Menopause and Oral Health

Dr Swati Nehete

Introduction















Al has helped in the generation of data analytics for this presentation

The Menopause

Understanding the hidden hormonal impact on your mouth, bone density, and quality of life.

35+

The Age Perimenopause Can Begin

Hormonal fluctuations can start impacting the body even while menstruation continues.

45-55

Typical Age Range for Menopause

Defined as 12 consecutive months without a menstrual cycle, caused by estrogen decline.

QOL

Impact on Quality of Life

Psychological changes can reduce motivation for essential self-care, including oral hygiene.

Living Longer and Better

Clin Oral Invest (2008) 12:271–277 DOI 10.1007/s00784-008-0190-z

ORIGINAL ARTICLE

Oral health in perimenopausal and early postmenopausal women from baseline to 2 years of follow-up with reference to hormone replacement therapy

L. Tarkkila · J. Furuholm · A. Tiitinen · J. H. Meurman

The Health Foundation, "a healthy person is someone with the opportunity for meaningful work, secure housing, stable relationships, high self-esteem, and healthy behaviors. A healthy society, in turn, is not one that waits for people to become ill, but one that sees health as being shaped by social, cultural, political, economic, commercial, and environmental factors, and acts on these for current and future generations."

Woods, BA(Biol), MBA, Tina; Manson Brown, Stephanie MBBS, MRCS, MFPM; Page, Ben BA. Living Longer Better. Plastic and Reconstructive Surgery 148(6S):p 7S-13S, December 2021. | DOI: 10.1097/PRS.000000000008780



Published in final edited form as:

Lancet. 2009 October 3; 374(9696): 1196-1208. doi:10.1016/S0140-6736(09)61460-4.

Ageing populations: the challenges ahead

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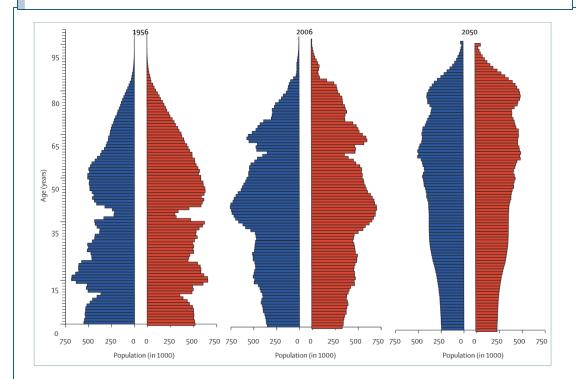


Figure 3. Population pyramids for Germany in 1956, 2006, and 2050 Horizontal bars are proportional to number of men (blue) and women (red). Data for 2050 are

based on the German Federal Statistical Office's 1-W1 scenario, which assumes a roughly constant total fertility rate of 1·4, yearly net migration of 100 000 and life expectancy in 2050 reaching 83·5 years for men and 88·0 years for women. Data from reference ³³ and the Human Mortality Database.

Menopause – Bone

- **Increased Susceptibility to Periodontal Disease:** susceptible to periodontal disease, largely due to estrogen deficiency resulting in **bone loss** and inflammatory processes.
- Systemic Bone Loss Link: The processes that cause bone loss in the spine and hips can also lead to the loss of the alveolar bone of the jaws, which results in periodontal disease, loose teeth, and tooth loss.
- Osteoporosis as a Risk Factor: The American Academy of Periodontology considers **osteoporosis** to be a risk factor for periodontal disease. The rate of whole-body bone loss in postmenopausal women can predict tooth loss.
- **Cytokine Mediation:** Osteoporosis and periodontitis appear to be mediated by **common cytokines**.



and to see their dentists regularly

MARIA CLARINDA A. BUENCAMINO, MD LEENA PALOMO, DDS, MSD a Assistant Professor of Periodontology, Director Director, Center for Specialized Women's Health of Predoctoral Periodontics, Case Western

How menopause affects oral health, and what we can do about it





Development of AI-Based Predictive Models for Osteoporosis Diagnosis in Postmenopausal Women from **Panoramic Radiographs**

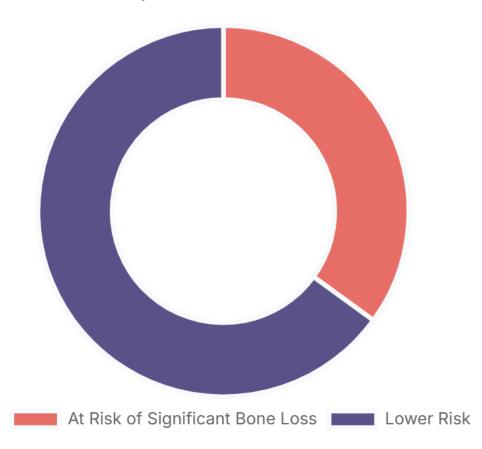
Francesco Fanelli 1,*, Giuseppe Guglielmi 1, Giuseppe Troiano 2, Federico Rivara 3, Giovanni Passeri 4, Gianluca Prencipe 1, Khrystyna Zhurakivska 1, Riccardo Guglielmi 5 and Elena Calciolari 3.6

Hormone therapy **Protective**

Estrogen deficiency /increased bone-resorbing cytokines + bacterial plaque biofilm= bone resorption/periodontitis

Bone Loss & Periodontal Disease

Menopause accelerates bone loss, including the alveolar bone supporting your teeth. This makes the gums more susceptible to severe disease.



The Mind-Mouth Connection

The psychological effects of menopause, such as anxiety and depression, can create a significant barrier to maintaining oral health, leading to a cycle of neglect and increased risk.

Menopause Begins
Hormonal Shifts

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Psychological Impact

Anxiety, Depression



Reduced Motivation

For Daily Oral Care



Increased Oral Risk

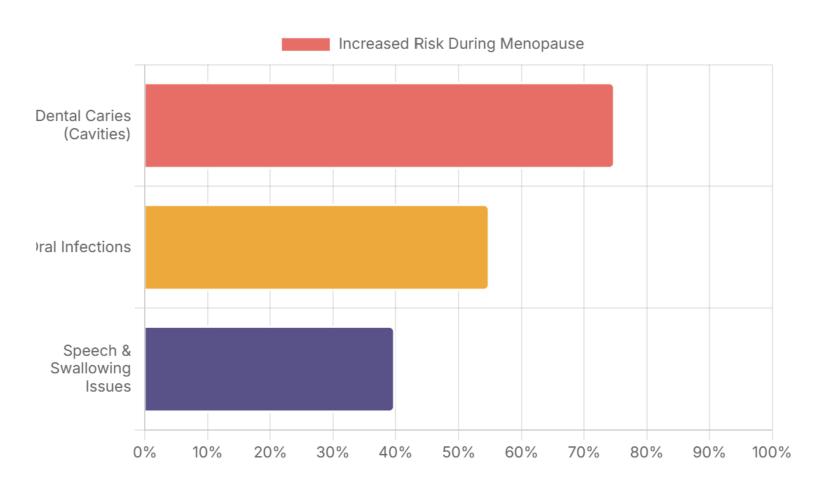
Cavities & Gum Disease

Motivation and Self Care

- Beauty industry Age specific skincare
- Dry eyes
- Dry Mouth
- Fatigue, Tiredness, Anxiety, Depression
- Oral Hygiene routine

Dry Mouth (Xerostomia) & Its Risks

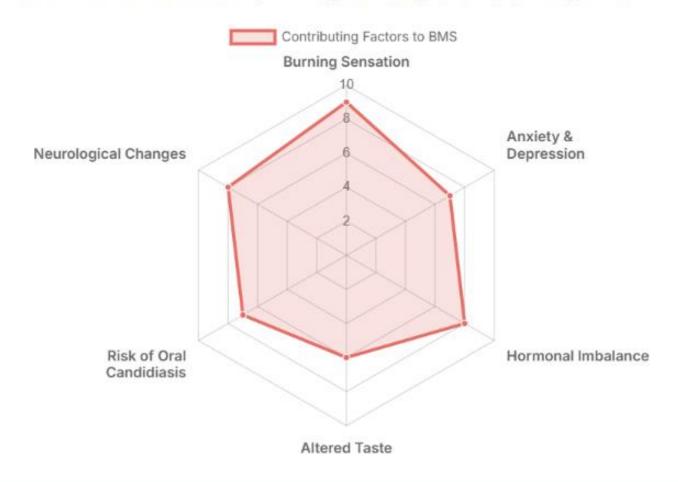
Reduced estrogen lowers saliva flow, removing the mouth's natural protection. This directly increases the risk for several oral health issues.



Understanding Burning Mouth Syndrome (BMS)

BMS is a complex condition more prominent in menopausal women, characterized by a painful burning sensation with no visible cause.

It's linked to hormonal shifts, neurological changes, and psychological stress.



What	Why/how
sufficient fluid intake	>1,5l/day: water or sugar-free tea; suck ice cubes
no tobacco, alcohol, caffeine	oral dryness
no soft drinks	high sugar content: erosive potential
avoid: too sweet, too salty, too spicy	osmotic effect of sugar/salt; local effects of
stimulate salivary glands: sugar-free chewing gum or lozenge	capsicum xylitol
saliva substitute (hyaluronic acid or methylcellulose)	Gum Hydral®, BioXtra®, dentaidxeros®
severe cases: pilocarpine hcl tablets (caveat: side effects)	4-5x5mg/day

Table 2: Interventions in case of xerostomia

Risk Assessment

Caries - Dry Mouth, Salivary changes, Oral Hygiene, Fluoride use

Infection – Existing disease, medication for osteoporosis

Periodontal Disease – Smoking, Vaping, Paan, Diabetes

Tooth Loss – Previous dental experience

Cancer – Social factors, family history

Tooth replacement options – Maintenance of teeth associated with reduced all cause mortality and longevity

Preventive strategy



Home > Health and social care > Public health > Health improvement > Oral health

Guidance

Delivering better oral health: an evidence-based toolkit for prevention

This is an evidence-based toolkit to support dental teams in improving their patients' oral and general health.

Oral Hygiene

Twice daily with fluoridated toothpaste

Physician

Discuss systemic symptoms for possible HRT

Strategies to avoid Osteoporosis

Assess for Diabetes and Hypertension

Nutrition/Diet/Exercise

Follow healthy eating plate
Diet associated with Longevity

Dentist

Check up with Dentist and specifically ask about dry mouth and gum disease Risk assessment

Save teeth – associated with longevity

Oral Medicine

Dry Mouth – saliva substitutes Burning Mouth Syndrome



Proactive Management & Treatment Strategies

Maily Care & Lifestyle

- Meticulous brushing and interdental cleaning.
- Use saliva substitutes, sugar-free gum, or lozenges for dry mouth.
- Limit acidic and sugary foods/drinks.
- Avoid alcohol-based as they mouth rinses worsen dryness.

HRT & Medical Intervention

- HRT can improve alveolar bone density.
- ✓ Shown to reduce dry mouth (xerostomia) symptoms.
- May also alleviate Burning Mouth Syndrome symptoms.
- Discuss options with your dentist and GP for a holistic approach.

Targeted BMS Relief

- Use topical gels with lidocaine or benzocaine.
- Natural soothing agents like chamomile and linseed can help.
- ✓ ChokeberryRinsing 3x daily has Juice shown promise in Therapy: reducing pain (requires more research).

Thank you for listening

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