

Systems for the Provision of Oral Health Care in the Black Sea Countries

Part 2: Bulgaria

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Abstract

This paper outlines the Bulgarian health insurance system in 2007 and how it funds some aspects of oral health care for the population. It explains which oral health care treatments are funded partly or completely by the National Health Insurance Fund and that most payments for oral health care are made privately by patients themselves. It then describes the Bulgarian oral health care workforce, which includes dentists, dental technicians, and some dental nurses (chair-side assistants), and notes that eight dental specialties are recognised in Bulgaria. Details of the education of dentists, dental specialists, and dental technicians follow. All dental education takes place in public dental schools (Faculties of Dental Medicine). At present, there is no overproduction of new dentists and very few (fewer than 90) dentists who graduated in other countries work in Bulgaria. The paper goes on to give estimates of the national mean DMFT for 12-year-olds and the percentage of 12-year-olds with no active caries. Finally, the author provides an outline of the costs of oral health care in the country.

Key Words: Bulgaria, Oral Health Care System, Dental Workforce, Dental Education

Introduction

This paper is the second in a series that describes the systems for the provision of oral health care in the countries that surround the Black Sea. Unless stated to the contrary, all data quoted in this paper relate to 2007. The data have come from official sources, reported research, and professional media. Some data are estimates.

The Country and Its Health Insurance Scheme

In 2007, the population of Bulgaria was 7,801,273 (52% female). Some 71% of the population is described as urban and the other 29% live in rural areas. The average age of the population is 41.5 years and average life expectancy is 72.7 years. An increase in the population over 60 years of age has taken place, from 21.8% of the population in 2000 to 23.5% in 2007. At the same time, there has been a decrease in the percentage of the population under the age of 18 years (from 19.5% in 2000 to 16.9% in 2007) [1]. The country is divided into 28 districts; each has administrative offices for the Health Information Centre and local insurance fund.

Since 1998, with the passage of a Health Insurance Act (HIA) [2], there has been a statutory health insurance scheme. The model for this scheme is similar to the German Bismarkian model for financing health care, in that there is a single health insurance fund [3]. The National Health Insurance Fund (NHIF) in Bulgaria was founded on 15th March 1999 as an independent public institution with an independent budget, voted by Parliament each year. The NHIF collects, manages, and distributes the funds for health care. Most of the fund is accrued from employers' and employees' monthly contributions. The proportion of the fund accrued from each of these two groups changes from year to year. It was 80% from employers and 20% from employees in the year 2000-2001, 75%:25% in the years 2002-2004, 70%:30% in 2005, 65%:35% in 2006-2007, 60%:40% in 2008, 55%:45% in 2009, and is expected to be 50%:50% in 2010. Employees' contributions have been 6% of their salary, which is deducted from their wages at the same time as social security taxation (for unemployment, pensions, and maternity leave) [4]. However, this year (2009) it has risen to 8%.

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The entire working population of Bulgaria is required to have health insurance with the NHIF. This includes: all Bulgarian citizens who are not citizens of another state; Bulgarian citizens who are also citizens of another state and live permanently within the territory of the Republic of Bulgaria; foreign citizens or people without citizenship who have been allowed a long-term stay in the Republic of Bulgaria, unless otherwise provided by an international agreement to which Bulgaria is a party; people granted refugee status; and those with humanitarian status or with a granted right to refuge [5].

Children below the age of 16 years are entitled to medical aid beyond the scope of the mandatory health insurance. Children accommodated in public institutions for the medically or socially deprived are entitled to medical and social care free of charge [2].

Both doctors and dentists contract individually with the NHIF at a district level. Medical treatment for outpatient care may take place at one of the following locations, all of which have to be registered with the NHIF:

1. Outpatient offices for primary medical care, which may be:

- a) Individual practices for primary medical care.
- b) Group practices for primary medical care.

2. Outpatient offices for specialised medical care, which may be:

- a) Individual practices for specialised medical care.
- b) Group practices for specialised medical care.
- c) Medical centres, dental centres, and combined medical and dental centres.
- d) Diagnostic and consultative centres.

3. Self-sufficient clinical diagnostic and clinical technical laboratories (including dental laboratories) [6].

The budget for the NHIF in 2009 totals 2,472,943,000 Lev (1,236,000,000 Euro) of which 66% comes from health insurance contributions, 33% from central state funds, and 1% from voluntary insurance funds [7,8].

Each year, once an overall contract has been agreed by the Bulgarian Dental Association, the NHIF, and the Minister of Health, both doctors and dentists contract individually with the NHIF at a district level [2]. The NHIF contracts only with dentists working in legally registered practices.

In 2004, approximately 80% of dentists held contracts with the NHIF; of these, 95% of general practitioners worked as individual contractors and 72% of specialists in public service dental centres [9].

The Provision of Oral Health Care

Theoretically, the NHIF covers dentistry. However, oral health care for adults funded by NHIF is limited to one annual routine examination (check-up) and two items of treatment, comprising fillings (amalgam and composite restorations) and/or extractions under local anaesthesia. For children and adolescents under the age of 18 years, treatment may include up to two endodontic treatments, as well as the items that can be provided for adults [5].

Outpatients pay a user fee of 2.2 Lev (1.1 Euro) every time they visit their dentist. In addition, when treated within the NHIF, patients make co-payments to dentists up to 40% of the contracted fees. If treated privately, they pay the whole cost of their treatment.

Certain groups of citizens have been exempt from the user fee. They include: individuals suffering from diseases specified in a list in the National Framework Contract; expectant mothers; children under 18 years of age; the unemployed; the military; war veterans; disabled soldiers; the socially underprivileged; and individuals in social institutions and medical specialists [2].

Dental treatment over and above that detailed in the National Framework Contract can be provided by health care facilities at specialised institutions opened by the Ministry of Health, the Ministry of Education and Science, the Ministry of Labour and Social Policy, the Ministry of Interior and the Ministry of Justice (responsible for health care to prisoners); and at specialised child institutions run by local governments and financed by the respective institutions [10].

In a new strategy for health (2008-2013), special attention is paid to the prevention of oral diseases [7]. This strategy states that full coverage of dental care for children under 18 years should be assured, with the emphasis on prevention. It also states that there should be improved oral health care provision for adults [7].

The Dental Workforce

The number of dentists registered in 2007 was 7834, of which 5092 (65%) were female and 2734

(35%) male. The number of dentists who were actively working was 7641; most of these (90%) worked in individual general dental practices [11]. The remainder worked in the military, for the police dental service, in hospitals, and in universities. The proportion of male dentists is growing; in 1997, it was just under 30%.

About a third of all dental practices are in Sofia, where a recent trend has been for young dentists to work for dental companies as sales personnel prior to or while starting up their practices.

Apart from single-handed practices, there are 216 group practices, 147 specialised individual practices and one specialised group practice, 47 dental centres each with four beds, and 38 medico-dental centres with 18 beds.

In 2007, 135 new dentists graduated from the three dental schools in Bulgaria (Sofia, Varna, and Plovdiv), all of which are publicly funded. There are no private dental schools in Bulgaria and only 90 dentists who worked in Bulgaria had qualified in other countries. The average age of dentists in Bulgaria has risen from 39.7 years in 1997 to 41.7 years in 2008 [12]. At present, there appears to be no risk of overproduction of new dentists.

Eight dental specialties are recognised in Bulgaria. In 2007, the number of specialists was as follows:

General dentistry	1507
Children's dentistry	509
Prosthodontics	306
Oral surgery	186
Orthodontics	62
Community dentistry/ dental public health	28
Periodontics	26
Oral medicine	24
Oral maxillofacial surgeons	24

The specialty of general dentistry stems from an earlier era when all dentists who wished to open a practice had to train and qualify for this "specialty" in order to open a dental practice. The relevant law has been abolished but some older dentists can still claim the specialty [11].

On graduation, there is no vocational training and graduates in dental medicine may register immediately. This registration is administered by the Bulgarian Dental Association (BgDA) through its regional colleges [11].

There are 1422 officially registered dental technicians in 2007 in Bulgaria. All dental laboratories must register with the Ministry of Health [6].

Since 1989, there has been no specific training for dental nurses (chair-side assistants) and their number has dropped from about 6000 to an estimated 3000. Those who originally trained as general care nurses are registered as such. However, there is no register for dental nurses.

There are no clinical dental technicians (denturists), dental hygienists, or dental therapists in Bulgaria.

Dental Education

Dentists train in one of the three public dental schools previously mentioned. The fees are 450 Euro per semester for first and second years of their training and 220 Euro per semester for the following years. The amount paid by individual students is subject to a local decision made each year. Training lasts for five years and six months. The final six months are described as pregraduation practical training [11].

Those who wish to specialise undertake a three-year full-time course, which ends with a state examination. Once this has been passed, they may register as specialists.

Dental technicians undertake a three-year programme at a university and graduate with a Bachelor's degree. The training last for 3240 hours and includes 1275 hours of theoretical, 1365 hours of practical, and 600 hours of pregraduate practice [11]. Technicians are then required to register. All dental laboratories must also be registered [6].

As mentioned previously, since 1989 there has been no organised training for dental nurses (chair-side assistants) [9] and the overall number of dental nurses (chair-side assistants) working in Bulgaria has fallen dramatically since then.

Continuing education (CE) for dentists is mandatory. CE is delivered only by the BgDA or other institutions accredited by the BgDA. A credit system has been introduced and is administered by the BgDA. A minimum of 30 points must be achieved over a three-year period. One point is gained for one-hour's CE. Mandatory CE for dentists in Bulgaria starts from their date of registration. Events that can be accredited for CE include participation or attendance in congresses, symposia, seminars, courses, conferences at in Bulgaria and abroad, as well as publications and lecturing. The system is organised and monitored at regional level [13].

Epidemiology

There have been no comprehensive national epidemiological surveys of oral health. The *Manual of Dental Practice* gives a figure of 3.03 for the national mean DMFT for 12-year-olds in 2002 with the reference OECD [11]. An estimate for this datum in 2007 is 4.8, with 32% of 12-year-olds caries free. The basis for this estimate is the Report of the Bulgarian Dental Association Commission on Prevention (2007) [14]. The authors of a comparative study have recently reported DMF figures for 12-year-old children in Plovdiv of 2.43 in 2005 and 3.09 in 2008. The study reports that the teeth of 24.2% and 19% of 12-year-old children were free of caries in 2005 and 2008, respectively [15].

In 2006, within the NHIF, 358,482 children were examined and received 623,302 fillings. Also in this year, 8284 permanent teeth were extracted from children and 134,740 pulp treatments were provided. The cost of all oral health care for children was 23,000,000 Lev (11,500,000 Euro). Seventy per cent of adult dental patients visited a dentist only because of an emergency or pain [14].

Costs

As mentioned earlier, in 2009 the budget for health care within the NHIF totals 2,472,943,000 Lev (1,236,000,000 Euro), of which 66% comes from health insurance contributions, 33% from central state funds, and 1% from voluntary insurance funds [6, 7].

In addition, the population has to pay for medicines and for many dental services. In 2006, these payments were 1,440,000,000 Lev (770,000,000 Euro). In addition, some limited funds are available for local preventive dentistry schemes such as a milk fluoridation scheme for 30,000 children who attend kindergartens in eight Bulgarian cities [11].

There are no data for private expenditure on dentistry. However, as previously stated, in 2001, on average, 85% of a Bulgarian dentists' income came from private payments and only 15% from the NHIF [11].

It has been reported that the average income from contracted activities with the NHIF remains relatively stable at about 600-700 Lev (300-350 Euro) per dentist per month [9]. It is virtually impossible to ascertain how much income the average Bulgarian dentist earns from private fees.

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