

ORIGINAL RESEARCH

Gender and Geographical Diversity in Authorship, Peer Reviewing, and Editorial Roles in the *European Journal of Vascular and Endovascular Surgery Vascular Forum*

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Objective: Gender based disparities have been reported regarding principal investigator positions, authorship of medical published literature, reviewing roles, and representation in journal editorial boards. This study aimed to analyse gender and geographical differences in the authorship and editorial roles of the *European Journal of Vascular and Endovascular Surgery Vascular Forum* (EJVES VF).

Methods: An observational retrospective study was performed of all consecutive submissions to EJVES VF between 2020 – 2023. Data were gathered on: first author's gender, first author's professional country, last author's gender, number of authors per submission, article type, and final editorial decision. Gender and professional country of external reviewers and editorial staff were also analysed, as well as performance indicators. The statistical analysis was descriptive and chi squared and *t* tests were used.

Results: A total of 577 submitted papers were included. First authors were female (FFA) in 26.7% and 28.5% of submitted and accepted papers, and last authors (FLA) in 16.5% and 22%, respectively. The acceptance rate was 34.7% (*n* = 200), which was similar for FFA and male first authors (37% vs. 33.8%; *p* = .47). The FLA had a higher acceptance rate than male last authors (46.3% vs. 32.4%; *p* = 0.009). The acceptance rate of original research and review papers was 34.7% (*n* = 42), 28.2% (*n* = 101) for case reports, short reports, editorials, and surgical videos, and 52.2% for images, correspondence, and invited commentaries (*p* < .001). The highest acceptance rate was achieved by Europe (*n* = 334; 43.1%), followed by America (*n* = 68; 33.8%) and Australasia (*n* = 20; 30%) (*p* < .001). The journal had six female and ten male editors. The proportion of female reviewers rose from 12.4% in 2020 to 17% in 2023, and female editorial board members from 7% to 21%. Performance indicators were statistically similar for male and female reviewers.

Conclusion: Female authorship is under represented in submitted and published papers in EJVES VF, with important geographical differences. The number and percentage of female reviewers is increasing; their performance is comparable with their male colleagues.

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INTRODUCTION

In the medical profession, the percentage of women has increased to become >50% of the workforce (Fig. 1),¹ yet <30% of women obtain leadership positions, in both clinical and academic departments.^{2–5} In the United Kingdom, female vascular surgery consultants made up 7.5% of the

workforce in 2013, rising to 9.9% in 2018. In 2018, 18.7% of new consultants (≤5 years) and 17% of the trainees were female.⁶ In the United States (US), 15% of the workforce in vascular surgery were female in 2023, with 40% being female trainees.^{5,7} Despite improvements in diversity in the last decade, 24% of program directors and 12% of department and division leaders were women.⁵

Several papers in the last few years have highlighted the gender gap in scientific research in different medical areas.^{8–11} Gender based disparities have been described regarding principal investigator positions, authorship of published medical literature, reviewing roles, and representation in journal editorial boards (EB).^{9,10,12–14} This reduces the opportunities for career development, funding for research, awards, decision making, and impact on professional teams

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Figure 1. Proportion of female doctors in 2000 and 2021 (or nearest year). Source: Organization for Economic Co-operation and Development (OECD) Health Statistics 2023.

and society. There are signs that the gap is slowly getting smaller,¹⁰ but career advance is slower for women than would be expected.²

The *European Journal of Vascular and Endovascular Surgery Vascular Forum* (EJVES VF) is the second European Society for Vascular Surgery (ESVS) scientific journal. It was revamped from the previous EJVES Short Reports in January 2020, led by, for the first time, a female Editor in Chief (EiC). In parallel, the ESVS has recently placed the spotlight on equality, diversity, and inclusion (EDI) within the Society and the vascular community. Among other initiatives, the ESVS has created an EDI Task Force, which aims to gather data and encourage inclusion initiatives (<https://esvs.org/edi-task-force/>).

This study aimed to analyse gender and geographical differences, regarding both authorship and editorial roles, in the publications of EJVES VF from its rebirth in 2020.

METHODS

A retrospective observational study of all consecutive submissions to EJVES VF was performed between 1 January 2020 and 31 December 2023. The following variables were gathered: first author's gender, first author's professional country at the time of submission (as detailed in the author's affiliation), last author's gender, number of authors per submission, article type, and final editorial decision.

The gender of the authors was classified according to their first name and through author search in Google Scholar and or LinkedIn. Gender was considered as dichotomic (male or female), as no data could be obtained on other gender diversity.¹⁵ The countries were grouped by continent. The article types were grouped as: original research or review; short or case report, editorial or surgical video; and image or correspondence or invited commentary. The final editorial decision was accept or reject. Papers withdrawn by the authors were classified as rejected.

All external reviewers and editorial staff (EiC, associate editors, assistant editors) of the Journal were also analysed for the same period. Data were gathered on gender and professional country, as well as performance indicators (total review invitations, accepted invitations, declined invitations, average days to respond to the invitation, average

days to complete the review, review submitted late, average days of late submitted review).

A descriptive analysis of the data was undertaken, using counts and percentage (n , %) for categorical variables and mean (standard deviation [SD]) values for continuous variables. Chi squared and t tests were used for univariable analysis of gender and geographical differences, using the statistical package SPSS 25.0 (SPSS, Armonk, NY, USA) and considering $p < .050$ as statistically significant.

RESULTS

Submitted papers and authors

A total of 577 submitted papers were included. The authors' data and article type for all submissions and accepted papers are detailed in Table 1. Gender and country were determined in 100% of the sample. Women were first authors in 26.7% of submitted papers and 28.5% of accepted ones, and last authors in 16.5% and 22%, respectively. Of the 577 submitted papers, 57.9% came from European countries, followed by Asia at 24.6%; European papers comprised 72% of accepted papers, followed by Asia (13.5%) and America (11.5%).

There were geographical differences in female representation as first ($p < .001$) or last authors ($p = .022$), with Europe showing the highest rates and Africa the lowest (Table 2a).

Papers with male first authors (MFA) and female first authors (FFA) had a similar mean number of authors (4.5 vs. 4.8; $p = .35$), as did the papers with last male authors (MLA) and female authors (FLA) (4.7 vs. 4.2; $p = .10$). Of the 95 papers with a FLA, 23 (24.2%) had an FFA and 72 (75.8%) an MFA. The proportion was similar for papers with an MLA: 131 (27.2%) had an FFA and 351 (72.8%) had an MFA ($p = .55$).

The acceptance rate was 34.7% ($n = 200$), which was similar for MFA and FFA ($n = 143$, 33.8% vs. $n = 57$, 37%, respectively; $p = .47$). However, FLA had a higher acceptance rate than MLA ($n = 44$, 46.3% vs. $n = 156$, 32.4%, respectively; $p = .009$). This can be linked to the article type: the acceptance rate of original research or review papers was 34.7% ($n = 42$), 28.2% ($n = 101$) for short

Table 1. Descriptive data of all submitted and accepted papers to the *European Journal of Vascular and Endovascular Surgery Vascular Forum* between 2020–2023.

	Submitted papers (n = 577)	Accepted papers (n = 200)
<i>First author</i>		
Male	423 (73.3)	143 (71.5)
Female	154 (26.7)	57 (28.5)
<i>Last author</i>		
Male	482 (83.5)	156 (78)
Female	95 (16.5)	44 (22)
<i>Continent</i>		
Europe	334 ^a (57.9)	144 ^f (72)
Asia	142 ^b (24.6)	27 ^g (13.5)
America	68 ^c (11.8)	23 ^h (11.5)
Australasia	20 ^d (3.5)	6 ⁱ (3)
Africa	13 ^e (2.3)	0 (0)
<i>Article type</i>		
Original research or review	121 (21.0)	42 (21)
Case or short report, editorial, surgical video	358 (62.0)	101 (50.5)
Image, correspondence, invited commentary	98 (17.0)	57 (28.5)

Data are shown as n (%).

^a Albania n = 2, Austria n = 4, Belgium n = 10, Bosnia n = 1, Bulgaria n = 2, Czechia n = 1, Denmark n = 12, Estonia n = 1, Finland n = 6, France n = 58, Germany n = 17, Greece n = 10, Hungary n = 5, Ireland n = 10, Italy n = 31, Luxembourg n = 1, Malta n = 2, Netherlands n = 35, Norway n = 5, Poland n = 3, Portugal n = 33, Romania n = 1, Slovakia n = 1, Spain n = 26, Sweden n = 6, Switzerland n = 8, United Kingdom n = 43.

^b Abu Dhabi n = 2, China n = 25, Dubai n = 3, Georgia n = 3, India n = 16, Indonesia n = 3, Iran n = 3, Israel n = 1, Japan n = 60, Korea n = 1, Lebanon n = 2, Malaysia n = 2, Mongolia n = 3, Oman n = 1, Pakistan n = 1, Russia n = 3, Saudi Arabia n = 2, Singapore n = 8, Thailand n = 3.

^c Brazil n = 7, Canada n = 3, Chile n = 1, Grenada n = 2, Nicaragua n = 1, USA n = 52, Venezuela n = 2.

^d Australia n = 15, New Zealand n = 5.

^e Egypt n = 5, Morocco n = 4, South Africa n = 3, Tunis n = 1.

^f Austria n = 2, Belgium n = 4, Denmark n = 4, Finland n = 2, France n = 34, Germany n = 5, Greece n = 2, Hungary n = 2, Ireland n = 2, Italy n = 8, Netherlands n = 20, Norway n = 3, Poland n = 1, Portugal n = 13, Spain n = 15, Sweden n = 2, Switzerland n = 5, United Kingdom n = 20.

^g China n = 6, Dubai n = 1, Georgia n = 1, Japan n = 13, Mongolia n = 1, Oman n = 1, Russia n = 1, Singapore n = 2, Thailand n = 1.

^h Brazil n = 2, Canada n = 2, Chile n = 1, USA n = 18.

ⁱ Australia n = 5, New Zealand n = 1.

papers (case reports, short reports, editorials, surgical videos) and 52.2% for images, correspondence, and invited commentaries ($p < .001$). The latter more often had FLA ($p < .001$) (Table 2b).

There were also statistically significant differences in the type of articles submitted per continent ($p < .001$), with the highest proportion of original research or review articles being submitted by African (53.8%) or European (23.1%) countries. The highest acceptance rate was achieved by Europe (43.1%), followed by America (33.8%) and

Table 2. Geographical distribution of first and last authors and gender distribution according to article type of all papers submitted to EJVES Vascular Forum. C) Geographic distribution of article types of all papers submitted to EJVES Vascular Forum and acceptance rates.

(n=577)	Male n (%)	Female n (%)	p-value
<i>First author</i>			
Europe	219 (65.6%)	115 (34.4%)	<0.001
America	51 (75%)	17 (25%)	
Asia	127 (89.4%)	15 (10.6%)	
Australasia	14 (70%)	6 (30%)	
Africa	12 (92.3%)	1 (7.7%)	
<i>Last author</i>			
Europe	270 (80.8%)	64 (19.2%)	0.022
America	55 (80.9%)	13 (19.1%)	
Asia	125 (88%)	17 (12%)	
Australasia	19 (95%)	1 (5%)	
Africa	13 (100%)	0 (0%)	
<i>First author</i>			
Original research / Review	84 (19.9%)	37 (24.0%)	0.31
Case/short report, editorial, surgical video	262 (61.9%)	96 (62.3%)	
Image, correspondence, invited commentary	77 (18.2%)	21 (13.6%)	
<i>Last author</i>			
Original research / Review	103 (21.4%)	18 (18.9%)	<0.001
Case/short report, editorial, surgical video	312 (64.7%)	46 (48.4%)	
Image, correspondence, invited commentary	67 (13.9%)	31 (32.6%)	

Australasia (30%), with no African papers accepted in this period ($p < .001$) (Table 3).

Editorial staff and reviewers

Throughout 2020–2023, EJVES VF had one EiC (female), three associate editors (two male, one female), and 12 assistant editors (eight male, four female). The EiC and associate editors were all European; nine assistant editors were European and three American.

The EB includes the most active and experienced reviewers of the Journal. The 2020–2022 EB consisted of 14 men (93%) and one woman (7%), 11 Europeans, two Americans, one Asian and one Australian. The EB was renewed in 2023 and included 11 men (79%) and three women (21%): 11 Europeans and three Americans.

The number of active external reviewers increased slightly from 2020 to 2023, but the percentage of men and women did not change significantly, with 12.4–17% of female representation. Most of the reviewers were European, followed by Americans, with a small representation of the other continents (Table 4). The performance of male and female reviewers was similar overall, with comparable numbers of total, accepted, and declined invitations, but

Table 3. Geographic distribution of article types of all papers submitted to EJVES Vascular Forum and acceptance rates.

Continent (n=577)	Type of paper n (%)			Acceptance rate
	OR/R	SR	I/C/InvC	
Europe	77 (23.1%)	186 (55.7%)	71 (21.3%)	43.1%
America	12 (17.6%)	50 (73.5%)	6 (8.8%)	33.8%
Asia	23 (16.2%)	101 (71.1%)	18 (12.7%)	19.0%
Australasia	2 (10.0%)	15 (75.0%)	3 (15.0%)	30.0%
Africa	7 (53.8%)	6 (46.2%)	0 (0%)	0%
p-value	<0.001			<0.001

OR/R: original research/review; SR: case/short reports, editorial, surgical video; I/C/InvC: image, correspondence, invited commentary

faster average submission of the review reports by female reviewers compared with males in 2021 ($p < .022$) and 2022 ($p < .008$) (Table 5).

DISCUSSION

This study reported the gender and geographical differences among authors of all submitted and accepted papers in EJVES VF between 2020 – 2023. The FFAs accounted for 26.7% and 28.5% of submitted and accepted papers, and LFAs for 16.5% and 22%, respectively. Over 80% of submitted papers came from European and Asian countries, with anecdotal submissions and no accepted papers from African countries. There was a higher female presence within the EJVES VF staff, but female representation of external reviewers was still <20%, with similar performance indicators. The female proportion of reviewers included in the EB rose from 7% to 21%.

The overall proportion of FFAs was <40% in most studies, with an even lower proportion of FLAs of around 20%.^{9,12,16–18} In dermatology research, 50.2% of FFAs and 33.1% of LFA have been described.¹⁹ Nursing and obstetrics research are the only fields with a higher proportion of female authors.^{20,21} However, there has been progress^{10,16–19,22} in leading medical education journals, where the percentage of FFAs increased from 6.6% in 1970 to 53.7% in 2019, and LFAs increased from 9.5% to 46%, respectively ($p < .001$).¹⁰ In critical care literature, female authorship rose from 2008 to 2018 by an average annual increase of 0.44% and 0.51% for FFA and LFA, respectively.¹⁸ The annual growth rates in dermatology were 1.45% for first authorships and 2.97% for last authorships.¹⁹ In oncology, the proportion of FFAs and FLAs increased from 26.6% and 16.2% in 2002 to 32.9% and 27.5% in 2019, respectively.¹⁶ However, FFAs had higher odds

than men of publishing in lower impact journals (OR 1.30, 95% CI 1.16–1.45).¹⁸ In cardiovascular research, the increase in female first authorship mainly stemmed from publications in low impact journals, and this increase in first authorships did not translate to future last authorships a few years later for women.¹⁷ The senior author gender gap has remained large and stable, and it is unclear why this transition falters.

The same gap exists for ongoing research projects, where 70.6% of gastrointestinal projects in 2020–2022 were directed by a male principal investigator, in contrast to 29.4% female principal investigators, with no differences for clinical or preclinical research or for topic.⁹ In the US, the representation of female leaders in vascular clinical trials lags behind that of male leaders, but the percentage is improving and female vascular surgeon investigators start to lead clinical trials sooner after board certification compared with male investigators.⁷ Current European grants (e.g., Horizon) specifically require gender balance in the research team application, in an effort to overcome this gender gap. Women are less likely to submit papers or apply for research grants but have similar success rates.¹² This could reflect more careful preparation and targeting by women, or taking fewer risks.¹² The acceptance rate between papers with FFA and MFA was similar in EJVES VF, with higher acceptance rates for LFAs, related to the type of article.

Mastrorocco found an association between FFA and LFA. For both US and European based gastroenterology journals, an FFA was found in 51.4% of articles with an LFA but in 28.3% in articles with an MLA ($p < .001$).⁹ In Vranas's study, when the senior author was female, the odds of female co-authorship significantly increased (FFA adjusted OR 1.93, 95% CI 1.71–2.17; female middle author OR 1.48, 95% CI

Table 4. Gender and geographical distribution of external reviewers of the *European Journal of Vascular and Endovascular Surgery Vascular Forum* between 2020–2023.

Distribution	2020 (<i>n</i> = 113)	2021 (<i>n</i> = 125)	2022 (<i>n</i> = 121)	2023 (<i>n</i> = 153)	<i>p</i> value
Male	98 (86.7)	109 (87.2)	105 (86.8)	127 (83.0)	.53
Female	14 (12.4)	16 (12.8)	16 (13.2)	26 (17.0)	
<i>Continent</i>					
Europe	90 (79.6)	97 (77.6)	94 (77.7)	133 (86.9)	.30
America	13 (11.5)	12 (9.6)	14 (11.6)	10 (6.5)	
Asia	7 (6.2)	10 (8.0)	8 (6.6)	5 (3.3)	
Australasia	1 (0.9)	4 (3.2)	3 (2.5)	5 (3.3)	
Africa	2 (1.8)	2 (1.6)	2 (1.6)	0 (0)	

Data are shown as n (%).

1.29–1.69).¹⁸ The MFA–MLA combination was the most common in oncology publications, but over time decreased by 2.0%, and male–female and female–female pairs increased by 2.0% and 5.0%, respectively.¹⁶ Such an association was not found in this study, in which there was a similar proportion of FFA in papers with an LFA and MLA.

Women more often publish shorter pieces, and fewer editorials.^{9,16} Editorials are typically the expression of expert opinions, and can have a significant impact on readership and clinical practice, and male authors have twice the possibility of publication.¹⁶ Thomas analysed all medical invited commentaries published between 2013 – 2017 in English language medical journals and multidisciplinary journals: 26.6% of the authors were women and, after adjusting for field of expertise, publication output, citation impact, and years active, women had 21% lower odds of being invited to write a commentary. This gap was worse for senior authors: the OR increased with every decile increase in years active by a factor of 0.97, and the findings were consistent across most medical subdisciplines and the spectrum of citation impact.²³

The geographical differences found in this study have previously been reported, with female authorship being more likely in Europe, America, and the West Pacific.^{19,24} Mastroiocco described highest percentages of FFAs in several European countries (45.3–46.9%) and Brazil (56.3%), intermediate in Australia (31.2%) and the US (28.9%), and lowest in Japan (10.1%). Similarly, the highest proportion of LFA was in Belgium (41%), with intermediate figures for Australia (15.5%) and the US (19.4%), and lowest in India (5.3%) and Japan (6.9%). There were similar large geographical differences regarding ongoing research, with the highest proportion of female principal investigators registered in several European countries (46.7–66.7%) and lowest in Japan (11.1%) and Germany (10%).⁹ Román-Gálvez reported that studies published in high income countries were twice as likely to be signed by a woman, as first (OR 2.22, 95% CI 1.20–4.11) and corresponding author (OR 2.24, 95% CI 1.22–4.10), after adjusting for other factors like article type, and that the proportion of women as corresponding authors decreased as the journal impact factor increased ($\beta = 0.62$, 95% CI 0.37–1.05).²⁰ There are no doubt differences in culture and unequal access to clinical and academic careers for women in various countries. As shown in Fig. 1,¹ Japan and Korea had the lowest proportion of female physicians in 2021, and several European countries led the chart with 50–74%. A corresponding proportion of female authorship should be expected.

Bibliometric analyses suggest that women peer review less often than men and are under represented in EBs and main editorial positions in journals across the world.^{12,24} Less peer reviewing can trickle down to fewer invitations to write commentaries, lower publishing productivity, less exposure, less self and external perceived expertise, and fewer professional connections, further entrenching the disparities and inequity in a vicious circle. The gender ratio of reviewers should be at least similar to the gender ratio of authors, but it is consistently smaller and was <20% in

Table 5. Gender comparison of reviewers' performance indicators in 2020, 2021, 2022, and 2023.

Year	Male	Female	p value
2020	(n = 99)	(n = 14)	
Total invitations	5.10 (4.55)	5.14 (4.9)	.98
Agreed invitations	3.49 (4.47)	3.21 (3.38)	.83
Declined invitations	0.62 (1.37)	0.43 (0.85)	.61
Average days to respond	0.97 (1.65)	1 (1.11)	.95
Average days to complete the review	8.38 (9.43)	11.93 (9.9)	.19
Submitted late	0.43 (0.89)	0.79 (1.05)	.17
Average days late ^a	6.04 (8.60)	2.86 (7.15)	.19
2021	(n = 109)	(n = 16)	
Total invitations	5.37 (3.82)	4.19 (2.83)	.24
Agreed invitations	3.64 (3.21)	2.50 (1.90)	.17
Declined invitations	0.68 (1.40)	0.38 (0.89)	.40
Average days to respond	1.19 (1.54)	2.31 (1.99)	.010
Average days to complete the review	10.20 (10.32)	8.50 (9.01)	.003
Submitted late	0.63 (1.27)	0.75 (1.34)	.73
Average days late	6.30 (9.42)	0.56 (7.68)	.022
2022	(n = 105)	(n = 16)	
Total invitations	3.64 (2.94)	2.31 (1.01)	.078
Agreed invitations	2.31 (2.44)	1.19 (1.05)	.072
Declined invitations	0.49 (1.00)	0.38 (0.62)	.67
Average days to respond	0.96 (1.51)	0.94 (1.73)	.95
Average days to complete the review	8.87 (9.46)	12.44 (12.22)	.18
Submitted late	0.33 (0.96)	0.31 (0.48)	.93
Average days late	6.16 (8.49)	0.19 (6.74)	.008
2023	(n = 127)	(n = 26)	
Total invitations	3.02 (2.34)	2.62 (2.35)	.43
Agreed invitations	1.89 (2.21)	1.38 (2.21)	.29
Declined invitations	0.38 (0.64)	0.54 (0.71)	.26
Average days to respond	0.79 (1.18)	0.69 (1.35)	.72
Average days to complete the review	9.31 (10.8)	7.38 (9.84)	.40
Submitted late	0.37 (0.78)	0.19 (0.49)	.26
Average days late	3.26 (8.22)	2.12 (7.20)	.51

Data are shown as mean and standard deviation.

^a From allocated standard three week required deadline for review submission.

EJVES VF, which mirrored previous reports.¹² Women have been reported to show a higher decline rate when invited to review than men,¹² but that was not the case in EJVES VF. Two studies have highlighted that editors of both genders tend to choose reviewers of their own sex beyond the expected baseline levels, this tendency being stronger in men.^{12,22} Female editors have been reported to recommend female reviewers 22% of the time vs. 17% for male editors.¹² Similarly, Helmer reported that 73% of reviewers appointed by men were also men, and 33% of reviewers appointed by women were women.²² Reviewing history will open or close the door to an EB and later on to editorial positions within journal staff. In Jagsi's study, which analysed 16 prominent biomedical journals, 11.5% of the EB

members were female overall;¹³ this percentage rose from 1% in 1970 to 21% in 2005. In 2005, the mean percentage of women was 22% in the general medical journals, 25% in the clinical specialty medical journals, and 15% in the biomedical science journals. There were geographical differences, with 12% female EB members in 2000 in the US journals and 27.1% in the Canadian and British journals. Of note, journals having a female EiC were not statistically significantly more likely to have female EB members during their term than journals with a male EiC ($p = .45$).¹³ Regarding journal leadership positions, 7% of the EiC listed in Jagsi's study were female.¹³ There has never been a female EiC in the 37 year history of the *European Journal of Vascular and Endovascular Surgery* (EJVES) and only one in the 20 year history of EJVES Extra, EJVES Short Reports, and EJVES VF. Editorial and EB positions have an important influence on the operative decisions made by the Journal and on its educational policy, and can avoid or create publication bias, attention to certain topics, transparency, and access.

There is a lack of understanding why the gender gap persists. Some factors have been pointed out, mainly: fewer resources (e.g., administrative support, laboratory space) for women, higher burden of non-research tasks, the unequal burden of family care, as well as a shortage of female mentors and role models.^{2,9} The small representation of women in senior positions seems to be due to more than the pipeline phenomenon, where time should naturally correct the gap as females make up an increasing percentage of the medical community and progress from the bottom up. Both Nonnemaker's and Tesch's studies found that promotions in rank and academic career development appear to be more slowly achieved by women than would be expected.^{2,3} Even if the rate of advance was similar to that of men, it would take many years to overcome the chronic gap; therefore, despite the absolute increase in women in the academic field, the slower rate of advance only maintains the disparities in senior positions. Yet, the participation of women in senior positions can serve as role modelling for younger generations and help reduce the current and long lasting gender gap.

The main limitation of this study was the limited knowledge of the number and gender proportion of practicing and trainee vascular surgeons currently working in each country, which would help put the gap in scientific production and career development into perspective. Second, the time frame of this study was 2020–2023 and it was not possible to assess whether the SARS-COV2 pandemic affected male and female researchers differently, thus impacting their scientific production. Third, there were no corresponding data on the age of the authors, which could also have helped to explain the disparities. Similarly, there was no available data on race. Finally, the analysis was limited to the EJVES VF and does not represent overall vascular scientific publication. This study responded to the former EiC's commitment to assess processes and practices in the Journal and to address inequality and gender bias. The findings mirrored previous reports on the same topic. The additional systematic data on all submissions, and not only accepted

papers, broadened the perspective to look at diversity in scientific production overall before editorial decision.

Conclusion

The analysis of gender differences in authorship and editorial staff of EJVES VF found a significant gender gap in authorship, with under representation of FFAs and FLAs in both submitted and published papers, with important geographical differences. The number and percentage of female reviewers is increasing, and the available data invalidates any negative bias towards female reviewing performance.

Future strategies of the Journal aiming at enhancing equity and diversity should consider increasing female and non-European involvement in all editorial roles, promoting equal and transparent access to invited editorials and commentaries, and supporting research and education on equality, diversity, and inclusion in career development in vascular surgery.

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