

Velázquez-Cayón, Rocío Trinidad; Balbuena, Pilar Martín

Article

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Review

Women in Dentistry: From Historical Milestones to Leadership in the Sustainable Development Goals of the 2030 Agenda

Rocío Trinidad Velázquez-Cayón *  and Pilar Martín Balbuena 

Centro Universitario San Isidoro, Pablo de Olavide University, 41092 Sevilla, Spain;
pilarmartinbalbuena@centrosanisidoro.es

* Correspondence: rvelazquez@centrosanisidoro.es

Abstract: This review offers a historical overview of the role of women in the modern dental profession, tracing their journey from the earliest pioneers to the present day and highlighting their significant achievements. The second main section presents a narrative analysis of the current situation, focusing on the main challenges faced by female dentists in advancing their careers in clinical practice, academia, and leadership roles. Finally, the discussion connects these issues with the Sustainable Development Goals (SDGs) of the 2030 Agenda and explores support models for women's empowerment in the health sciences, with a particular emphasis on dentistry.

Keywords: gender equity; leadership; dentists; dentistry

1. Historical Evolution of Women in Dentistry

Dentistry has undergone significant evolution over time, reshaping its structure and core components. Historically, the field of dentistry has traditionally been male-dominated; however, the gradual inclusion of women has started to reshape the future of the profession as female practitioners increasingly take on visible and influential roles (Bifulco et al., 2016; Seale & Waggoner, 1992). Today, a renewed professional landscape is emerging in which women have established a solid presence in both clinical and academic settings. Nonetheless, representation in leadership and executive positions remains limited (Russell et al., 2025).

Women's involvement in dentistry dates back to antiquity, reflecting a longstanding, though often overlooked, trajectory. Notably, during the Middle Ages, the Salerno Medical School played a pivotal role in the dissemination of knowledge related to oral hygiene and dental treatments, laying the groundwork for future practices (Bifulco et al., 2016; Seale & Waggoner, 1992). With the rise of universities and the formalization of scientific knowledge, women's presence in academic spaces became increasingly marginalized due to the dominance of androcentric frameworks, which hindered recognition of their contributions. Nonetheless, several pioneering historical figures succeeded in making their mark over time (Table 1). These women defied prohibitions and navigated the constraints of a traditionally exclusionary system, ultimately setting important precedents for future generations (Domínguez Bello, 2014; Quintão et al., 2021).

The path of women in dentistry is a powerful testament to resilience. Trótula di Ruggiero is recognized for her contributions at the Salerno Medical School during the Middle Ages (Bifulco et al., 2016), where she transmitted essential knowledge regarding oral hygiene and dental treatments, although her role has been historically underestimated (Quintão et al., 2021). Hildegard von Bingen was a multifaceted 12th-century figure, known as a



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Benedictine abbess, mystic, composer, writer, and healer. She addressed oral hygiene in her medical treatise *Causae et Curae* (*The Causes and Cures*) (Quintão et al., 2021). In the 18th century, Madame de Rezé emerged as a notable contributor to the field. In 1719, she published *Dissertation Apologetique*, discussing the use of elixirs to relieve dental pain. This work is considered one of the earliest known dental contributions by a woman, notable during a time when female participation in medical sciences was highly restricted (Hyson, 2002). In 1740, Marie Madeleine Calais became the first woman officially licensed to practice dentistry in France. However, it was not until 1866 that Lucy Hobbs Taylor (also known as Lucy Beaman Hobbs), after overcoming numerous rejections, became the first woman in history to graduate from a dental college in the United States (Hyson, 2002; Taylor, 1894). Her achievement marked a turning point in the professionalization of women in dentistry (Hyson, 2002; Prasanna et al., 2015).

Pioneers such as Emeline Roberts Jones, Henriette Hirschfeld Pagelsen, Nellie E. Pooler Chapman, Annie D. Ramburger, Emilie Foeking, M. Evangeline Jordon, and Ida Gray Rollins, among others, paved the way across various countries, establishing practices and leaving a legacy that has inspired future generations (Domínguez Bello, 2014; Loevy, 1991). Emeline Roberts Jones overcame adversity by opening her own dental practice, demonstrating the viability of a successful career in dentistry despite the economic and social constraints of her time in the United States (Hyson, 2002; Roberts et al., 1997; Seale & Waggoner, 1992).

In Europe, Lilian Lindsay stood out in the United Kingdom, becoming the first woman to earn a formal degree in dentistry in 1895. She later held leadership positions in major dental associations, laying the groundwork for female leadership in the profession. Concurrently, Ida Gray Nelson Rollins broke both gender and racial barriers, becoming a leading figure in American dentistry (Hyson, 2002). In Spain, figures such as María Rajoó (considered the country's first female dentist) and Polonia Sanz y Ferrer (one of the first women to receive an official license to practice dentistry) stood out, despite facing resistance from male colleagues (Hyson, 2002; Quintão et al., 2021).

Despite opposition, these pioneering women laid the foundation for future generations. They proved that talent and dedication in dentistry are not defined by gender. Their efforts not only opened new paths in the profession but also served as a model for integrating women into professional and academic institutions. Until the 1970s, women represented only about 3% of the profession. However, female participation accelerated in the latter half of the 20th century (particularly during the 1970s and 1980s), spurred by social movements advocating for gender equality and the emergence of dedicated organizations that strengthened professional training and support networks. Organizations such as the Women's Dental Association, founded in 1892, played a vital role in advancing the presence of women in the profession and facilitating recognition of their contributions (Prasanna et al., 2015). These and many other trailblazing women have left an indelible mark on dentistry, proving that with determination and perseverance, anything is possible (Domínguez Bello, 2014; Hyson, 2002). Their contributions, documented in specialized literature (Table 1), underscore the essential role women have played in the global transformation and modernization of dentistry (Domínguez Bello, 2014; Prasanna et al., 2015; Quintão et al., 2021).

Table 1. Women pioneers in the field of dentistry.

Name (Year)	Context	Career	Recognition/Impact
Lucy Beaman Hobbs Taylor (1866)	First woman to graduate from a recognized dental school.	Graduated from the Ohio College of Dental Surgery, and was admitted to the Iowa State Dental Society.	Inspired by the inclusion of women in professional institutions; the AAWD (American Association of Women Dentists) created an award in her honor.
Henriette Hirschfeld Pagelsen (1869)	First woman to graduate from the Pennsylvania College of Dental Surgery.	Traveled from Germany to the U.S. to study; faced opposition but established a successful practice in Berlin, treating royalty.	First woman to practice dentistry with formal credentials in Germany; a role model for future generations.
Nellie E. Pooler Chapman (1870s)	First woman to practice dentistry in California.	Learned from her husband and continued the practice while he was away.	Inspired other women in California to enter the field of dentistry.
Annie D. Ramburger (1874)	First American woman to graduate from the Pennsylvania College of Dental Surgery.	Primarily treated women and children.	Overcame prejudice and gained recognition as a qualified dentist.
Emilie Foeking (1873)	First woman to earn a dental degree in Baltimore.	Was admitted to Baltimore after being rejected in Pennsylvania; her thesis defended the role of women in dentistry; returned to Prussia to practice.	Pioneer in opening opportunities for women in European dentistry. Her thesis, "Is Woman Adapted to the Dental Profession?", was published in the American Journal of Dental Sciences.
Lilian Lindsay (1895)	First woman to obtain a formal degree in Dentistry in the UK.	Accepted at the hospital and the Edinburgh Dental School.	Leadership of prominent professional associations.
Evangeline Jordon (1898)	First pediatric dentist in the U.S.	Worked as a dental assistant (specialized in children). Set standards in pediatric dentistry.	Highlighted the importance of children's dental care in private practices; considered the founder of Pediatric Dentistry.
Ida Gray Rollins (1890)	First African American woman to earn a dental degree.	Worked at Dr. Jonathan Taft's clinic, the first dean of the University of Michigan School of Dentistry.	Made significant contributions to the African American community and helped establish the National Association of Colored Women (U.S.).
María Rajoó (1800)	The first female dentist in Spain.	She practiced dentistry in Madrid between 1800 and 1830.	Her professional work set an important precedent for future generations of women in the field.
Polonia Sanz y Ferrer (1849)	One of the first women in Spain to obtain an official license to practice dentistry.	Granted by the Academy of Medicine and Surgery of Valencia to perform procedures such as tooth cleaning and extractions.	Served as court dentist to the Moroccan prince Muley el Abbas during the war with Spain. <i>Treatise on Teeth</i> , 1852.

2. Current Perspectives on Women in Dentistry

The global evolution of the role of women in dentistry is clearly evident today. A growing body of research has highlighted the rising enrollment of women in dental education, which has helped shape the profession's current evolution (Chmar et al., 2007; Cohen, 1996). Surveys conducted among women dentists across 81 countries, involving 189 member associations of the Women Dentists Worldwide section of the FDI World Dental Federation, demonstrate significant progress in female participation in dentistry on a global scale. Women now represent a substantial proportion of the dental workforce in both developed and developing countries. Nevertheless, disparities remain in terms of leadership roles and professional recognition. Women currently comprise between 48% and 75% of dentists worldwide. However, their representation in leadership positions remains limited, with only 3.9% holding executive roles and just 10% serving on the boards of academic institutions and professional associations (Campus et al., 2024).

2.1. Career Choices and Working Conditions

Historically, female dentists have experienced career interruptions due to family responsibilities. In research from the late 20th and early 21st centuries (del Aguila et al., 2005; van Dam & van Rossum, 1998)—research by Atchison et al. (2002), Baldwin et al. (1998), Barr et al. (1992), Blasius and Pae (2005), and Stokes et al. (1992)—findings increasingly suggest that, in the early stages of their careers, many women opted for work arrangements that allowed a better work–life balance, most notably, a preference for part-time practices and flexible roles. These decisions often resulted in extended career breaks. Female dentists were found to occupy lower positions in public healthcare hierarchies (Hjalmer, 2006) and were less likely to be owners or partners in private practices (McKay & Quiñonez, 2012). Many chose to practice as general dentists and, when specializing, tended to pursue pediatric dentistry or orthodontics (Newton et al., 2000a, 2000b, 2001). In 2001, Newton et al. (2001) reported that 61% of female dentists had interrupted their careers, compared to 27% of their male counterparts, with significantly longer interruption periods among women. With the growing number of women entering the profession, and despite evidence that access to dental care is not affected by the provider's gender (McCarthy & MacDonald, 1996), the rise of female practitioners has encouraged more child-centered care and promoted empathetic, collaborative models of treatment. These trends have contributed to enhanced quality in dental services (Stokes et al., 1992; Waldman, 1989, 1992). Nevertheless, implementing flexible work arrangements has required strategic reorganization to maintain the continuity and efficiency of care, given that reduced working days may lower the total number of patients treated, thereby demanding human resource planning adjustments (Newton et al., 2001; Waldman & Bruder, 2009; Brown & Lazar, 1998; Murphy et al., 2006).

Campus et al. (2024) show that women dentists in the public sector feel more secure returning to work after maternity leave (82.8%) than those in the private sector (51.6%). Currently, the trend toward private practice remains strong. According to Campus et al., over 57% of female dentists work as self-employed professionals, primarily in solo (29.7%) or group practices (28.8%). Most work between 31 and 40 h per week. However, Russell et al. (2025) found a persistent gap in opportunity that continues to negatively impact their career progression.

In the 2025 survey by Sangalli et al. of dentists in the United States, both men and women reported similar challenges in their work–life balance (62.8%) and stress (59.6%). However, women reported receiving less financial, administrative, and mentorship support, and felt less encouraged to pursue leadership roles. They also reported more frequent

career breaks and significantly higher rates of harassment and bullying (41.3% vs. 22.6%), microaggressions (55.6% vs. 33.9%), and gender bias (46.9% vs. 14.5%).

Meanwhile, [Heaton et al. \(2023\)](#) found that 13% of participants of their study reported multiple lifetime experiences of unfair treatment based on race. These experiences were associated with a 72% increase in the prevalence of high dental anxiety, contributing to the delay or avoidance of dental care and deepening oral health disparities among both dentists and patients of color. Similarly, [Lopes-Silva et al. \(2024\)](#), in a multicenter study conducted across four Brazilian states, reported that 45% of dental students from ethnic minority backgrounds experienced explicit discrimination in academic and clinical environments. This discrimination was linked to increased anxiety, withdrawal from essential training experiences, and diminished leadership opportunities within the profession.

It is essential to examine how structural and cultural dynamics continue to shape women's professional experiences within dentistry. The role of women in dentistry across African contexts is marked by both progress and persistent challenges. In South Africa, the number of female dentists has nearly doubled between 2002 and 2015, reflecting efforts to diversify the profession and increase access to dental education among historically marginalized groups ([Bhayat & Chikte, 2018](#)). However, despite this demographic shift, women remain underrepresented in leadership and specialist roles. In Kenya, qualitative research reveals that gendered social expectations (particularly related to childbearing and domestic responsibilities) continue to constrain women's career advancement in health leadership, including dental sectors ([Muraya et al., 2019](#)). These barriers are compounded by perceptions of female leaders as more emotional or reactive, which may further hinder their selection for managerial roles.

2.2. Academic and Research Aspects

The UN Educational, Scientific, and Cultural Organization's Women in Science data show that less than 30% of the world's researchers are women ([UN Educational, n.d.](#)). Since the beginning of the 21st century, there has been a growing trend in women's access to dental education. However, their access to leadership positions in universities and other institutions remains restricted due to various sociocultural factors ([Whelton & Wardman, 2015](#); [Hernández-Ruiz et al., 2022](#)).

In academia, a gradual increase in female authorship has been observed, yet the transition to leadership roles remains slow. Studies by [Solomon and Hayes \(1995\)](#), [Yuan et al. \(2010\)](#), and [Kongkiatkamon et al. \(2010\)](#) confirmed a growing female presence in authorship; however, representation in senior positions remains low. [Gottlieb et al. \(2024\)](#) report that female authorship has increased by 1.2% annually, reaching 47% in 2022, with women surpassing 50% as first authors since 2016. Nonetheless, female presence in leadership roles and senior authorship continues to lag behind ([Russell et al., 2025](#)).

As of 2022, women account for 47% of scientific publications in dental research, while their representation on editorial boards stands at 41%. This gap is linked to challenges in balancing family responsibilities and a lack of robust mentorship networks ([Gangwani et al., 2024](#); [Russell et al., 2025](#)). Moreover, female dental researchers and academics face significantly greater obstacles in career development and workplace environments compared to their male counterparts ([Sangalli et al., 2025](#)). Recent research indicates that although women frequently appear as first authors in scientific publications, their representation in senior authorship roles and leadership of high-impact projects remains low, highlighting structural barriers to career advancement in research ([Gottlieb et al., 2024](#)).

Schumacher et al. conducted in 2021 an observational study analyzing articles published in three leading orthodontic journals: *The European Journal of Orthodontics* (EJO), *The American Journal of Orthodontics and Dentofacial Orthopedics* (AJODO), and *The Angle*

Orthodontist (ANGLE), including 2539 articles. Their findings revealed that a gender gap persists in orthodontic publications (Schumacher et al., 2021). This is a noteworthy observation, particularly considering that orthodontics is the specialty most commonly pursued by women who choose not to continue practicing as general dentists (Newton et al., 2000a, 2000b, 2001).

According to Russell et al. (2025), female professionals are often relegated to secondary positions, reflecting systemic inequalities in authorship and management. The work–life balance continues to be a determining factor in the professional development of female dentists. Studies by Russell et al. (2025) and Wells et al. (2014) suggest that while flexible work models help balance personal and professional life, they often limit access to high-responsibility roles and reduce annual productivity. More recently, regarding the role of speakers at conferences held by European scientific societies, Heggie et al. (2021), Koletsi and Papadopoulou (2022), and Dunn (2024) have demonstrated the disparity between men and women, with the latter being clearly underrepresented.

2.3. Leadership Aspects

Since the end of the last century, gender-based inequalities have been observed in the representation of women in leadership and decision-making positions within the field of dentistry (Stokes et al., 1992). Career interruptions due to child-bearing years have limited access to higher-responsibility positions even though flexible work arrangements have helped facilitate the work–life balance (Davidson et al., 2012; Newton et al., 2000a, 2000b, 2001). Difficulties in reconciling personal and professional responsibilities have historically constrained women’s involvement in leadership positions and academic research (Blinkhorn et al., 2001; Kongiatkamon et al., 2010; Yuan et al., 2010).

In the early 21st century, the persistence of gender bias and traditional institutional structures has continued to limit women’s access to senior management positions, despite the increasing number of women in clinical dental practice. Moreover, research by Risser and Laskin (1996) and Rostami et al. (2010) has highlighted the presence of workplace harassment.

Currently, in regions such as Europe and Latin America, despite the high enrollment of women in dental education programs, cultural and structural factors continue to hinder their access to leadership positions. For example, in Spain, women represent over 50% of the dental workforce, yet structural barriers limit their presence in senior management roles (Hernández-Ruiz et al., 2022). In the United States, as of 2019, women’s representation in editorial and dean-level positions remained limited, with only modest progress reported (Li et al., 2019).

The systematic review conducted by Gangwani and Kolokythas (2019) highlights the four main themes that drive gender inequalities in terms of leadership within the academic world in the fields of medicine and dentistry: (1) the lack of appropriate role models and mentorship for successful socialization of female faculty; (2) the lack of peer support for women’s promotion through the academic ranks and their selection for executive administrative roles at rates equal to those of their male counterparts; and (3) implicit bias and negative stereotypes (Gangwani & Kolokythas, 2019).

Studies by Hernández-Ruiz et al. (2022), Gangwani et al. (2024), Russell et al. (2025), and Bernardi et al. (2023) confirm that women dentists continue to face significant challenges in accessing leadership positions in dentistry, both in academia and across other professional domains. Carr et al. in 2025 reveal gender-based differences in the perception of leadership skills in dentistry. While women tend to value adaptability, organizational awareness, and conflict management, men prioritize achievement orientation and mentoring. These findings suggest that perceptions of effective leadership vary according to gender.

In the workplace context, [Petsko and Rosette \(2023\)](#) found that women of color continue to face biases in leadership identification, as their directive behaviors are often interpreted less favorably and they are perceived as less “prototypical” leaders compared to their white counterparts, hindering their access to executive positions ([Berdahl & Bhattacharyya, 2024](#)). Furthermore, [Cozier et al. \(2023\)](#) reported that lifetime perceived experiences of racism are associated with a 45% increased risk of reporting “poor” or “very poor” oral health status among Black American women, highlighting the systemic impact of racism on their overall well-being.

[Leal Murillo et al. \(2024\)](#) examined the relationship between leadership styles and job satisfaction among healthcare professionals. The transformational leadership style exhibited the strongest positive correlations, followed by authentic and transactional styles. In contrast, passive and laissez-faire styles were consistently associated with negative correlations, regardless of the professionals’ roles. These findings offer valuable insights for guiding the selection and training of personnel in managerial and coordination positions through the adoption of effective leadership approaches.

3. Gender Challenges in Dentistry and the 2030 Agenda

In the 2030 Agenda for Sustainable Development ([United Nations, 2023](#)), adopted in 2015 by the member states of the United Nations, a master plan is established with 17 Sustainable Development Goals (SDGs) aimed at achieving peace and prosperity for people and the planet, now and in the future.

The current role of women in dentistry is closely aligned with several United Nations Sustainable Development Goals (SDGs), particularly the following: SDG 5—Gender Equality, promoting and recognizing the contributions of women in dentistry, supports the goal of ensuring full and effective participation and equal opportunities for leadership at all levels; SDG 3—Good health and well-being is reflected in the essential role female dental professionals play in expanding access to oral healthcare, especially in underserved communities; SDG 4—Quality education is also relevant, as it encompasses equal access to professional and higher education in fields such as dentistry; SDG 8—Decent work and economic growth is supported by efforts to eliminate gender-based barriers and promote fair working conditions, equal pay, and career advancement opportunities for women in the dental profession.

SDG 5 ([United Nations, 2023](#)) is a transversal objective that addresses gender equality on a global scale through nine targets, each accompanied by specific indicators. Notably, advancing gender parity in clinical and academic fields (thus fulfilling Target 5.5, which seeks to ‘ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making’) will generate positive synergies contributing to the achievement of SDGs 3, 4, and 8. This interconnected approach underscores the necessity of comprehensive strategies to promote gender equity and foster sustainable development.

According to ([Glick et al., n.d.](#)) healthcare professionals will possess the knowledge, skills, and attributes necessary to effectively contribute to the prevention and management of oral diseases and to ensure that various healthcare disciplines work collaboratively to enhance health and well-being. The role of women in achieving this goal is very important, as it is closely linked to attaining equity in education and access to health sciences. Despite the increasing presence of women in dentistry and advancements in clinical practice, [Fleming et al. \(2024\)](#) indicate that leadership representation remains limited, highlighting a gap in decision-making positions. Their access to executive roles is constrained, affecting perceptions of competence and relegating their opportunities for career advancement ([Russell et al., 2025](#)).

Within the framework of the Sustainable Development Goals and the United Nations’ 2030 Agenda, the Gender Equality Index was published in 2024 as a composite indicator designed to assess the complex notion of gender equality. Based on the European Union’s

policy framework, this index facilitates the monitoring of gender equality progress across the EU over time. The report highlights significant advancements in female representation in leadership roles but also underscores persistent challenges related to occupational segregation and access to quality employment. These findings emphasize the need for comprehensive and sustainable public policies to promote substantive equality. Overall, the document presents a broad perspective in which notable progress has been achieved, yet there remain critical obstacles that require strategic intervention to fulfill Sustainable Development Goal 5 (European Institute for Gender Equality, 2024).

4. Initiatives and Strategies to Achieve Gender Equity in Dentistry

Recent studies on the role of women in dentistry propose various initiatives and strategies that include structural and educational actions aimed at transforming the professional environment (Figure 1). These efforts focus on fostering a more inclusive and equitable atmosphere to advance true gender equity in the field. Among these initiatives are mentorship programs and support networks, which connect young professionals with experienced leaders to facilitate knowledge transfer and provide role models (Gangwani et al., 2024; Gottlieb et al., 2024); implementation of institutional equality policies, including the development of clear promotion and hiring criteria to ensure equal opportunities, supported by diversity committees and inclusive policies (Russell et al., 2025); promotion of flexible work models, involving the adaptation of dental service structures to integrate work arrangements that enable a work–life balance without compromising efficiency and care quality (Newton et al., 2001; Russell et al., 2025); review and expansion of academic evaluation criteria, ensuring a comprehensive assessment of contributions in teaching, mentorship, and research to facilitate career advancement into leadership roles (Gangwani et al., 2024; Gottlieb et al., 2024); continuous monitoring of equity indicators, systematically collecting and updating data on female representation to design evidence-based interventions (Russell et al., 2025); advancing awareness and training on gender issues, incorporating gender equity modules into dental education and continuing education programs to reshape perceptions and foster inclusive environments (Carr et al., 2025; Gottlieb et al., 2024).



Figure 1. Strategies to achieve gender equity in dentistry.

5. International Support and Global Models of Empowerment

Various international strategies and initiatives have been implemented to promote gender equality and enhance the participation of women and girls in diverse fields, including health, science, and dentistry. The World Health Organization (WHO) has developed tools to facilitate gender analysis in health and outlines gender-transformative approaches for programs and policies. Similarly, significant efforts have been made in education and training within STEM fields (science, technology, engineering, and mathematics), as reflected in the 55th Session of the Commission on the Status of Women and the 2013 resolution by the UN General Assembly on science, technology, and innovation for development. These milestones underscore the importance of ensuring full and equal access for women and girls (Shannon et al., 2019).

The dental sector further benefits from global initiatives like the UN Women strategy, which emphasizes economic empowerment, pay equity, and integrating gender perspectives into public policies. Focused on dismantling structural barriers and fostering strategic partnerships, these measures also aim to strengthen female leadership in dentistry. By adopting these international models, the sector aligns with the Sustainable Development Goals of the 2030 Agenda and demonstrates a comprehensive commitment to equity. Partnerships with key stakeholders, including UNDP, UNFPA, and UNICEF, provide opportunities to integrate gender perspectives across the United Nations system and drive sustainable change (UN Women, n.d.).

In line with these global efforts, regional and national efforts have emerged to address gender disparities more specifically within dental education and research. Foláyan et al. (2025) present a theoretical analysis of gender equity in West African medical and dental academic institutions, highlighting mentoring and training programs for early-career female researchers, alongside institutional reforms to promote equal opportunities. Similarly, Campus et al. (2024), writing in the *International Dental Journal*, describe the efforts of the FDI's Women Dentists Worldwide section to coordinate national associations, collect data, and foster networks aimed at increasing women's leadership roles in professional dental organizations across Africa. Foláyan et al. (2025) also identify key social, institutional, and individual barriers to gender equity in research and propose strategic interventions—such as gender-sensitive mentoring—to transform organizational norms and empower female researchers.

In a different regional context, Asian countries have also undertaken significant efforts to promote gender equity in dental academia. Gangwani et al. (2024) report on initiatives including leadership workshops, structured mentoring, and gender-informed policy reviews to support women's advancement in dental academia. In Pakistan, Shahzad et al. (2024) note the introduction of formal mentoring, leadership training, and gender quotas for senior academic roles. In Jordan, Tbayshat (2025) highlights the creation of Women's Leadership Committees within dental faculties to support future female leaders through seminars and networking.

Drawing from these developments, the 2025 report from the European Commission's 2020–2025 Gender Equality Strategy highlights progress in five priority areas, showcasing national initiatives and EU-funded projects. These policies have led to significant improvements in the protection and well-being of women, positively impacting the healthcare sector by fostering safer and more equitable work environments. Collectively, these achievements reaffirm the commitment of international organizations to addressing gender inequalities and accelerating progress toward a fair, balanced, and inclusive society.

Efforts to advance women's roles in science are evident in various global initiatives. The UNESCO and UN Women's International Day of Women and Girls in Science, established in 2015, promotes equitable access to science and technology. Its 2025 campaign,

“Imagine a World with More Women in Science”, underscores the value of diverse perspectives in driving progress across disciplines. The L’Oréal–UNESCO For Women in Science program fosters female talent through mentorship, leadership development, and support for innovative projects addressing social challenges, while combating gender stereotypes. Similarly, GenderInSITE integrates gender analysis in Science, Innovation, Technology, and Engineering (SITE), advocating inclusive policies to advance sustainable development across sectors such as agriculture, energy, and climate change. These initiatives demonstrate a global commitment to enhancing women’s contributions to science.

Currently, it is essential to highlight the work and influence of female dentists such as Dr. Figen Seymenoglu, whose contributions have played a significant role in the advancement of the profession and in the empowerment of women within the field of oral health. Her work includes research on dental anomalies, genetics, and aesthetic treatments, and she has been an active advocate for inclusive and accessible dental education. Also, Dr. María Fidelia Pérez is a prominent researcher in oral health and a champion for female leadership in Latin American dentistry. Her work has included collaboration with the World Health Organization (WHO) on strategies to improve oral health for women in rural communities ([World Health Organization, 2022](#)).

The American Association of Women Dentists (AAWD) in the USA is an organization dedicated to supporting women dentists through networking, leadership opportunities, scholarships, and mentorship programs. It serves as a professional empowerment model that has inspired similar associations in countries like Canada, Brazil, and Spain (<https://aawd.org/>, accessed on 24 January 2025).

At the international level, there are also initiatives that have had a significant impact on the field of dentistry. The International Association for Dental Research (IADR)—Women in Science Network is dedicated to promoting the visibility and participation of women in dental research. It organizes congresses, webinars, and scientific publications with a gender-focused approach (<https://www.iadr.org/WISN>, accessed on 3 February 2025). In line with the aforementioned organization, The Global Health Workforce Network—Gender Equity Hub, co-chaired by the World Health Organization (WHO) and Women in Global Health, focuses on addressing gender inequities in the health and social workforce. It aims to promote gender-transformative policies and actions to achieve sustainable development goals. One of its key contributions is the report “Delivered by Women, Led by Men: A Gender and Equity Analysis of the Global Health and Social Workforce”, which highlights systemic workplace gender biases and inequities. The Hub also works on initiatives like closing the leadership gap in health and care sectors, where women make up 70% of the workforce but hold only 25% of senior leadership roles (<https://womeningh.org/initiatives/gender-equality-hub/>, accessed on 12 March 2025).

6. Conclusions

The historical evolution of participation in dentistry is a testament to a transformative process marked by significant challenges, ranging from a time when women were virtually excluded to their establishment as a substantial presence in clinical and academic practice. However, the current situation reveals that, despite these advancements, representation in leadership roles and authorship of high-impact research remains insufficient. To achieve true equity in dentistry, it is essential to implement comprehensive strategies, including mentorship programs, equality policies, flexible work models, and a review of promotion criteria. Only through firm commitment and concrete actions can the glass ceiling be broken, ensuring that diverse perspectives contribute to excellence in patient care and the advancement of knowledge in the field. This, in turn, will help achieve SDG 5 of the 2030 Agenda within the realm of dentistry.

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