality: How can digital health technologies contribute? *Health Policy and Planning*. 2021;36(Suppl_1):i48–i59. doi: 10.1093/heapol/czab002.
14. Feng L, Wenting H, Akhter T, Albasher G, Aamir A, Imran A. Evading the entrepreneurship: A study to discover implementable online approaches to avoid greenhouse consequences. *Frontiers in Psychology*. 2021 Aug 9;12:713957. <https://doi.org/10.3389/fpsyg.2021.713957>