

CONTENTS

GERODONTOLOGY



Willy Baumgartner, Martin Schimmel, Frauke Müller

Oral health and dental care of elderly adults dependent on care

417



Fabienne Glenz, Christina Brand, Christian E. Besimo, Carlo P. Marinello

The elderly patient:
no reason to worry!?

427



Ina Nitschke, Angela Stillhart, Julia Kunze

Utilization of dental services
in old age

433



Martin Schimmel, Joannis Katsoulis, Laurence Genton, Frauke Müller

Masticatory function
and nutrition in old age

449

496 Impressum

Gerodontology – the latest trend in dentistry?



François Keller
President SSO 2008–2014



Frauke Müller
President SGZBB

Demographic changes leave no doubt that patients are getting older – also in our dental practices. Whilst ten years ago, continuing education programs devoted to gerodontology were exotic events attended by a handful of alternative altruists wearing Birkenstock sandals, today many issues concerning the dental care of seniors are the focus of large conferences and attract a great deal of interest from many colleagues. Gerodontology has become socially acceptable!

However, this interest alone is not enough, and many problems remain unresolved. Already during the third stage of life, patients should be treated with the possibility of dependency in mind, restorations must be planned prospectively, and the option to “downgrade” high-tech restorations should be available.

In the fourth stage of life, when patients are dependent, the challenges are even more diverse. In addition to dental care, which is a challenge in itself, there are many aspects of public health that affect the care of institutionalized patients and dependent persons living at home.

The Swiss Dental Association (SSO) has therefore made gerodontology one of its main topics. In this special edition of the SWISS DENTAL JOURNAL (SDJ), the SSO and

the Swiss Dental Society for the Disabled and Elderly Persons (SGZBB) would like to present their new oral health model for the dental care of dependent persons. The ability of elderly patients to perform oral hygiene may be impaired by multimorbidity, polypharmacy, dementia, and depression. Additional hurdles include the impairment of the musculoskeletal system, vision, and hearing, as well as limited social interaction.

The resulting deterioration in oral hygiene may lead to oral infections, which in turn may result in a general health risk. Therefore, the SSO and SGZBB call for the creation of an interdisciplinary team to care for dependent elders. This team should of course include dental specialists.

All patients should have access to adequate dental care while still having the freedom to choose their clinician. This applies not only to dental examinations when entering a care facility, but also to care in the home-based nursing sector. This would enable the provision of therapy, prevention, and recall adapted to the individual needs of the patient.

Dental therapy should not be limited to emergency treatment, but focus on prevention, even in this age

group. Those dependent on care cannot be blamed for not correctly and regularly carrying out oral hygiene measures because their eyesight, mobility, motivation or even their autonomy is compromised.

It is clear that dentistry is facing similar problems to those faced by general medicine: care must be organized more efficiently and the corresponding infrastructure must be better developed. The SSO and SGZBB therefore call for dental care to be integrated into a health policy framework, thus ensuring oral comfort even in old age.

We are very pleased to see that more and more of our colleagues are dedicating themselves to this fascinating area and are becoming involved in the field of gerodontology. What about you? Have you treated a patient this week who is no longer able to come to your practice? Have you ever thought about which of your long-term patients haven't attended the practice for a while and enquired after them?

The SGZBB encourages exchange between colleagues, making the first step easier. It offers specialist continuing education and support in many areas. Even dental hygienists have long been on board, providing professional oral hygiene services in care facilities and at home. The hygienists also offer continuing education programs for nursing personnel. Their contribution to the dental team is an enormous help and a great support for our cause. Adequate oral hygiene alone is sufficient to prevent one in ten deaths due to pneumonia in those dependent on care.

It is with great pleasure that the SGZBB has accepted the offer of a special edition of the SDJ to highlight this sensitive issue. The SGZBB oral health model, with the full support of the SSO, is presented in three languages, and the four university institutes in Switzerland have all made specialist contributions on the subject.

SGZBB Oral Health Model

for the dental care of elderly patients dependent on nursing care



Contemporary dentistry is aware of the links between oral health, quality of life, and geriatric diseases in people who are dependent on care and who usually live in institutions. This understanding may show us a way to improve the present unsatisfactory situation.

The increasing attainment of old age in our population leads to an increasing occurrence of loss of autonomy and **dependence on nursing care, either at home or in long-term care facilities.**

Usually as a result of age-related functional impairments, an increase in geriatric pathologies, and the associated medications, there is typically an increase in

- multimorbidity,
- polypharmacy with hyposalivation,
- dementia – depression,
- impairments of the musculoskeletal system, vision, hearing, and ultimately
- reduced social interaction.

For those dependent on care, this leads to a **reduced ability to maintain oral hygiene and to undergo dental treatment.**

This in turn leads to food debris remaining in the oral cavity and to the formation of soft and hard deposits such as plaque, calculus, and biofilm on both natural dentition and fixed and removable dentures. This results in a massive increase in the bacterial flora in the oral cavity.

When first becoming dependent on care, many risks associated with the oral cavity, such as neglecting to care for residual dentition and dentures as well as dental pathologies, remain unnoticed and untreated if neither dental examination nor prescription for dental and oral care are available from the dentist who has previously provided care. Pathologies thus persist over the remaining lifetime and often lead to **dental emergencies, reduced quality of life, and increased morbidity.**

The risks of developing **caries, gingivitis, periodontitis, stomatitis, and other infections of the oral cavity** then increase dramatically. For bedridden patients, aspiration of bacterial pathogens also increases the **risk of pneumonia.**

The literature suggests that one in ten deaths due to pneumonia in geriatrics could be prevented by regular and thorough oral hygiene. This risk is increasing because more elderly and bedridden patients have at least some of their natural teeth and prevalence of dysphagia increases with age. Periodontal infections also make glycemic control more difficult in diabetes, and there is evidence of a link between periodontal infections and an increased risk of cardiovascular diseases such as stroke. These are also the typical diseases that often affect older adults.

Loose, fractured, and chipped teeth or tooth stumps, as well as ultimately tooth loss and inadequate prosthetic treatments with, for example, pressure points, misfitting clasps, and poor denture retention, along with painful gingivitis and stomatitis lead to a **reduction in chewing force and masticatory efficiency.**

This often leads to a loss of desire to eat and can in turn contribute to **malnutrition, hyposalivation, weakening of the immune system, and greatly reduced well-being.**

The connection of biofilm, calculus, caries, periodontitis, and nonfunctional dentition with general medical and geriatric pathologies with an impaired quality of life shows the classical picture of a **vicious circle.**

The way out of this problematic situation can be identified on the basis of today's knowledge in dentistry and be implemented in Switzerland without delay. What is important here is the awareness that – in the prospect of a possible future onset of dependency – a sustained improvement in the oral health of older adults living in institutions is achieved more easily if those still living at home receive optimal preventive and therapeutic care in dental practices.

The SGZBB oral health model therefore postulates:

Dentistry with all of its specialist personnel should be integrated as part of the interdisciplinary care team in the preventive, curative, and palliative care of elderly people who are dependent on care.

Ensuring the oral health of elderly adults who are dependent on care requires a network comprising a wide range of partners:

- **SPITEX nursing personnel** can assist the daily oral hygiene measures of immobile elderly adults, which requires adequate training as well as continuing education for this task.
- **Nursing personnel** in long-term care facilities requires training and continuing education in oral preventive care. The **LTC management** prepares a care plan that includes mouth and dentures of patients into the basic daily personal hygiene regimen. A patient-oriented oral care requires a dental care prescription.
- **Consulting physicians** are sensitized concerning the problem of oral pathologies and competent to detect them. In particular, they consider the possible oral side effects of polypharmacy in their medical treatment plan. Any medical examination includes an assessment of the oral health and the masticatory function and, where necessary, obtaining a dental care prescription.
- **Dentists** are responsible for the dental care of people who are dependent on care as a part of their general dental practice. At admission to an institution, dentists ideally carry out a dental examination, prescribe a dental care plan, and ensure continuing dental care.
- **Dental hygienists** receive training and continuing education in the area of gerodontology and should support the daily oral hygiene of people who are dependent on care by professional oral hygiene, either on-site or ambulatory. They encourage and instruct the nursing personnel in the practical implementation of daily oral hygiene and act as a link to the dentist.

- **Universities** provide under- and postgraduate training and continuing education in the area of gerodontology. They support research in the domain of gerodontology as well as the effective implementation of the knowledge obtained.
- **Health authorities** monitor patient safety in long-term care facilities and request the necessary health-policy-related professional licenses and reports as stipulated by the Swiss federal law on medical professions as well as the cantonal health legislation. A central aspect is securing liability in the event of damage.

The SGZBB recommends the following dental measures for elderly adults dependent on care:

- A dental examination at the onset of dependency, carried out by a physician and/or dentist including the issue of a dental care prescription as part of the basic care required by the Swiss health insurance act,
- Access to possible emergency treatment as well as subsequent restoration after admission to a long-term care facility or at the onset of dependency as well as recall examinations with intervals tailored to the patient's individual risk,
- Daily oral hygiene carried out by nursing staff and SPITEX nursing personnel, according to the autonomy of the patient,
- Access to professional oral hygiene carried out by dental hygienists.

The dental care of patients dependent on care should, like the dental care provided to children, be integrated into the **health policy framework of the Swiss cantons.**

A "Dental Care in Elders" vade mecum should be written, in analogy to the "Dental Care in Schools" vade mecum. Mirror-inverted to children, the principle of personal responsibility for oral health that currently applies to adults in Switzerland must be reconsidered in the case of limited autonomy.

Swiss Dental Society for disabled and elderly persons (SGZBB) supported by:

- *Swiss Dental Association (SSO)*
- *Swiss Dental Hygienists*