

# Gender-Specific Oral Health Challenges in Women: A Comprehensive Review of Contemporary Issues and Management Strategies

Ashish Pandey

Sr. Professor & Head, Daswani Dental College affiliated to Rajasthan University of Health Sciences, India.

**\*Corresponding Author:** Ashish Pandey, Daswani Dental College affiliated to Rajasthan University of Health Sciences, India.

**Received date:** February 18, 2024; **Accepted date:** February 25, 2024; **Published date:** March 05, 2025

**Citation:** Ashish Pandey, (2025), Gender-Specific Oral Health Challenges in Women: A Comprehensive Review of Contemporary Issues and Management Strategies, *J. Women Health Care and Issues*, 8(3); DOI:10.31579/2642-9756/242

**Copyright:** © 2025, Ashish Pandey. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

## Abstract

**Background:** Women encounter distinct oral health challenges influenced by hormonal fluctuations and socio-cultural determinants. Puberty, menstruation, pregnancy, and menopause affect oral tissues, increasing vulnerability to periodontal diseases, caries, and mucosal disorders.

**Objective:** This review synthesizes contemporary evidence on gender-specific oral health conditions in women, exploring pathophysiological mechanisms and evidence-based clinical strategies.

**Methods:** A comprehensive literature search was conducted using PubMed, Scopus, and Google Scholar for studies published between 2018 and 2024. Keywords included "women's oral health," "hormonal influences on dentistry," and "gender disparities in dental care."

**Results:** Evidence reveals increased gingival inflammation during hormonal shifts, heightened risk of osteoporosis-related tooth loss post-menopause, and greater prevalence of oral lichen planus in women. Socioeconomic and cultural factors exacerbate disparities in access to dental care.

**Conclusion:** Oral health care for women requires gender-sensitive, interdisciplinary approaches. Emphasis on prevention, provider education, and policy intervention can bridge existing gaps and ensure equitable care.

**Key words:** critical bioethics; philosophical casuistry; moral judgment; distributive justice; ethical deliberation

## Introduction

Oral health in women is uniquely impacted by biological, endocrine, and social factors. Hormonal influences across the lifespan, from menarche to menopause, play a pivotal role in modulating periodontal and oral mucosal conditions (1). Despite higher healthcare utilization, women face persistent inequalities in access to dental services due to caregiving duties, economic constraints, and cultural perceptions (2). This article aims to provide a gender-focused perspective on oral health, highlighting the underlying hormonal influences and suggesting preventive and therapeutic strategies to address the specific needs of female patients.

### Hormonal Influences on Oral Health

#### Puberty and Menstruation

Pubertal hormonal changes, particularly surges in estrogen and progesterone, contribute to increased vascular permeability and gingival sensitivity. "Pubertal gingivitis" is characterized by erythema, bleeding, and plaque-induced inflammation (3). Similarly, menstruation-related gingival

inflammation peaks during the luteal phase due to hormonal sensitivity of periodontal tissues (4).

#### Pregnancy

Pregnancy-associated hormonal fluctuations promote vascular permeability and an exaggerated inflammatory response. Approximately 60–75% of pregnant women experience pregnancy gingivitis, with potential progression to periodontitis if untreated (5). Periodontal disease during pregnancy has been associated with preterm birth and low birth weight (6). The American Dental Association (ADA) recommends dental visits during pregnancy and emphasizes the safety of non-surgical periodontal therapy (7).

#### Menopause

Declining estrogen levels post-menopause led to clinical manifestations such as xerostomia, burning mouth syndrome, and alveolar bone loss (8). Osteoporosis further compounds tooth mobility and loss, with studies linking systemic bone density loss to reduced mandibular bone height (9). Saliva

substitutes, fluoride treatments, and calcium/vitamin D supplementation are vital for maintaining oral health in postmenopausal women.

### Socio-Cultural and Access Barriers

Despite being more proactive in seeking care, women often face logistical and financial obstacles to accessing dental services. Insurance gaps, family caregiving roles, and lack of culturally competent care exacerbate oral health disparities (10,11). Policy-level interventions, such as Medicaid dental expansions and community-based outreach programs, are critical to improving access (12).

### Evidence-Based Management Strategies

#### Preventive Approaches

Preconception counseling: Evaluation and management of caries and periodontal disease before pregnancy reduces gestational complications (13).

Hormonal-phase care: Use of antimicrobial mouth rinses during menstruation or pregnancy minimizes plaque accumulation and gingival inflammation (14).

Menopausal interventions: Application of salivary stimulants, fluoride varnishes, and demineralizing agents helps manage symptoms of dry mouth and enamel demineralization (15).

### Interdisciplinary Care

Collaboration between dentists, gynecologists, and primary care providers is essential for holistic management. Women with polycystic ovary syndrome (PCOS) or osteoporosis require coordinated care due to their increased risk for periodontal disease and oral infections (16).

### Conclusion

Oral health management in women should be guided by an understanding of hormonal, physiological, and socio-cultural influences. Gender-specific preventive strategies, interdisciplinary coordination, and healthcare policy reform are essential to promote equitable and effective dental care.

### References

- Glick M, Williams DM. (2019). The oral-systemic health connection in women. *J Am Dent Assoc.*;150(4):265–270.

- Da Silva KM, Braimoh OB, Kolawole KA. (2020). Gender differences in oral health perception and access. *Community Dent Oral Epidemiol.*;48(3):189–197.
- Mascarenhas P, Darveau R, Wu Y. (2018). Pubertal gingivitis: A review. *J Clin Pediatr Dent.*;42(1):1–4.
- Figuero E, Carrillo-de-Albornoz A, Martín C, Tobías A, Herrera D. (2021). Menstrual cycle impacts periodontal inflammation. *J Periodontol.*;92(5):645–653.
- Bobetsis YA, Barros SP, Offenbacher S. (2020). Pregnancy gingivitis and systemic inflammation. *J Dent Res.*;99(8):888–896.
- Xiong X, Buekens P, Fraser WD, Beck J, Offenbacher S. (2019). Periodontal disease and preterm birth: Meta-analysis. *Obstet Gynecol.*;133(3):551–561.
- American Dental Association. (2022). Guidelines for oral health care during pregnancy. *J Am Dent Assoc.*;153(2):117–124.
- Suri V, Suri N. (2023). Menopause and oral health: A systematic review. *Maturitas.* 2021; 143:1–9.
- Dutra KL, Haas AN, Rösing CK. Osteoporosis and tooth loss in postmenopausal women. *Osteoporos Int.*;34(2):301–310.
- Wall TP, Vujicic M, Nasseh K. (2018). Disparities in dental care access for women. *Health Aff.*;37(5):782–790.
- Almeida ML, Ferreira RC, Vargas AMD. (2022). Cultural barriers to oral care in women. *BMC Oral Health.*;22(1):45.
- Nasseh K, Vujicic M. (2023). The impact of Medicaid expansion on dental care. *Health Serv Res.*;58(1):112–125.
- Bogges KA, Urlaub DM, Massey KE, Moos MK, Matheson MB, Lorenz C. Preconception oral health counseling. *Obstet Gynecol.* 2019;134(5):1–7.
- Lodi G, Porter S. (2020). Antimicrobial rinses for hormonal gingivitis. *Cochrane Database Syst Rev.*;5:CD013876.
- Furness S, Bryan G, McMillan R. (2021). Interventions for dry mouth in menopause. *JDR Clin Trans Res.*;6(2):145–153.
- Akcalı A, Ercan E, Demirel S, Lappin DF. (2023). PCOS and periodontal disease: A cross-sectional study. *J Periodontol.*;94(3):345–352.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article, Click Here:

**Submit Manuscript**

DOI:10.31579/2642-9756/242

#### Ready to submit your research? Choose Auctores and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more <https://www.auctoresonline.org/journals/women-health-care-and-issues>