Gender and geographic diversity of global oral health organisations

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Key points

Diversity of voices in global oral health organisations is essential to advance clinical innovations that address global oral health challenges.

While there is recent progress towards gender diversity, most leaders are from high-income countries.

The lack of leadership from non-high-income countries may lead to a focus on policies and practices to address challenges exclusive to high-income countries, not directly relevant elsewhere.

Abstract

Introduction Diversity of leadership of global oral health organisations is critical to ensure a global agenda.

Aim To analyse the gender and geographic diversity of global oral health organisations.

Methods Publicly available data on the gender of their staff and leadership, and congress locations, were analysed. Gender was allocated from photographs if available, and using Genderize, an online allocation platform. Location of leaders and global congresses were analysed by country, region and World Bank income category. The organisations analysed were the International Association of Dental Research (IADR), FDI World Dental Federation, International Federation of Dental Hygienists (IFDH) and 15 dental specialist global associations.

Results The majority of headquarter staff in the IADR (76%) and FDI (84%) are female. Gender diversity in the leadership differs across the various organisations, with recent progress towards gender parity. The IFDH was and is exclusively female-led. The majority of leaders are from high-income countries in Europe and North America. Of the 370 congress locations, 90% were held in high-income countries.

Conclusion There is recent progress towards gender diversity in the leadership; however, this leadership is essentially from high-income countries. There is an urgent need to publicly commit to diversity goals and implement strategies to reflect the oral health workforce and be truly diverse and global.

Introduction

An analysis of women leadership in global health shows that, in 2021, more than half of 138 global health organisations have not had a woman chief executive officer (CEO) or chair of the board.[1,2,3] Less than half (40%) of the 2,014 board seats are held by women – 9% by women from low- and middle-income countries and 1% by women from low-income countries. Only 12% of boards published gender targets, 6% geographic targets, and 3% had information on dedicated board seats. The 2023 Global Health 50/50 report again illustrated the significant under-representation of women across global organisations with some movement towards parity, which, at the current trend, will be achieved in 14 years.[4] Across 194 organisations in 2023, 60% of CEOs are men compared to 73% in 2020, and 65% of board chairs are men compared to 68% in 2020. While incoming leaders from low- and middle-income countries was higher than in previous years, in 2023, 66% of CEOs and board chairs were men, 73% from high-income countries and 83% educated in high-income countries. Global oral health organisations are not a part of this analysis. The Global Health 50/50 report also measures public commitment to gender equality, public definition of what gender means and published policy with measures to advance gender equality. Across 135 organisations, 13% had no public commitment to gender equality, 50% no definition of gender and 21% no published work policy to advance gender equality.

Equity, diversity and inclusivity in oral health have largely focused on leadership of academic institutions and research productivity. Oral health leadership generally reflects a dominance by men.[5,6,7,8] Academic leadership in particular is dominated by men, with women making up about one-third of dental researchers.[5,9] A significant majority of dental deans (or equivalent) are men: 76% in USA; 90% in UK; 100% in Japan; 97% in Germany; 56% in France; and 96% in Saudi Arabia. Further evidence from North America shows that women are under-represented across all oral health leadership, including professional associations, dental schools and dental journals.[6] The major global dental research organisation, the International Association for Dental Research (IADR), was established in 1921. All presidents for its first 60 years were men.[10] The first woman president was elected in 1981, and by 2019, 11 women presidents had been elected. A recent analysis of the diversity of Australian oral health organisations leadership showed that of the eight Australian Dental Association presidents (one federal and seven state branches), six are

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men (75%).[11] Of the six CEOs, five are men (83%). Women representation is much higher in the Australian Oral Health Therapy and Dental Hygienist Association.

This lack of gender equity and diversity is also reported for research grants and publications, for example, from 2007–2016, two-thirds of applicants and awardees for research project grants from the National Institute of Dental and Craniofacial Research or the National Institutes of Health were men.[12] An analysis of editorial teams across 124 dental journals showed that of 159 chief editors, 82% were men and 30% based in the USA.[13] Of the 1,265 other editors and 3,044 board members, two-thirds and half were from the USA, UK, Brazil and Japan, respectively. From 1996–2015, women led 20% of top-cited articles and were last authors on 16%.[14] Women as lead authors was trending up over this period, increasing from 15% (1996–2000) and 25% in 2015. The dental workforce, and especially the dentist and dental specialist workforce, is dominated by men, but this is changing. Over the last decade, women are increasingly pursuing careers in oral health.[5,15,16] Globally, women now make up more than 50% of oral health workforce.

Representation of the global workforce and population within oral health organisations is also of paramount significance as they serve as catalysts for progress, setting standards, promoting oral health and driving advancements in the field of dentistry. However, the composition of leadership within these organisations has not always reflected the diversity found within the profession and the populations they serve.

Enhancing and advancing leadership diversity within global oral health organisations is both a moral imperative and a strategic necessity. As the oral health profession becomes increasingly interconnected and globalised, diverse leadership is essential for driving innovation, addressing disparities and ensuring equitable access to oral health care. This paper aims to shed light on the current state of the gender and geographic diversity of global oral health organisations.

Table 1 Gender distribution of IADR and FDI headquarter staff

IADR https://www.iadr.org/about/leadership/iadr-ghq-staff		FDI https://www.fdiworlddental.org/the-team	
Chief executive officer	Male	Executive director	Male
Chief financial officer	Male	Communications and advocacy director	Female
Chief operating officer	Female	Digital communications and brand manager	Male
Senior accountant	Female	Campaign and social media manager	Female
Director of science policy	Female	Advocacy and policy manager	Female
Director of strategic programs	Female	Writer/editor and communications co-ordinator	Female
Director of membership and publications	Female	Congress and events director	Female
Director of government affairs	Male	Congress and education manager	Female
Director of meetings	Female	Congress and educations manager	Female
Assistant director, digital strategy and operations	Male	Education and public health director	Female
Awards, fellowships and grants co-ordinator	Female	Education and public health manager	Female (4)
Digital strategy co-ordinator	Female	Finance and administration director	Female
Meetings and exhibit co-ordinator	Female	Finance manager	Female
Component relations co-ordinator	Female	Governance and membership director	Female
LAR co-ordinator	Female	Membership and governance manager	Female
Accounting manager	Female	Partnerships and corporate relations manager	Male
Membership and marketing manager	Male		
Membership engagement manager	Female		
APR regional office	Male		
AMER, per regional offices	Female		
APR, AMER, per regional offices	Female		
Executive assistant to the CEO	Female		
Editorial assistant	Female (2)		
Receptionist	Female		
Total staff	25	Total staff	19
Males	6 (24%)	Male	3 (16%)
Female	19 (76%)	Female	16 (84%)

Methods

The gender and geographic diversity of the current headquarters and leadership teams of the IADR, FDI World Dental Federation and International Federation of Dental Hygienists (IFDH) were analysed from publicly available data on the organisations' respective websites (https://www.iadr.org/, https://www.fdiworlddental.org/ and https://ifdh.org/). The gender diversity of past presidents, current chief dental officers (CDOs) and senior leadership for 15 global dental specialist organisations (online Supplementary Table 1) was also analysed. Male or female only was allocated to each member of the staff and leadership teams from photographs and by using a gender allocation from Genderize, an online software (https://genderize.io/). First names of the team leaders were uploaded to the platform. The location of all leaders was analysed by country, region and income category. The World Bank categorises countries as high, upper-middle, lower-middle and low-income (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups).

The location of global congresses was analysed by country, region and income category, from publicly available data (FDI, IFDH, specialist organisations) or provided by the central office (IADR).

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All data are publicly available on the respective websites of the organisations, individual online profiles and annual reports and were collected during August to October 2023.

Results

Headquarters staff

Of the 48 IADR, FDI and IFDH staff, 37 (77%) are women. Table 1 presents the gender of staff employed at the headquarters of the IADR (in USA) and FDI (in Switzerland). Of the 25 IADR staff, 76% are women, and of the 19 FDI staff, 84% are women. The most senior positions (CEO/executive director) are held by men in both organisations.

The IFDH team is small (https://ifdh.org/about-ifdh/meet-the-team/). They have an executive director (male), membership, meetings and project co-ordinator (female), accountant (female) and E-marketing director (male).

Table 2 Gender and division distribution of IADR board of directors

Position	Gender	Division	Income category
President	Male	American	High
President-elect	Male	Japanese	High
Vice-president	Female	American	High
Immediate past president	Male	Irish	High
Treasurer	Male	American	High
Regional board members	2 female, 3 male	Saudi Arabian, American, British, Argentine, Japanese	High, high, high, upper-middle, high
Young investigator representatives (x 2)	Male and female	Continental Europe, American	High, high
Journal of Dental Research editor-in chief	Male	British	High
JDR Clinical & Translational Research editor-in chief	Female	Canadian	High
Chief executive director	Male	American	High

Table 3 Gender, regional and income category distribution of FDI council

Position	Gender	Country	Region	Income category
President	Male	USA	North America	High
President-elect	Male	Bulgaria	Europe	Upper-middle
Treasurer	Male	Korea	Asia	High
Member	Female	Egypt	Africa	Lower-middle
Member	Female	Colombia	South America	Upper-middle
Member	Female	USA	North America	High
Member	Male	Portugal	Europe	High
Member	Male	USA	North America	High
Member	Female	France	Europe	High
Member	Female	Turkey	Europe	Upper-middle
Member	Female	Poland	Europe	High
Member	Female	Mexico	Central America	Upper-middle
Member	Male	Japan	Asia	High
Speaker of the General Assembly	Female	UK	Europe	High
Non-voting member	Male	Switzerland	Europe	High

Leadership

IADR

- https://www.iadr.org/about/iadr-leadership.

The Board of Directors comprises 15 members with five (33%) female members. The president and president-elect are male and the vice-president female. Six (40%) of the directors are from the American division (Table 2). There are 123 members across 15 IADR committees (https://www.iadr.org/about/leadership/iadr-committee-officers), excluding joint committees with the American Association for Dental, Oral, and Craniofacial Research (AADOCR). Of the committee chairs, eight (53%) are women and six (40%) are from the American division. Of the 108 committee members, 45% are women. The important Distinguished Scientist Awards Committee is chaired by a man, with 41% of members women. Supplementary Table 2 details chairs and members of the IADR committees by division and shows that more than half are from four divisions: the American (29%), Australian/New Zealand (11%), Brazilian (8%) and British (7%) divisions.

FDI

- https://www.fdiworlddental.org/council.

Of the 15 members on the Council, eight (53%) are women. The president, president-elect and treasurer are all men. Most (67%) are from high-income countries in Europe (47%) and USA (20%) (Table 3). Standing committee leadership by country, region and income category is detailed in online Supplementary Table 3. Of the 50 standing committee members across five committees (https://www.fdiworlddental.org/standing-committees), 42% are from Europe, 26% from Asia and 14% from North America. Three of the five committee chairs are men.

IFDH

- https://ifdh.org/about-ifdh/officers/.

The board of directors is exclusively female, with a president (Canada), president-elect (USA), vice-president (Sweden), treasurer (Ireland) and secretary (Israel). All 12 of the IFDH committee chairs and co-chairs are women. Committee members are located in Canada (4), the Netherlands (2), Korea (2) and one each from Ireland, Germany, the USA and the UK, all high-income countries.

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Past presidents

IADR

- https://www.iadr.org/about/leadership/iadr-presidents.

Of the 100 past presidents (1921–2023), 11 were women, with the first female president elected in 1981. Since then, of the 41 past presidents, nine (22%) were women. From 2018–2023, three of the five past presidents were women. The division of past presidents is not indicated on the website. A manual check of the recent 22 past presidents (post-2000) showed that they were based in eight countries, most from the USA (n = 8; 36%), followed by the UK (n = 4; 18%), Ireland (n = 3; 14%), two each from Japan and Australia, and one each from Netherlands, Brazil and Finland. All except Brazil are high-income countries.

FDI

- https://www.fdiworlddental.org/past-presidents.

Of the 47 FDI past presidents (1901–2023), six (13%) were women. From 1901–1952, all 11 past presidents were men; from then to 1999, two (8%) of 25 were women; and in the twenty-first century, of the 11 past presidents, three (30%) were women. Almost all (89%) were from high-income countries. More than half (n = 27; 57%) of past presidents were from Europe, ten (21%) from North America, five (11%) from Asia and two (4%) each from Oceania and South America, and one (most recent) from Africa. Almost one-fifth (19%) were from the USA and 17% from France (online Supplementary Table 4).

IFDH

- https://ifdh.org/about-ifdh/officers/.

All 12 past presidents of the IFDH were women. Of the 12, four (33%) were from the USA, three (25%) from the Netherlands, and one each from Canada, Norway, Sweden, Australia and New Zealand.

Leadership of global dental specialist organisations

Of the 16 presidents (across 15 organisations), five (31%) are female. Of the seven president-elects, one is female. Of the eight vice-presidents (potentially president-elects), one is female. Of the 12 immediate past presidents, five (42%) are female. Of the 12 treasurers, one is female and of 12 secretaries, half are female.

Table 4 Gender distribution of chief dental officers by region

Region	Number of CDOs	Male	Female
Africa	48	54%	46%
Asia	26	62%	38%
Europe	42	52%	48%
North and Central America	25	52%	48%
Oceania	6	33%	67%
South America	11	64%	36%

Table 5 Location of global congresses by region

Region	FDI (n = 109) 1901–2023	IADR (n = 99)* 1922–2023	IFDH (n = 13) 1986–2023	Specialist associations (n = 149) 1967–2023	Overall (n = 370) 1901–2023
Africa	0	1 (1%)	1 (8%)	6 (4%)	8 (2%)
Asia	12 (11%)	3 (3%)	1 (8%)	31 (21%)	47 (13%)
Central America	3 (3%)	1 (1%)	0	5 (3%)	9 (2%)
Europe	71 (65%)	9 (9%)	7 (54%)	56 (38%)	143 (39%)
Middle East	2 (2%)	0	0	4 (3%)	6 (2%)
North America	13 (12%)	81 (81%)	2 (15%)	30 (20%)	126 (34%)
Oceania	4 (4%)	2 (2%)	2 (15%)	6–4%)	14 (4%)
South America	4 (4%)	2 (2%)	0	11 (7%)	17 (5%)

Key:
* = Two virtual general sessions not included here

Online Supplementary Table 5 lists the location of the senior leadership (presidents, president-elects, vice-presidents and immediate past presidents) and shows that of the 43 leadership positions, 40% are located in Europe.

Global chief dental officers

- https://www.fdiworlddental.org/section-chief-dental-officersdental-public-health.

The executive board of the chief dental officers/dental public health section comprises a chair (male, Canada), secretary (male, Bahamas) and three members (two female, UK and Senegal; and male, Singapore). Of the 159 global CDOs, 54% are male. By region, this differs slightly, with less than 40% of CDOs being female in South America and Asia (Table 4).

Congress locations

Of the 370 global congresses (or similar global events), spanning from 1901–2023, almost three-quarters have been held in Europe (39%) and North America (34%). Of the 221 FDI, IADR and IFDH congresses, 183 (82%) were held in North America (43%) and Europe (39%) (Table 5). Only 38 congresses have been held outside these continents with almost half (42%) located in Asia. The first IADR congress outside North America was held in the UK in 1975. Since 1975, there have been 49 congresses, held in North America (59%), Europe (18%) and the rest across Africa (1), Asia (3), Central America (1), Oceania (2) and South America (2). Prior to 1975, 86% of FDI meetings were held in Europe. Of the 47 FDI meetings since 1975, 38% have been held in Europe and one-quarter (26%) in Asia. Of the 13 IFDH symposia, seven (54%) were held in Europe. Of the 149 specialist association congresses, 38% have been held in Europe, 21% in Asia and 20% in North America (Table 5).

Online Supplementary Table 6 details congress locations by organisation, country and income category. Of the IADR congresses, 95 of the 99 have been held in high-income countries. Of the 109 FDI congresses, 91 have been held in high-income countries. All but

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one of the 13 IFDH symposia have been held in high-income countries. Of the specialist association congresses, 80% have been held in high-income countries.

Discussion

The analysis generally shows positive findings on gender diversity of the headquarter and leadership teams when compared to the history of the global oral health organisations. Headquarter staff are predominantly women but the senior roles are held by men, suggesting that there may be a ceiling for women to progress to these senior roles. Leadership was exclusively male in the early decades of both the IADR and FDI. The IFDH is a relatively young organisation and the leadership reflects the gendered nature of the oral health profession, oral health/dental therapists and dental hygienists being female. This is now changing, with fairly equal numbers of graduating dentists across the genders and increasing numbers of male therapists and hygienists. Global dental specialist organisations are still male-dominated, which may be reflection of the workforce. Global CDOs are close to 50/50 gender parity overall, but in some regions, women remain under-represented. Addressing gender diversity in our global oral health organisations is important to ensure the leadership reflects the changing oral health workforce and global society. The Global Health 50/50 project measures the following: public commitment to gender equality; public definition of gender; workplace gender equality policy; workplace diversity and inclusion policy; board diversity and inclusion policy; gender distribution in senior management and on the board; demographic characteristics of the CEO and board chair; and programmatic data disaggregated by sex.[4] It is important that all global oral health organisations make a public commitment on equity, diversity and inclusivity of their leadership. This needs to go further than gender, and include equity on ethnicity, age, socioeconomic status and geographic representation.

On global representation, the leadership of all the organisations analysed here are essentially based in high-income countries, and mainly from Europe and North America. While there are some leaders based in upper-middle and lower-middle income countries, this is fairly limited. Almost no leaders are based in low-income countries. This significant skew of the leadership to high-income countries needs to be urgently addressed, again to reflect the global workforce and population. Not having a global leadership means challenges faced by oral health colleagues and systems in low- and middle-income countries struggle to be on the agenda and priorities of the organisations. These organisations cannot be considered truly global if leaders are essentially based in Europe and North America.

This bias towards high-income countries is further reflected in the location of global congresses; again, almost all of these are held in high-income countries, mainly in Europe and North America. The percentage (<20%) of congresses held outside these regions is negligible; positively, most of these were held in Asia where the majority of world's population lives. Upcoming IADR congresses will be in the USA (2024) and Spain (2025). The next FDI congress will be in Turkey (2024) and future IFDH symposia in Italy (2026) and the United Arab Emirates (2028). Having congresses in high-income countries means that many practitioners, academics and researchers from lower-middle and low-income countries would struggle to afford to attend them. This is not just about costs of travel, accommodation and daily expenses. Registration and membership fees as a percentage of income are very different across the world, appreciating that some fees are lower for low-income countries. An example is the 2023 FDI congress in Sydney, Australia. A crude estimate for an international delegate to attend this meeting is about $5,000. This amount will be a few weeks of income in a high-income country and many months in a low-income one. High-income countries offer the safety and security delegates require to attend, but the cost of attending is often out of the reach of many across the world. The safety and attractiveness of the congress location needs to be balanced with the costs when choosing locations by the leadership. With little to no presence of leadership from outside high-income countries, considering locations unfamiliar to the leadership will be unlikely. The gender income gap also means many women generally, and in particular, women of colour, would struggle to afford the costs of membership and participating in the activities of global oral health organisations to ensure a diverse global leadership.

This paper does not detail strategies for organisations to achieve equity, diversity and inclusivity in their respective leaderships. There are numerous resources that recommend strategies, including publications in the oral health space.[2,5,6,12,13,17,18] The global headquarter of the IADR is co-located with the AADOCR. The Diversity and Inclusion Statement of the AADOCR, adopted in 2022, is available here: https://www.aadocr.org/about/news-reports/dei/diversity-inclusion-statement. The AADOCR has a committee on diversity and inclusion (https://www.aadocr.org/membership/communities/aadocr-committee-officers) and a number of initiatives to address diversity. In a personal communication from the IADR CEO: 'The Association is committed to increasing diversity and inclusion within the organisation and the broader dental, oral and craniofacial research workforce. The organisation is "an equal opportunity employer and does not tolerate discrimination in any form with respect to hiring, the terms and conditions of your employment, or any other aspect of the employer/employee relationship". The IADR Board acknowledges the critical role of appreciating the diversity of race, ethnicity, gender identity, sexual orientation, ability, culture, religion, national origin, and the other characteristics that make us human. Further, the Board affirms that inclusivity of diverse perspectives strengthens our ability to study and develop solutions for a diverse society. The IADR Women in Science Network aims to serve the need for promoting the interests of women, communication, research collaboration and career mentoring among – but not restricted to – female members' (https://www.iadr.org/membership/communities/groups-networks/women-science-network).

This analysis used mainly publicly available data and is accurate at the time information was accessed. Gender was only categorised as male and female as it was not possible to identify persons as non-binary and gender nonconforming. The consideration of gender as a binary factor belies considerable further debate in terms of diversity within gender. Also, other equity indicators such as ethnicity, race and age were not analysed. These all need further investigation to ensure true diversity of leadership across all equity indicators and within these indicators. For example, the women in leadership, who are they? Female IADR presidents are almost exclusively white

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and from high-income countries in the Global North. There are few leaders of these global oral health organisations who are women of colour or from the Global South. The largest division of the IADR is the American one. Of the 51 past presidents, nine (18%) were women and almost all are white. True diversity is lacking in the division which has publicly made a commitment to increasing diversity and inclusivity. The analysis of global representation is fairly comprehensive in that the locations of the leadership and congresses, by country, regions and income category were included in the analysis.

Conclusion

Equity, diversity and inclusivity of global oral health organisations encompasses various dimensions, including but not limited to gender, ethnicity, age, socioeconomic background and geographic representation. The acknowledgement of these multifaceted identities and experiences is crucial in fostering inclusive leadership that can effectively address the complex challenges facing the oral health profession and community on a global scale. This analysis has not assessed the interaction of social identities that shape life opportunities, for example gender, sexual orientation, socioeconomic status (class), race, ethnicity, geographic locations and language.[19] These all work together to either provide or deny life opportunities, including leadership roles in global organisations. Data from the UK and USA show that numbers of female dentists have increased significantly; this growth is however mainly among white and Asian women.[20] While this analysis is focused on gender and geographic location, it is critical that organisations adopt an intersectionality lens when reflecting on their global membership and leadership.

Ethics declaration

The author declares no conflicts of interest.

Ethics approval was not required as data reported in this study are publicly available at the respective organisations' websites or personal profiles of the leadership team members.

Data availability

Most data analysed are publicly available, though some data were made available by organisations when not easily available (eg web links and reports).

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References

1. Global Health 50/50. Boards for all? A review of power, policy and people on the boards of organisations active in global health. 2022. Available at https://globalhealth5050.org/wp-content/themes/global-health/reports/2022/media/Boards%20for%20All_Global%20Health%2050_50%20Report_OnlineMarch2022.pdf (accessed February 2024).
2. Smith S G, Sinkford J C. Gender equality in the 21st century: Overcoming barriers to women's leadership in global health. *J Dent Educ* 2022; **86:** 1144–1173.
3. Allotey P, Reidpath D D. Improving diversity in global health governing boards. *Lancet* 2022; **399:** 1673–1675.
4. Global Health 50/50. Workplaces: worse for women. 2023. Available at https://globalhealth5050.org/wp-content/themes/global-health/reports/2023/media/Global%20Health%205050%202023%20Report%20-%20Workplaces%20Worse%20for%20Women%20-%2012%20July%202023.pdf (accessed February 2024).
5. Tiwari T, Randall C L, Cohen L *et al.* Gender Inequalities in the Dental Workforce: Global Perspectives. *Adv Dent Res* 2019; **30:** 60–68.
6. Li J, de Souza R, Esfandiari S, Feine J. Have Women Broken the Glass Ceiling in North American Dental Leadership? *Adv Dent Res* 2019; **30:** 78–84.
7. Weinstein G J, Haden N K, Stewart D C, Pyle M A, Albino A W, West K P. A profile of dental school deans, 2021. *J Dent Educ* 2022; **86:** 1304–1316.
8. Bompolaki D, Pokala S V, Koka S. Gender diversity and senior leadership in academic dentistry: Female representation at the dean position in the United States. *J Dent Educ* 2022; **86:** 401–405.
9. Gangwani P, Kolokythas A. Gender Gap in Leadership in Academic Medicine and Dentistry: What Are the Barriers? What Can Be Done To Correct It? *J Oral Maxillofac Surg* 2019; **77:** 1536–1540.
10. Shaddox L, Letra A. Then and Now-A Look Inside the Lives of 11 Women Presidents of the IADR. *Adv Dent Res* 2019; **30:** 95–118.
11. Lalloo R. Gender diversity of the oral health leadership in Australia. *Aust Dent J* 2023; **68:** 197–201.
12. Garcia M N, Tiano J P, Contreras O, Hildebolt C F, Horsford J, Stewart D. Trends in Academic Dentistry and Oral Health Research Funding by Gender. *JDR Clin Trans Res* 2020; **5:** 176–184.
13. Lalloo R. 'You can't be what you can't see': equity, diversity and inclusivity of editorial teams of dental journals. *Br Dent J* 2022; DOI: 10.1038/s41415-022-5078-9.
14. Haag D G, Schuch H S, Nath S *et al.* Gender inequities in dental research publications: Findings from 20 years. *Community Dent Oral Epidemiol* 2023; **51:** 1045–1055.
15. Gallagher J E, Scambler S. Reaching A Female Majority: A Silent Transition for Dentistry in the United Kingdom. *Prim Dent J* 2021; **10:** 41–46.
16. Hernández-Ruiz R E, Rosel-Gallardo E M, Cifuentes-Jiménez C, González-López S, Bolaños-Carmona M V. Gender and Leadership Positions in Spanish Dentistry. *Inquiry* 2022; DOI: 10.1177/00469580221109970.
17. D'Silva N J, Herren S S, Mina M, Bellile E. Women Recipients of IADR Distinguished Scientist Awards. *Adv Dent Res* 2019; **30:** 85–94.
18. Cain L, Brady M, Inglehart M R, Istrate E C. Faculty diversity, equity, and inclusion in academic dentistry: Revisiting the past and analysing the present to create the future. *J Dent Educ* 2022; **86:** 1198–1209.
19. Elaine Muirhead V, Milner A, Freeman R, Doughty J, Macdonald M E. What is intersectionality and why is it important in oral health research? *Community Dent Oral Epidemiol* 2020; **48:** 464–470.
20. Fleming E, Neville P, Muirhead V E. Are there more women in the dentist workforce? Using an intersectionality lens to explore the feminization of the dentist workforce in the UK and US. *Community Dent Oral Epidemiol* 2023; **51:** 365–372.

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