



Factsheet Zahnmedizin

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Ergänzend hierzu: Foliensatz zum Factsheet Zahnmedizin

Vorbemerkung: Das Factsheet [Name des Fachs] stellt, wie alle anderen Factsheets, beispielhaft einzelne Geschlechterunterschiede dar. Es erhebt keinen Anspruch auf vollständige Darstellung der Problematik. Die Kommission ist sich der verschiedenen, fachspezifischen Perspektiven auf Gender/Geschlecht bewusst. Alle Factsheets wurden in der Kommission Sex and Gender in Medicine der Medizinischen Fakultät der Universität Zürich diskutiert und in der vorliegenden Form verabschiedet. Die inhaltliche Verantwortung liegt bei den Autorinnen und Autoren.



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1 Clinic of Reconstructive Dentistry

1.1 Pain Perception – Sex & Gender

First, the prevalence of most common forms of pain is higher among women than men, and women report greater pain after invasive procedures than men, though these findings are less consistent. (Bartley et al. 2013; Fillingim et al. 1995; J. L. Riley et al. 1998)

Also, only recently evidence has emerged indicating that men may exhibit greater diffuse noxious inhibitory controls (DNIC) than women, and recent findings suggest that DNIC may be particularly predictive of clinical pain (R. B. Fillingim et al. 2009).

1.2 Sex Differences in Analgesia

While not a direct measure of analgesic response, studies of self-administration of opioids using patient-controlled analgesia (PCA) have revealed lower postoperative opioid consumption among women than men in several studies, as previously reviewed by Miaskowski and Levine (Miaskowski C et al. 1999; Pisanu et al. 2019).

1.3 Implant Insertion Time-point – Sex & Age as compromising Factors

The skeletal growth status can be assessed accurately by comparing conventional radiographs of both the hand and wrist to standardized atlas of bone development. Special care should be taken regarding the region of the desired implant placement. The anterior maxilla poses the highest risk in further facial growth (Op Heij et al. 2003). Implants placed after age 15 in girls and 18 in boys have the most predictable prognosis (Cronin et al. 1994).

1.4 Implant Infraposition & Loss of Contact Point

Implant Infraposition (IIP)

A significant influence of patient sex on IIP was found, indicating that male patients were associated with milder IIP than female patients. This might be attributed to the more pronounced increase of anterior face height and posterior rotation of the mandible seen among female patients (Jemt, T et al. 2007). Especially in late

growth periods of 25–45 years of age, female patients seem to have greater increases in both overbite and upper anterior face height than male patients (Bishara, S.E. et al. 1998), which might explain at least in part this sex-specific difference in IIP.

Male patients were less prone to IIP than female patients (three studies; OR = 0.30; 95% CI = 0.10–0.88; p = 0.03) (Papageorgiou et al. 2018).

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2 Clinic of Cranio-Maxillofacial Surgery - Department of Oral Surgery

2.1 Wisdom tooth extraction

After surgical wisdom tooth extraction, wound infections occur significantly more frequently in female patients than in male patients. A connection with the use of oral contraceptives has been proven (Filippi 2001; Xu et al. 2015).

2.2 Fibro-osseous lesions

9x more frequently in women (Ahmad et al. 2018; Pick et al. 2022).

2.3 Antiresorptive-associated osteonecrosis of the jaw (ARONJ)

ARONJ occurs more frequently in women than in men. This is due to drug therapy for osteoporosis, which occurs more frequently in women than in men (Pick et al. 2021)

2.4 Root resorptions

Root resorptions triggered by impacted canines occur more than twice as frequently in women than in men (Bornstein et al 2017).??

2.5 Cysts of the jaw

The nasopalatine cyst, as well as the odontogenic keratocyst, occur more frequently in men than in women (Suter et al. 2007; Bornstein et al. 2005; Cecchetti et al. 2012).

2.6 Dental trauma

Dental trauma occur more frequently in young men. This increased risk of male patients is due, among other things, to a greater involvement of boys in sports and games, as well as to more injury-prone sports such as football or martial arts (Andreasen 2019). (American Academy of Pediatric Dentistry 2022).

2.7 Dental Implants

There are few studies that address the gender issue regarding implant procedures. One study shows that women are more likely to experience delayed wound healing after implant procedures (Kahn et al. 2021).

2.8 Stomatology

The female gender increases the probability of developing symptomatic oral lichen planus by a factor of 2.9. Hormonal factors are suspected since it occurs more frequently postmenopausally (Osipoff et al. 2020).

Burning Mouth Syndrome occurs more frequently in women than in men. (F:M=5:1). Biological, sociocultural and psychological reasons are referred to in the literature (Feller et al. 2017).

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3 Clinic of Conservative and Preventive Dentistry

3.1 Oral health, caries, and microbiome

Evidence has been provided to demonstrate that caries risk factors for women include a different salivary composition and flow rate, hormonal fluctuations, dietary habits, genetic variations, and particular social roles among their family (Ferraro et al. 2010).

Men are more likely to: ignore their oral health, have poorer oral hygiene habits, periodontitis and dental trauma than women. Men also visit dentists less frequently and seek oral treatment more often for an acute problem and less often for disease prevention than women (Lipsky et al. 2021; Su et al. 2022).

Men brushed less frequently and shorter period of time than women. Males gender is a risk factor for gingival bleeding and poor oral hygiene behavior (Abe et al. 2020).

Male to female ratio of 2:1 for oral cancer due to tobacco use, heavier alcohol use and longer sun exposure rates of periodontal disease, caries, oral cancer (Lipsky et al. 2021).

Men showed a different kind of oral microbiome than women. Men and non-smokers had higher bacteria counts in saliva (Lira-Junior et al. 2018).

3.2 Dental treatment

Dental treatment avoidance with younger age and men; unemployment and men, lower social strata in women; increased depressive symptoms in men and increased physical illnesses and men (Spinler et al. 2021).

3.3 Gingival recession

Men had significantly more gingival recession, gingival bleeding, subgingival calculus, and more teeth with total calculus than women in the US adult population (Albandar et al. 1999).

3.4 Periodontitis

Men have higher prevalence of periodontitis than women (50.2% vs 34.6%) (Eke et al. 2018).

3.5 Diabetes and Periodontitis

Men have higher prevalence of Diabetes associated with moderate-severe Periodontitis. This relationship not found in women (Liu et al. 2018).

3.6 Dentists' gender

Patients with female dentists results in more regular visits and preventive oral health behaviours. Dentist's gender has important clinical implications for patients (Takeuchi et al. 2020).

3.7 Gingival inflammation

Women have higher hormonal influence and periods of significant hormonal surges on gingival inflammation (due to puberty, menstrual cycle, pregnancy and the perimenopause) (Boyapati et al. 2021).

Women have increased prevalence of gingivitis in pregnancy (Figuero et al. 2010).

3.8 Caries

Adolescent girls have greater susceptibility to caries than boys throughout Germany (Ferraro et al. 2010).

3.9 Periodontitis and Osteoporosis

Women treated with estrogen for postmenopausal osteoporosis leads to lower prevalence of severe periodontitis than women not receiving treatment (Passos-Soares et al. 2017).

Elderly women with osteoporosis have a greater chance to present periodontitis, with higher severity than those with normal bone mineral dentistry (Penoni et al. 2016; Penoni et al. 2019).

3.10 Oral contraceptives and Periodontitis

The use of hormonal contraceptives may be associated to severity of periodontal diseases in women (Castro et al. 2021).

3.11

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4 Clinic of Masticatory Disorders

4.1 Temporomandibular Disorders

Female gender more than doubles the risk of developing TMD. However, other equally important factors reported in the recent literature must be also taken into account, such as self-rated general health conditions, general chronic pain disorders, age, study site, ethnicity, and psychosocial and genetic factors (Bueno et al. 2018). Among males the prevalence differences between age groups are inconsistent and small, whereas among females prevalence clearly peaks, in middle age, whereas it is lower in the youngest age group and the two oldest age groups. (National Academies of Sciences, Engineering, and Medicine 2020. Temporomandibular Disorders: Priorities for Research and Care Washington,DC: The National Academies Press.).

4.2 Primary Headaches

Cluster Headache
 M:W=2:1 (Lund et al. 2019)

Migraine
 Women are more commonly affected than men with a lifetime prevalence of 12–17% and 4–6%, respectively (Straube et al. 2019).

4.3 Trigeminal neuralgia

The proportion between women and men who had TN was 3 to 1, the affected age range was 37 to 67 years old. (Porto De Toledo et al. 2016).

4.4 Burning Mouth Syndrome

In the population-based studies the pooled prevalence of BMS for female was 1.15% and for male was 0.38% (Wu et al. 2021).

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5 Clinic of General, Special Care and Geriatric Dentistry

5.1 Tooth loss and edentulism

According to the results of the DMS V there are hardly any measurable gender-specific differences in the number of missing teeth at the group of 65-74 years old participants of the study (n=1042): female seniors in this group show a loss of 11.2 teeth and male seniors 11.0 teeth. In the group of older seniors (75-100 years old, n=1133) a gender-specific difference of around 2 missing teeth was observed: older women had a higher rate of tooth loss than older men. The significant influence of gender on edentulism was not observed in the group of younger seniors (65-74 years old). For older study participants (75-100 years old), however, the influence of gender on edentulism is noticeable: women (35.7%) versus men (28.5%) [Jordan & Micheelis 2016].

5.2 Denture stomatitis

Epidemiological studies report prevalence of denture stomatitis among denture wearers to range from 15% to over 70%. A literature review indicates that the incidence of denture stomatitis is higher among elderly denture users and among women (Gendreau et al 2011). Gender related difference in the prevalence of denture stomatitis was also found in a clinical study in Portugal denture-related stomatitis was more prevalent in females (60%) than in males (34.0%) (Figueiral et al. 2007) and in Iran with significantly more women (85%) than men (15%) (Atashrazm et al. 2013).

5.3 Xerostomia and Hyposalivation

The estimates of xerostomia prevalence from studies of representative samples of older populations range from 12% to 39% (with a weighted average of about 21%) (Thomson et al. 2015).

Research showed a high prevalence of xerostomia and salivary gland hypofunction in vulnerable elders: it can be as high as 72% among institutionalized older adults. Common etiologies include medications, poor general health, female gender, and age. (Liu et al. 2012). Xerostomia has been shown to be more frequent in females than males (Margaryan et al 2017 and Krajewski Jr et al 2022).

5.4 Stroke and Post-stroke dysphagia

Significant gender differences were observed by Banda et al. (2022) in a meta-analysis: female participants demonstrated to have a higher risk of Post-stroke dysphagia compared to male participants. The study findings are inconsistent with previous studies, which found no significant gender differences in the risk of post-stroke dysphagia. The possible explanation for this outcome would be that women have shown to have worse stroke-associated outcomes because they experience their first ever stroke at an older age compared to men. Therefore, the findings that women are on higher risk for post-stroke dysphagia compared to men may be explained by their age (Banda et al. 2022).

5.5 Oral potentially malignant disorders

The most encountered oral potentially malignant disorders (OPMD) are leukoplakia, but others, including lichen planus, oral submucous fibrosis, and erythroplakia, may also be seen. OPMDs have a statistically increased risk of progressing to cancer. Malignant transformation rates are higher in older individuals and in females. Even though lesions are less common in females, the rate of malignant transformation is greater in females than in males. It is still unclear why women are more predisposed to malignant transformation compared with men (Speight et al 2018).

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