

Oral Health Care Provision Systems in the Black Sea Countries

Part 14: The Republic of Macedonia

Julijana Nikolovska¹

¹PhD, DDS. Docent, Faculty of Dental Medicine, University of St Cyrilus and St Methodius, Skopje, Republic of Macedonia.

Summary

This paper gives an overview of the development of health insurance and some aspects of the oral health care in the Republic of Macedonia since it became independent in 1991. First, it describes the provision of oral health care and treatments funded by the public health care system. The dental educational system and available epidemiological data are then described. Generally, few data are available about the dental workforce in recent years, especially regarding dental epidemiology. There are various specialisations in dentistry recognised in Macedonia, as well as three subspecialisations: implantology, maxillofacial and reconstructive prosthodontics, and prosthodontics for children. One aspect of particular interest is that there are many dental faculties in Macedonia and many dentists, relative to the population and the country's requirements.

Key Words: Republic of Macedonia, Oral Health Care System, Dental Workforce, Dental Education

Introduction

In Macedonia, the necessity for reforms in all sectors, including health care, became apparent at the beginning of the 1990s as a consequence of the financial crisis that beset all former communist countries of Eastern Europe. When redefining the direction and strategy for the health care sector, the most important issue was a clarification of the role of the state and the role of the market in financing and providing the health services. Other issues included the transformation from centrally planned to market-oriented economies, reduction of state investments in the economy, together with the removal of several governmental controls, and extensive decentralisation [1,2].

Many aspects of the existing system were restructured, with the intention of creating an effective oral health care system in Macedonia. Resource allocation was directed to those types of oral health care that were thought to be more cost effective (such as primary health care), reasonable distribution of human resources and clinics, a regulated insurance system and a precise definition of the right to receive publicly funded oral health care, as well as establishing a market economy through the introduction of privately funded oral health care [3].

The Country and Health Insurance System

The Republic of Macedonia is an independent, sovereign and democratic country in the middle part of the Balkan Peninsula in South East Europe. Macedonia is a former Yugoslav Republic and its independence dates from 1991, when parliamentary democracy was established as the political system.

In 2009, the Macedonian population was 2,059,722, 57.8% of whom lived in urban areas. Many rural areas are deserted or their population is over 65 years of age. There have been significant changes in age bands among the population. In the period from 2001 to 2011 the percentage of young people (0-14 years) decreased from 21.5% to 17.2% and the percentage of the population over 65 years increased from 10.5% to 11.8% [4].

The country is administrated in 84 municipalities and the capital is Skopje. Data on ethnic origins from the 2002 census reported that 64.1% of the population identified themselves as Macedonians, 25.17% as Albanians, 3.95% as Turks, 2.66% as Roma, 1.78% as Serbs, 0.84% as Bosnians, 0.48% as Vlachs, and 1.04% others [5].

The per capita gross domestic product (GDP) for 2004 was US\$ 2382. In 2005, the unemploy-

ment rate in Macedonia was 36.5% of the total labour force, placing Macedonia among European countries with an extremely high unemployment rate [6]. According to data from the Macedonian Statistical Institute, the unemployment rate in 2011 was 31.4% [4].

The health system in Macedonia is an insurance-based system and is financed by the Health Insurance Fund (95%), the state budget, and co-payment [7]. The Health Insurance Fund (HIF) pools health insurance contributions from the payrolls (7.5% of gross salary), transfers from the state budget (for the unemployed and beneficiaries of social welfare), and co-payments [8].

The HIF is the main funder of health care in Macedonia. The statutory health insurance system is organised centrally by the HIF with a central office in Skopje and 30 branch offices at municipality level.

The health insurance system offers universal access and according to the Law on Health Insurance there are two types of insurance: mandatory and voluntary (which has not yet been implemented in practice). Mandatory health insurance is established for all the citizens of the Republic of Macedonia for the purpose of providing health services and monetary compensation based on the principles of thoroughness, solidarity, equality and efficient use of funds under conditions determined by this law.

All citizens of Macedonia are covered by the obligatory health insurance system in various categories: those employed in the public or private sectors, retired, students, disabled, and their dependants. The unemployed have the benefits of social care, as do pregnant and nursing women (nine months following the birth of the child) [9].

The Provision of Oral Health Care

With the Law on Health Care of 1991 followed by amendments in 2004 and 2005 the process of privatisation in dental practice was started, especially in the primary health care sector. Dental centres have been divided into two separate entities: primary care and specialist consultative care [10].

In 2005 the privatisation of dental services at primary health care level was completed (only preventive dental services and emergency dental care are still offered in the publicly-owned health centres). Oral health care can be obtained from three types of dental offices (practices): public, private, and those that are under concession.

The HIF negotiates contracts with private general dentists, based on a capitation payment system, and with specialists in prosthodontics, oral surgery and orthodontics. Payments are made monthly to the professional team (dentist, chairside assistant, and technician) [11]. Specialised and consultative oral health care is based upon referral from the selected primary health care dentists.

Apart from contracts with general dentists and specialists, the clinic of the Dental Faculty of the University of St Cyrilus and St Methodius, Skopje, also has a contract with the HIF for the provision of both primary and specialist care.

All insured individuals have the right to select a dentist of their choice for the provision of their primary oral health care.

Dentists who have a contract with the HIF receive 100% of the capitation fees subject to the dentists meeting the targets stated in their contract. These include delivering a pre-agreed number of periodic routine oral examinations, reasonable prescription of treatments, referral of patients where necessary to specialists, and not exceeding an agreed level of absence due to holidays or sick leave. If these targets are not met, the percentage of the payment is decreased [12].

The basic package of benefits covers: routine oral examinations, providing oral hygiene advice, consultations, plaque control, dental plaque removal and preventive treatments (application of topical fluoride and fissure sealants), and removable orthodontic treatment for children.

Insured adults have to pay a part of the costs of: fillings, acrylic dentures, metal crowns, oral surgery (extractions), periodontal treatments, diagnosis and treatment of oral mucosal diseases, endodontic treatment, radiographs, and post and cores.

Metal-ceramic crowns, full-ceramic crowns, metal-based dentures, superstructures on implants, fixed orthodontic appliances, dental implants and periodontal surgery are not covered.

Tertiary oral health care is available at the University Clinic for Maxillofacial Surgery in Skopje and at the Department of Maxillofacial Surgery in Bitola hospital.

The Dental Workforce

In 2010, the number of active dentists registered by the Dental Chamber of Macedonia was 2240. There are various specialists (*Table 1*). In addition, in 2005, there were 1205 dental auxiliaries who were

qualified dental technicians, qualified dental chair-side assistants (dental nurses), and trainee dental technicians and dental chairside assistants. [6].

Table 1. Number of dental specialists in the Republic of Macedonia in 2010 (Source: Dental Chamber)

Paedodontics and preventive dentistry	89
Orthodontics	125
Prosthodontics	140
Oral surgery	78
Specialists in general dentistry	23
Oral maxillofacial surgery	24
Conservative dentistry	7
Endodontics	27

Dental Education

There are three government-financed Faculties of Dental Medicine (Dental Schools) in Macedonia; the oldest is in Skopje, the others are in Tetovo and Shtip. In 2010, only the Dental Faculty in Skopje provided clinical education; the other two provided theoretical education [13]. There is also one privately financed Dental Faculty in Skopje. The students who attend all four dental faculties pay fees; the fees for private one are much higher.

The oldest and the biggest is the public Faculty of Dental Medicine in Skopje. Beside undergraduate courses there are also postgraduate and doctoral programmes. Over the years, 3551 dentists have graduated from the Skopje Dental Faculty, of whom 178 dentists hold a Master of Science degree and 91 a PhD [14].

In 2003 the Skopje Dental Faculty established the first programme for dental technicians (three years, full time). There are also three-year studies for dental chairside assistants [15]. At the end of the studies for both dental technicians and chairside assistants, there is a qualifying examination that is conducted by a commission, established by the Ministry for Health. Those who pass are awarded a diploma as a qualified dental technician or a qualified chairside assistant and are registered in the Register for Health Workers in the Republic of Macedonia

At present, unlike dentists, they are not obliged to follow continuing dental education in order to retain their registration. There is an association for dental technicians in Macedonia and membership is on a voluntary basis.

About 200 students enter the Dental Faculties each year. The duration of undergraduate study is five years and the curricula have been changed to meet the requirements of credit transfer through the Bologna Process.

Each graduate student is granted a diploma as a “Doctor of Dental Medicine”. Following graduation, there is a 12-month period of vocational training. On completion of this period, there is a final examination, which must be passed for independent practice as a general dental practitioner and in order to obtain a work licence. The competent institution for the final state examination is the Dental Chamber of Macedonia.

Continuing professional development is considered obligatory for improving the competence and capabilities of a dentist. The process of compulsory continuing education started a few years ago and many seminars, congresses and courses are organised by the public Faculty of Dental Medicine in Skopje, the Macedonian Dental Association, and other established associations. Participation in continuing professional education is confirmed by the Dental Chamber by awarding points. Dentists should get 20 points each year in order to relicense every seven years. That means attending 2-3 meetings (8-15 points each; lecturers are awarded more points, whereas “passive” attendees earn eight points). Each meeting is usually of 3-4 hours’ duration.

Currently, specialist education takes place only at the public Faculty of Dental Medicine in Skopje. The following specialisations are recognised: orthodontics, paediatric and preventive dentistry, prosthodontics, oral surgery, restorative dentistry and endodontics, periodontics, primary oral health care, and maxillofacial surgery.

There are plans to add the specialisation of oral medicine in near future. There are three subspecialisations in implantology, maxillofacial and reconstructive prosthodontics, and prosthodontics for children.

Epidemiology

According to an epidemiological study that was conducted by the Ministry of Health, in 2007 the national mean DMFT for 12-year-old children was 6.88. The frequency of orthodontics malocclusions was 28% for six-year-old and 48% for 12-year-old children (source: Institute for Public Health).

There is a national preventive strategy for prevention of oral health diseases for children under

14 years of age, which includes milk fluoridation and fissure sealants on first molars [7].

Costs

There are some differences in the official data for the national total health expenditure in the Republic of Macedonia. According to World Health Organization (WHO) estimates, total health expenditure as a percentage of GDP in Macedonia amounted to 6.8% in 2002. This represented a significantly lower figure compared with the most of the other former Yugoslav countries and the European Union [10]. Revenues are rather low and

they correspond to the present level of economic development, with approximately 5% of the GDP spent on health. Within the structure of the total revenues in the budget for health care, only 1.4% is from the state budget, excluding the Government's transfers to the HIF. Average spending in the European region of the WHO was 6.5% of GDP, and 6.4% of GDP for the ten new EU members in 2002 (source: Health for All Database) [6]. According to the World Bank, health expenditure in the Republic of Macedonia as a percentage of GDP amounted to 6.9% in 2009 [16]. There are no data available for the oral health care expenditure.

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