

## Gender composition of editorial boards in Pakistani Medline-indexed journals: a disaggregated analysis

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### Abstract

Editorial boards determine the direction and scope of journals. The objective of this study was to assess the gender composition of the editorial boards of four Pakistani Medline-indexed journals using a descriptive cross-sectional study design. Gender composition of the editorial boards of four Pakistani Medline-indexed journals was assessed using a descriptive cross-sectional study design. The publicly available official editorial board pages were accessed and analysed for: Journal of the Pakistan Medical Association (JPMA), Journal of Ayub Medical College (JAMC), Journal of the College of Physicians and Surgeons of Pakistan (JCPSP), and Pakistan Journal of Pharmaceutical Sciences (PJPS). Cumulatively, 163 individuals comprised the editorial boards in these journals, out of which 112 (68.7%) were males. JPMA had the largest editorial team with 59 individuals, and JCPSP had the smallest team with 25 individuals. The most and least gender-diverse editorial teams were reported by JPMA and JAMC, with 22 (37.3%) and 6 (20.7%) women, respectively. Results augur the need for gender-sensitive training programmes to promote gender balance in the editorial boards of the country's medical journals.

**Key words:** Medical Journals, Editorial boards, Gender equity, Women, Pakistan.

**DOI:** <https://doi.org/10.47391/JPMA.32109>

### Introduction

Editorial boards of medical journals decide the editorial direction, weigh in on the selection of articles for publication in terms of which research areas get visibility, and provide peer-review oversight. Gender equitable composition of the editorial boards of medical journals is important for promoting gender equality and women's

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**Submission complete:** 23-08-2025 **First Revision received:** 23-09-2025

**Acceptance:** 14-02-2026

**Last Revision received:** 13-02-2026

health priorities, and helping more women serve as role models in academic positions.

The under-representation of women on editorial boards has been a consistent finding globally, for both general biomedical as well as specialty-specific medical journals. Several recent studies based on systematic analysis have empirically documented the under-representation of women in editorial boards of various specialty-specific, general surgery, and internal medicine journals.<sup>1-10</sup>

A study based on 591 journals on environmental sciences and public health from across the world reported that 65.9% of editors were men, with men in the majority on 75.5% of the editorial boards.<sup>1</sup> Another study based on 105 international urologic journals reported that women comprised merely 14.6% of the total number of editorial board members.<sup>2</sup> The editorial board landscape contains significant gender-based disparities in several other medical specialties: 30.4% women as editorial board members in 119 psychiatric journals across the world;<sup>3</sup> 33.05% women as editorial board committee members and 19.44% as editors-in-chief in 125 paediatric related journals;<sup>4</sup> on average 37% women as editorial board members in 20 dermatology journals and in 5 out of these 20 journals (25%) women served as editors-in-chief;<sup>5</sup> 23% women as editorial staff in 20 cardiology journals;<sup>6</sup> 20.2% women as editorial board members in 27 international general surgery journals;<sup>7</sup> 32.9% women occupying editor's position in 39 specialty-specific medical society affiliated journals in the United States;<sup>8</sup> 24% women as editorial board members in 60 oncology journals;<sup>9</sup> 9% women as editorial board members in orthopaedic journals, 21% in general surgery journals, and 35% in internal medicine journals in a total of 15 journals.<sup>10</sup>

To the best of our knowledge, only one study has reported on the gender disaggregated analysis of the editorial board composition of Pakistani medical and dental journals.<sup>11</sup> In 2015, it examined 2,342 editorial board members of 79 journals and reported 17.5% women to be editorial board members, with 11 journals having no women representation.

The Committee on Publication Ethics (COPE) gender-diversity recommendations and the Sustainable

Development Goals (SDG) 'Publishers Compact' advocate for gender-equity in editorial structures.<sup>12-13</sup> Three general biomedical journals and one specialty journal, i.e. Pharmaceutical journal, from Pakistan are indexed in the most prestigious medical indexing bibliographic database of Medline. The general biomedical journals include, Journal of the Pakistan Medical Association, Journal of Ayub Medical College, and the Journal of the College of Physicians and Surgeons Pakistan, while the Pakistan Journal of Pharmaceutical Sciences is the only medical specialty journal from Pakistan indexed in Medline. This study, using a cross-sectional design, aimed to descriptively analyse the gender composition of the editorial boards of the four Pakistani Medline-indexed journals, using web content from their official websites.

## Methods

On June 23, 2025, the publicly available editorial board pages of all four Pakistani Medline-indexed journals were accessed from their official websites in this cross-sectional web content descriptive analysis study. These included three general biomedical journals: Journal of the Pakistan Medical Association (JPMA);<sup>14</sup> Journal of Ayub Medical College (JAMC);<sup>15</sup> and Journal of the College of Physicians and Surgeons of Pakistan (JCPSP);<sup>16</sup> and the specialty-specific Pakistan Journal of Pharmaceutical Sciences (PJPS).<sup>17</sup> The web content was saved as PDF files, data was scrapped, an Excel spreadsheet was created, and analysed from June 23-29.

This spreadsheet entailed everyone's name and their specific role, e.g. 'Editor-in-Chief', 'Associate Editor', or 'Advisory Board Member'. For Pakistanis, gender base was concluded on names. If a name was clearly feminine or masculine, it was noted down. Few journals had profile photographs next to the names, and that made it easier to record the gender. For international members, an AI tool was used as a helper that checked publicly available data to give its best guess on gender. Hence, the spreadsheet included everyone's role, gender, and the journal they served on, and was used for subsequent descriptive analysis.

Each author independently assigned a gender to every editorial board member, and compared results. Their assignments differed in two instances, and after discussion, a final gender assignment was agreed upon.

The Google Colab,<sup>18</sup> a free, cloud-based tool, was used to read the final spreadsheet into Python for analysis in terms of counts, frequencies, and percentages, across all four journals and separately for each journal.

## Results

A consistent pattern of male dominance was observed. Table 1 provides the gender distribution of all editorial roles listed on the official websites of the four Medline-Indexed Pakistani journals, by each journal. Table 2 provides the overall gender distribution of editorial staff and various boards, cumulatively and by each of the four Medline-Indexed Pakistani journals.

**Table-1:** Gender distribution of editorial roles in four Medline-Indexed Pakistani journals.

	PJPS		JAMC		JPMA		JCPSP	
	M	F	M	F	M	F	M	F
Patron	1	-	1	-	-	-	-	-
Chairman	-	-	-	-	1	-	-	-
Editor-in-Chief	1	-	-	-	-	1	-	-
Associate Editor-in-Chief	-	-	-	-	-	1	-	-
Chief Editor	-	-	1	-	-	-	1	-
Editor	-	-	-	-	-	-	1	-
Editor, Students Corner	-	-	-	-	-	2	-	-
Managing Editor	-	-	1	-	-	-	-	-
Executive Editor	-	-	-	-	-	-	-	1
Publication Editor	-	-	1	-	-	-	-	-
Associate Editor	1	-	-	-	1	2	1	2
Advisory Board	31	16	5	0	-	-	-	-
Editorial Board/Member	-	-	12	6	18	14	-	-
International Advisors	-	-	-	-	15	2	-	-
Advisory Board Member (National)	-	-	-	-	-	-	6	3
Advisory Board Member (International)	-	-	-	-	-	-	9	1
Statistical Reviewer	-	-	2	-	2	-	-	-

PJPS: Pakistan Journal of Pharmaceutical Sciences, JAMC: Journal of Ayub Medical College, JPMA: Journal of the Pakistan Medical Association  
JCPSP: Journal of the College of Physicians and Surgeons Pakistan

**Table-2:** Overall gender distribution of editorial staff and various boards in four Medline-Indexed Pakistani journals.

	PJPS		JAMC		JPMA		JCPSP	
	M	F	M	F	M	F	M	F
Patron/Chairman	1	-	1	-	1	-	-	-
(%)	(100)	-	(100)	-	(100)	-	-	-
Editors	2	-	3	-	1	6	3	3
(%)	(100)	-	(100)	-	(14.3)	(85.7)	(50.0)	(50.0)
Board/Members/Advisors/Team	31	16	17	6	33	16	15	4
(%)	(66.0)	(34.0)	(73.9)	(26.1)	(67.3)	(32.7)	(78.9)	(21.1)
Statistical Reviewer	-	-	2	-	2	-	-	-
(%)	-	-	(100)	-	(100)	-	-	-
Total	34	16	23	6	37	22	18	7
(%)	(68.0)	(32.0)	(79.3)	(20.7)	(62.7)	(37.3)	(72.0)	(28.0)

PJPS: Pakistan Journal of Pharmaceutical Sciences, JAMC: Journal of Ayub Medical College, JPMA: Journal of the Pakistan Medical Association, JCPSP: Journal of the College of Physicians and Surgeons Pakistan

Overall, 163 individuals comprised the editorial boards in these four journals, out of which 112 (68.7%) were males. In terms of broad categories: the editorial staff, comprising various editors, was 18 in all four journals with an even split of both genders; the membership/advisoryship in various boards totalled 138, with 96 (69.6%) males; with the exception of JCPSP, the other three journals listed patrons/chairmen of the editorial board and all three were men; overall, four statistical reviewers were listed by JAMC and JPMA, and all were men.

JPMA had the largest editorial team with 59 individuals, and JCPSP had the smallest team with 25 individuals. The most and least gender-diverse editorial teams were reported by JPMA and JAMC, with 22 (37.3%) and 6 (20.7%) women, respectively.

In terms of various editors in the editorial staff: JPMA listed women as Editor-in-Chief and Associate Editor-in-Chief; two out of three Associate Editors, and both Student Corner/Section Editors, while the only other journal that listed women in any editorial role was JCPSP, which listed one woman as an Executive Editor, and two as Associate Editors. Largest boards comprising either advisors/team-members/members were listed by JPMA and PJPS, with 49 and 47 individuals, respectively, and out of these women comprised 16 (32.7%) and 16 (34.0%) of JPMA and PJPS boards, respectively.

## Discussion

This is the first study on the gender profile of the editorial boards of Medline-indexed journals in Pakistan, in a decade. The profile of gender composition is essentially similar to what has been reported from across the world.<sup>1-10</sup> The one previous study conducted in Pakistan on the editorial board gender profile did not provide information

disaggregated by each journal,<sup>11</sup> hence, making it difficult to elucidate the change in 2025, from a decade ago. However, the pronounced gender disparities paint a similar profile.

Overall, males dominate the editorial boards in the broad categories of patron/chairman, membership/advisoryship, and statistical reviewers, in all four journals. Although for the category of editors, both males and females were evenly poised cumulatively, but this exception was an artefact of JPMA having six women editors out of a total of its seven editors. While PJMS and JAMC had no woman in this category, and JCPSP had only one out of a total of three in this role. These findings, coupled with patronship and chairmanship being an exclusive domain of men, clearly indicates that senior leadership positions across all journals were disproportionately held by men.

The noted exception of JPMA in the category of editors could be explained by the highest number of individuals in the category of editors, including 'Student Corner' editors, and perhaps the fact that historically women have led this journal in the capacity of lead editor. Perhaps women in senior and leading positions tend to be fairer and more balanced in ensuring an equitable representation. However, this putative women-factor did not translate into the other broad category of membership/advisoryship of editorial boards, where men comprised a majority in each journal, and for JPMA represented 33 (67.3%) of the total. Although this is far from equal, it is not too lopsided.

The male skewed editorial boards may not necessarily reflect system-wide biases. The gender-based disproportionality may also be driven by the availability and willingness of qualified and experienced women to take up the editorial board positions.

The major limitations of this study include the fact that only Medline-indexed journals were studied. Secondly, it provides a snapshot of the editorial board composition and does not reflect such composition profile in the past. Finally, the official websites of these four journals studied, may not be completely up-to-date and represent the precise current situation. The major strength entails provision of baseline analysis, against which editorial board compositions of these four Medline-indexed and other Pakistani medical/health journals in the future, could be compared. Such comparative studies in the future would help monitor the gender disparity trends and progress or lack thereof.

The descriptive breakdown provided, clearly highlights gender imbalances in Medline-indexed journal governance structures in Pakistan. The relative absence of women from the highest levels of editorial authority underscores the need for more inclusive editorial board hiring/selection policies, and mentorship programmes that promote gender equity in Pakistan. Furthermore, future studies need to extend this analysis to all medical journals in Pakistan to better gauge the gender-based disparities in the composition of editorial boards.

## Conclusion

Gender composition of the editorial boards of four Pakistani Medline-indexed journals show a stark gender divide, which is more pronounced at the senior editorial leadership positions. Overall, women were more likely to be included in advisory or board member capacities than in executive editorial decision-making positions. These findings augur the need for gender-sensitive internship and training programmes in Pakistan to promote gender balance in the composition of editorial boards of medical journals.

**Disclaimer:** None.

**Conflict of Interest:** None.

**Source of Funding:** None.

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**MAS:** Concept, literature review, writeup, data analysis and final revision.

**SMM:** Literature review, writeup, data analysis and final review.