

Gender Diversity at the Ophthalmology Podium: How close are we to achieving parity?

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Background

- The number of women ophthalmologists is increasing¹
- However, women are under-represented in research authorship, leadership roles, and surgical volumes²⁻⁴
- Women hold fewer speaking roles at US ophthalmic conferences compared to men⁵
- These gender gaps may have widened during the COVID-19 pandemic⁶

Purpose

We report the gender of presenters at global ophthalmology conferences to determine whether women are under-represented at the speaker podium.

Methods

Study design: retrospective observational study.

Inclusion criteria:

- An internet search identified the largest ophthalmology meetings between 2020 – 2021
- 9 geographic regions
- 8 subspecialties

Speaker gender was noted through review of pronouns, analysis of first name using a validated gender predictor tool, and/or review of photographs.

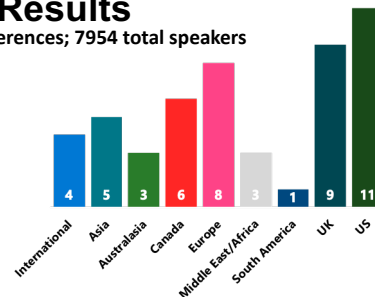
Statistics: Descriptive methods were used, including chi-square and T-tests.

Ethics: This study did not involve human subjects and was therefore exempt from REB review.

Results

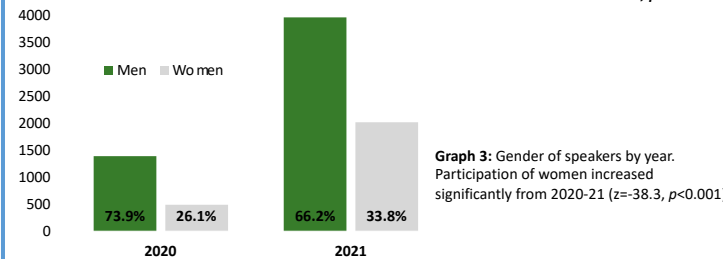
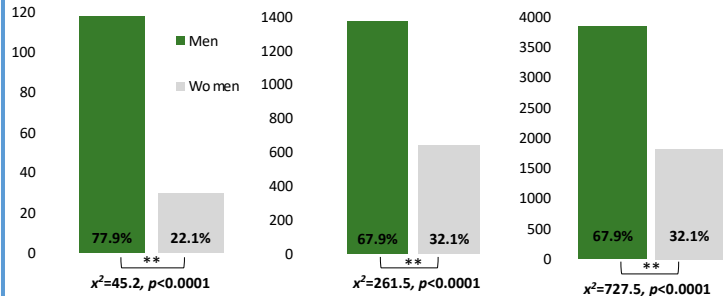
N = 50 conferences; 7954 total speakers

Specialty	No. (%)
General	6 (12)
Cataract/Refractive	5 (10)
Cornea	5 (10)
Glaucoma	10 (20)
Oculoplastic surgery	5 (10)
Neuro-ophthalmology	3 (6)
Pediatrics	5 (10)
Retina	11 (22)



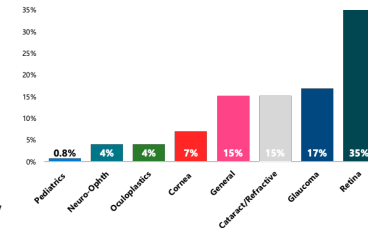
Number of conferences by specialty (Table 1, left) and by region (Graph 1, above)

Graph 2a: Keynote speakers by gender Graph 2b: Panel moderators by gender Graph 2c: Paper presenters by gender



Total number of conference sessions = 965
Total number of all-men sessions = 124
Total number of all-women sessions = 8

Graph 3 (right): Rate of all-men panels by specialty



Gender of speakers by specialty (Table 2a, top) and by region (Table 2b, bottom)

Specialty	No. men presenters (%)	No. women presenters (%)	x ² value; p-value
General	1453 (62.2)	883 (37.8)	139.1; <0.0001
Cataract/Refractive	1387 (74.5)	475 (25.5)	446.7; <0.0001
Cornea	274 (71.9)	107 (28.1)	73.2; <0.0001
Glaucoma	743 (69.3)	329 (30.7)	159.9; <0.0001
Neuro-ophth	135 (51.7)	126 (48.3)	0.3; <0.6
Oculoplastics	119 (58.9)	83 (41.1)	6.4; <0.05
Pediatrics	162 (52.9)	144 (47.1)	1.1; <0.4
Retina	1091 (74.7)	370 (25.3)	355.8; <0.0001

Region	No. men presenters (%)	No. women presenters (%)	x ² value; p-value
International	560 (62.4)	338 (36.1)	54.9; <0.0001
Asia	697 (72.6)	268 (27.2)	204.7; <0.0001
Australasia	108 (73)	39 (26.4)	32.4; <0.0001
Canada	391 (67.4)	189 (32.6)	70.4; <0.0001
Europe	707 (70.4)	285 (28.5)	177.5; <0.0001
Middle East/Africa	299 (88.5)	39 (11.5)	200; <0.0001
South America	69 (69)	31 (31)	14.4; <0.0001
UK	442 (70)	204 (30.9)	87.7; <0.0001
US	2074 (64.7)	1124 (35.1)	282.2; <0.0001

Conclusions

- This is the largest study of gender diversity at ophthalmology meetings, comprising nearly 8000 speakers across 50 global conferences
- Gender disparity persists worldwide. Women comprise less than 1/3rd of ophthalmic presenters. This gender gap is most pronounced in keynote roles
- Women speakers are under-represented in all regions and roles, and most subspecialties
- All-men panels remain common in surgical subspecialties
- Further research is needed to understand other dimensions of diversity in ophthalmology

References

1. Aguiwa UT et al. Analysis of Sex Diversity Trends Among Ophthalmology Match Applicants, Residents, and Clinical Faculty. *JAMA Ophthalmol.* 2021.
2. Kalavar M et al. Authorship Gender Composition in the Ophthalmology Literature from 2015 to 2019. *Ophthalmol.* 2021.
3. Feng PW et al. Gender Differences in Surgical Volume among Cataract Surgeons. *Ophthalmol.* 2021.
4. Azad AD. Representation of Women in Ophthalmology Subspecialty Societies over 20 Years. *Ophthalmol.* 2022.
5. Patel SH et al. Gender of Presenters at Ophthalmology Conferences. *AJO.* 2020.
6. Nguyen AX et al. Impact of COVID-19 on longitudinal ophthalmology authorship gender trends. *Graefes Arch Clin Exp Ophthalmol.* 2021.