Luc De Visschere

Gerodontology in Belgium

In Belgium, like in many other European countries, demographic changes and a significant increase in the number of disabled older people till 2050 imply that fundamental adjustments will need to be made to the (oral) healthcare system. A national survey reported inadequate oral health in these vulnerable older people. In the long term, the most important future challenge when it comes to oral healthcare policies is to identify older adults before they start to manifest oral health deterioration. Regular dental visits should be strongly promoted by all (oral) healthcare workers, especially for adults aged 55 years or older.

Belgien

Ländername: Belgien
(Koninkrijk België – Royaume de Belgique)
Größe: 30.528 Quadratkilometer
Hauptstadt (Einwohnerzahl): Brüssel (ca. 1,12 Mio.)
Bevölkerung: ca. 11,2 Mio. (Stand 2014), davon ca. 11,2% Ausländer (Stand 2012); 60% Flamen, 40% Wallonen; Wachstum: 0,6%
Landessprachen: Niederländisch, Französisch, Deutsch

Quelle: Auswärtiges Amt (Stand: März 2015)

Demographic evolution

The proportional increase of the aging population is one of the most important recent social developments in the developed world. Strongly driven by advancements in the medical field, the average life expectancy for people in the developed world rises each year. Thus, the Belgian population – as with many other European populations – is becoming increasingly older. By 2020, nearly 20% of the Belgian population will be 65 years or older, and 5.6% will be over 80 years, with the expectation for 2050 being 25.8% and 10.3%, respectively (Table 1). In 2060, there will be approximately 12.5 million people in Belgium, one out of ten (1.25 million) of whom will be 80 years or older. This

Table 1 Prognosis of number and proportions of people of ≥ 65 and ≥ 80 years of age between 2010 and 2060 in Belgium

	2010	2020	2030	2040	2050	2060
Total	10,839,905	11,489,541	11,894,652	12,161,178	12,354,339	12,522,884
≥ 65	1,860,159	2,204,694	2,686,073	3,020,422	3,136,652	3,225,489
≥ 65 (%)	17,16	19,19	22,58	24,84	25,39	25,76
≥ 80	533,148	640,277	772,369	1,039,737	1,254,837	1,291,633
≥ 80 (%)	4,92	5,57	6,49	8,55	10,16	10,31

means that the proportion of individuals of 80 years or older will equal 0.6 million. In fact, within the age group 65 years or older, the oldest group (≥ 80) will increase very rapidly. This is called aging within aging[1]. Together with these demographic changes, a significant increase is expected until 2050 in the number of disabled older people[8]. Both of these striking phenomena imply that fundamental adjustments will need to be made to the (oral) healthcare system, since a higher percentage of older people will mean higher morbidity and care dependency.

Number of dentists

At present, Belgium is not short of dentists. With 81 dentists per 100,000 inhabitants, Belgium is ranked fifth in the world after Greece (127 dentists per 100,000 inhabitants), Iceland (94), Norway (97), Sweden (83), and Germany (77). France follows, with 67, and the Netherlands is next, with 50[17]. The number of dentists in Belgium is controlled by the national government through limiting the number of people admitted into the dental profession. The number was fixed at 140 per year for the 2002 to 2010 period, and 150 for the 2011 to 2013 period[7]. A compulsory entrance examination reduced the yearly intake of dental students to 136 students for 2010[17].

As the Belgian population grows older, so do the dentists, which could result in a shortage of dentists in the future. On 31 December 2011, 83% of male dentists and 60.5% of female dentists in Belgium were 45 years or older[17]. When this group of dentists retires, one can expect that the intake of dentists into the profession will be insufficient to compensate for this loss.

Over the last decade, more female students have enrolled at dental schools, resulting in a gradual feminization of the dental profession in Belgium. On 31 December 2010, 44% of Belgian dentists were female[17]. In a quantitative assessment of male and female career patterns in dentistry, Decaluwe showed that female dentists scored lower than their male counterparts in each career phase. Female dentists reported other goals and other ways of working compared to male dentists, and they paid more attention to preventive dentistry[2].

Education in gerodontology

In Europe and in other developed countries, dentistry courses have not had much geriatric content, which has only been added to the curriculum relatively recently. Several authors have mentioned the need for innovations to the dental curriculum to include geriatric dentistry[9,10-12,14]. Within the limits of the 42% response rate, Preshaw and Mohammad concluded that geriatric dentistry education was integrated into the curricula of European dental schools. Although the education format varied considerably, the range of topics was broad[12]. The same trend was observed regarding geriatric dental education at various dental schools in Belgium, with significant differences among dental schools indicating the lack of a single format of teaching geriatric dentistry in Belgium[4].

Nowadays, Belgian dental schools are reorienting their geriatric dentistry education to include activities that develop positive perceptions towards the elderly, and an empathic, positive, caring attitude. Furthermore, taking the demographic changes in our society into account, a balance between theory and practice needs to exist in geriatric education to properly prepare future dental professionals. A geriatric dentistry course should make students aware of the problematic nature of the oral healthcare of the frail elderly patient, and should prepare students to provide adequate oral healthcare to such patients in terms of knowledge, attitude, ethics, and skills.

Important topics include:

- aspects of geriatric medicine – multiple morbidity and polypharmacy;
- communication skills – the respectful and empathic approach to elderly patients, specifically patients with cognitive disorders;
- logistical aspects – interdisciplinary treatment management of the individual elderly patient;
- organization of a safe environment for the treatment of the elderly patient;
- aspects of accessibility of oral healthcare and providing on-site oral healthcare;
- diagnosis and treatment planning – anamnesis and risk assessment of the elderly patient, patient-oriented treatment planning, the effect of dental status on nutrition status and quality of life;
- therapy and prevention – management of the oral healthcare of the elderly patient, adapted to the treatment needs, demands, and living situation of the elderly;
- palliative oral healthcare; and
- ethical reflection.

Oral healthcare system

In Belgium, the dentist is the only professional educated and trained in the provision of oral healthcare, almost exclusively in private dental practices. Less than 5% of the dental services are hospital-based. Most dentists work alone, without any chairside assistance. Patients pay the dentist and are reimbursed afterwards at approximately 75% for limited preventive, periodontal, restorative, and prosthetic (only removable appliances) care. In contrast to children (≤ 18), no additional reimbursement exists for people of

65 years or older regarding preventive, restorative, or periodontal care, with the exception of prosthetic treatments for patients of 70 years or older. Annual dental visits are no longer reimbursed after the age of 65 years. No complementary reimbursement exists for treatments provided by dentists outside the dental practice[16].

In 2008, 58% of the Belgian population had visited a dentist on average 1.3 times per year[18]. More than eight out of ten people of 65 years or older had at least one dental treatment reimbursed during the period 2002 to 2008. This proportion is the same for older people in all age groups, whether they are living at home or in a nursing home. Less than 7% of dental visits to people's place of abode were reimbursed for people of 65 years or older. This proportion was always significantly higher for older people living in nursing homes compared to their counterparts living at home[13].

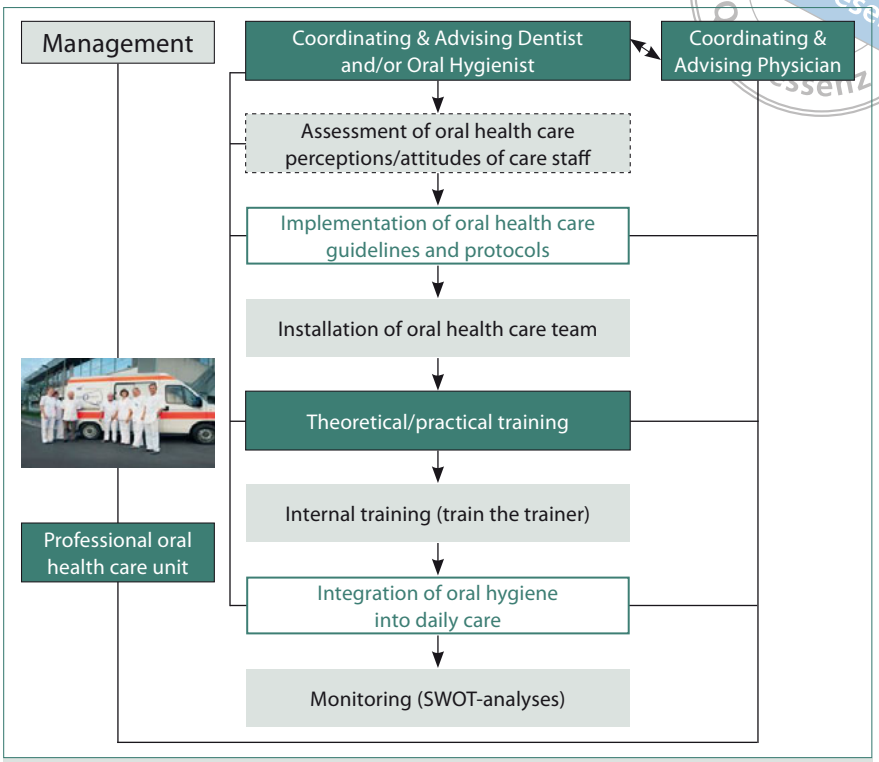

Fig 1 Oral healthcare model to integrate oral healthcare into daily care for residents in nursing homes.

Global oral healthcare plan in Belgium

In many countries worldwide, reports show a growing concern about the oral health of older people. In Belgium, a national survey was conducted in 2010 by the Dental Association (VVT) and the universities of Ghent and Leuven on the oral health of people with special needs (people with disabilities, and frail elderly people). This survey was ordered by the National Institute for Health and Disability Insurance (NIHDI) to monitor the oral health of groups with special needs, including vulnerable older people in all three regions of Belgium (Flanders, Brussels, and Walloon).

This epidemiological cross-sectional study (n = 686) demonstrated a very poor oral health status among elderly people aged 65 years or older. It also showed a high restorative and prosthetic treatment need, with oral hygiene levels that were far from acceptable. The study showed that:

- three out of four individuals living at home and receiving support with domiciliary care still had their natural teeth, while one out of three was the proportion for their counterparts residing in nursing homes;
- one out of three individuals had no occlusal contacts, and recession with exposed root surfaces was observed in 70% of cases;
- nearly 75% of individuals older than 89 years wore a denture in the maxillary jaw, and 50% wore one in the mandibular jaw;
- oral hygiene levels were far from acceptable, with plaque observed in more than 60% of cases, and calculus in more than 50%;
- the mean DMFT was > 20, with a mean D component of 2, and a mean number of missing teeth of 16;
- periodontal disease was reported in more than 85% of individuals; and
- prosthetic treatment need was observed in more than 40% of individuals wearing dentures.

These results emphasize a high need for a global oral healthcare program that includes tailor-made oral health promotion by implementing procedures, protocols, standard practices, and facilities for oral healthcare delivery for all frail elderly people, regardless of their place of residence.

A great need exists for more coordinated, seamless, continuous oral healthcare services, tailored to the actual needs of elderly individuals, both at home and in nursing homes[6,15]. Accordingly, dentists and dental auxiliaries should be encouraged and funded to offer on-site domiciliary oral healthcare. In Belgium, the educating of oral hygienists will be started up in 2015.

New models of oral health services (Fig 1), with the emphasis on prevention, health promotion, and on-site oral healthcare delivery, are real con-

cerns, and need to be brought to the forefront[3]. However, in the long term, the most important future challenge when it comes to oral healthcare policies is to identify older adults before they start to manifest oral health deterioration. Therefore, regular dental visits should be strongly promoted by all (oral) healthcare workers, especially for adults aged 55 years or older.

References

1. Belgium statistics (1998/2004) A division of the Federal Public Service Economy, SMEs, Self-employed and Energy. Available at: http://statbel.fgov.be/figures/d23_nl.asp.
2. Decaluwe F, De Boever JA. Woman and career: an unhappy marriage? A study model: dentistry [in French]. Rev Belge Med Dent (1984) 2002;57:293–313.
3. De Visschere L. The development and application of an oral health care model for institutionalised older people [doctoral thesis]. Ghent: Ghent University, 2010. Available at: http://hdl.handle.net/1854/LU-1085832.
4. De Visschere L, Van Der Putten GJ, de Baat C, Schols J, Vanobbergen J. The impact of undergraduate geriatric dental education on the attitudes of recently graduated dentists towards institutionalised elderly people. Eur J Dent Educ 2009;13:154–161.
5. Federale overheidsdienst, Volksgezondheid, veiligheid van de voedselketen en leefmilieu. Planning van het medisch aanbod in België: tandartsen, Status rapport 2006, health.belgium.be.
6. Hally J, Clarkson JE, Newton JP. Continuing dental care for Highlands elderly: current practice and attitudes of dental practitioners and home supervisors. Gerodontology 2003;20:88–94.
7. Jaarstatistieken Gezondheidsberoepen in Bekgië, aantal beroepsoefenaaars 31/12/2010 en instroom, Brussel, Oktober 2007, www.health.fgov.be.
8. Lafortune G, Balestat G, the Disability Study Expert Group Members. Trends in Severe Disability Among Elderly People: Assessing the Evidence in 12 OECD Countries and the Future Implications. OECD Health Working Papers, 2007. http://www.google.com/search?hl=en&q=OECD+HEALTH+WORKING+PAPERS+2007+disability+&btnG=-Search.
9. Matear D. Why do we need education in geriatric dentistry? J Can Dent Assoc 1998;64:736–738.
10. Nitschke I, Müller F, Ilgner A, Reiber T. Undergraduate teaching in gerodontology in Austria, Switzerland and Germany. Gerodontology 2004;21:123–129.
11. Plasschaert AJM, Holbrook WP, Delap E, Martinez C, Walmsley AD. Profile and Competences for the European Dentist, ADEE, 2004.
12. Preshaw PM, Mohammad AR. Geriatric dentistry education in European dental schools. Eur J Dent Educ 2005;9:73–77.
13. Rapport Pilootproject Mondzorg voor Personen met Bijzondere Noden, RIZIV, 2011.
14. van Waas MAJ. De geriatrische tandheelkunde in het tandheelkundig onderwijs. Ned Tijdschr Tandheelkd 1998;105:362–364.
15. Weening-Verbree L, Huisman-de Waal G, van Dusseldorp L, van Achterberg T, Schoonhoven L. Oral health care in older people in long term care facilities: a systematic review of implementation strategies. Int J Nurs Stud 2013;50:569–582.
16. Widström E, Eaton KA. Oral healthcare systems in the extended European union. Oral Health Prev Dent 2004;2:155–194.
17. http://worldental.org/dentists/most-dentists-per-capita. Organisation for Economic Co-operation and Development (OECD) statistics.
18. his.wiv-isp.be/nl/Gedeelde%20%20documenten/DEC_NL_2008.pdf.

Autor

Prof. Dr. Luc De Visschere
Dental School, Faculty of Medicine
and Health Sciences,
University Ghent, De Pintelaan 185
9000 Belgium
Tel: +32 9 332 69 43
E-Mail: luc.devisschere@ugent.be