

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

Part 9: Belarus

Tamara Tserakhava¹, Natallia Shakavets², Alyaksandr Smirnoy³

¹ D.D.S., Ph.D. Head of Department of Paediatric Dentistry, Belarusian State Medical University, Minsk, Belarus. ² D.D.S., Ph.D. Associate Professor, Department of Paediatric Dentistry, Belarusian State Medical University, Minsk, Belarus. ³ D.D.S. Dental Administrator, Methodological Department, Ministry of Public Health, Minsk, Belarus.

Abstract

This paper provides a description of the system for the provision of oral health care for the population of Belarus in 2010. It details the organisation of this system and its benefits. It then describes the oral health care workforce and its education and finishes with some information on oral epidemiology and costs of oral care in Belarus.

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

Introduction

This is the ninth of a series of articles that describes systems for providing oral health care in countries of the Black Sea area. Unless otherwise indicated, the data quoted in this paper are derived from the annual report of the Methodical Department of Ministry of Public Health [1].

The Republic of Belarus, has an area of 207,600 km². Its neighbouring countries are

Russia, Ukraine, Poland, Lithuania, and Latvia (Figure 1). Although Belarus does not directly border the Black Sea, it has close connections with Russia and Ukraine and until fairly recently was part of the former Soviet Union. This justifies its inclusion in this series.

The Republic of Belarus is a presidential republic with a president and a National Assembly with two chambers. The country's capital is Minsk.



Figure 1. Map of the Republic of Belarus.

Corresponding author: Tamara Tserakhava, Department of Paediatric Dentistry, Belarusian State Medical University, Minsk, Belarus; e-mail: tsetam@tut.by

It is organised into six regions/districts (Viciebsk, Mahilou, Homiel, Hrodna, Brest, and Minsk) [2]. In 2010, their population was 9,481,193 of whom 4,408,159 (46.5%) were male and 5,073,034 (54.5%) female. Seventy-five per cent of the population lived in urban areas and 25% in rural areas. [3]

Health Insurance System

In Belarus, health care is delivered by a number of providers including state organisations for public health services, private organisations for public health services, individual businesses and other organisations. The Ministry of Health is in charge of organising the health sector through health departments of regional and Minsk city's executive committees [3]. The law on health care dating from 1993 states that public money allocated to health care should not be less than 10% of national income. All citizens of Belarus are entitled to free medical care in state institutions [2].

Health services provide a public health service, development of international cooperation in public health, and development and organisation of government programmes. The public health service is financed by general taxes. The health budget is set by the Ministries of Health and Finance and the tax rate for health care is proposed by these two ministries. Unlike in other European countries, employees are not required to contribute to the health budget [3].

All citizens are entitled to a comprehensive package of free medical care in state institutions. This includes people under 18 years, unemployed people, pregnant and nursing (one year after the birth of a child) females, war veterans, patients with diabetes or tuberculosis, military personnel, and those in prison. Exceptions are drugs for patients undergoing ambulatory treatment, dental treatment (including false teeth), plastic surgery, time spent in health resorts (spas), and some preventive examinations. Parents pay a part of the cost of prescription drugs for their children. However, prescriptions are free for hospital patients. As a result, people try to postpone ambulatory treatment until they are hospitalised [4].

Citizens can buy private health insurance to supplement the state provision and in order to cover services considered to be non-essential. Rural health facilities offer emergency medical services, first-aid and basic care to citizens who live in villages and small towns. Medical staff provide rou-

tine health checks, immunisations, treatment for mild injuries and home visits. Patients requiring complex medical procedures are referred to a hospital.

The medical offices serving larger rural districts are run by doctors. These offices usually have rooms for one overnight hospitalisation and employ nurses, general medical practitioners, a paediatrician, a gynaecologist, and a midwife. Many doctors who work in rural medical centres are recent graduates [5].

The Provision of Oral Health Care

In 2007, 5.844 million of the population of Belarus (just over 60%) visited a dentist at least once during that year. Of these, 28.7% were under 18 years and 71.3% were over 18 years. The population is interested and aware of the need for dental care. In 2007, on average, every citizen visited a dentist 1.5 times during the year [2]. A recent study indicated that 65% of the population of Belarus visited a dentist in 2010 [1].

In 2007 there were 67 state dental clinics [2] at which dental treatment was provided free. Patients have to pay for prosthodontic appliances. Furthermore, nowadays at almost all state clinics if patients want to be treated with modern, aesthetic and expensive materials such as composites, ceramics, and implants, they must pay for them.

Unfortunately, there are no data about the volume of oral health care provided in state clinics and private clinics.

The Dental Workforce

Until the early 1990s, Belarus was part of the Soviet Union. It is therefore unsurprising that the dental workforce and education of dentists, dental technicians, and dental nurses has many similarities with the pattern followed in the Russian Federation. These were described in a previous paper in this series [5].

In 2010, the number of registered dentists was 3577, all of which were active dentists, with 26% working in private practice and 74% for the state [1]. This amounted to one dentist for every 2740 inhabitants.

The number of registered dental technicians in 2010 was 1592 [1]. Belarus does not have any dental hygienists. The number of dental nurses in 2010 was 2988 [1].

In 2007, there was a total of 360 oral surgeons, 114 orthodontists, 622 fixed and removable

prosthodontists, 244 paediatric dentists, 127 general dentists, and 80 oral maxillofacial surgeons. State clinics were run by 189 administrative dentists who worked as heads of departments and deputies (*Table 1*).

Table 1. Number of dental specialists in 2007

Specialty	N
Oral Surgery	360
Orthodontics	114
Periodontology	0
Endodontics	0
Prosthetics	622
Paediatric Dentistry	244
Community Dentistry/Dental Public Health	0
Oral Medicine	0
Oral Radiography	0
Other Specialties (Heads and Deputies of Departments and Clinics)	189
General Dentists	127
Oral Maxillofacial Surgery	80

Dental Education

Between 1997 and 2010, there was only one new dental medical school, the Faculty of Dentistry, located at the Vitebsk State Medical University. However, in 2010, new Faculties of Dentistry were opened and 370 students were admitted for the first time to one of the five medical and dental faculties in the Republic of Belarus (colleges funded by the state).

The education of dentists lasts five years. After graduating, dentists have an 11-month period of probation, during which time they work as a general practitioner (dentist) and perform a full range of clinical dentistry (restorative dentistry, oral surgery, periodontics, prosthodontics, orthodontics, and paediatric dentistry) under the supervision of an approved dentist, who is supervised by the uni-

versity and is visited every two months. After the probationary period, every dentist takes a further examination and is then licensed to work independently. The young dentist then has the opportunity to specialise in a particular field.

Every year, there are a number of training places available for each specialty as follows: orthodontics (3-4 places), oral surgery (10), endodontics and dental therapeutics (105), periodontics (10), fixed and removable prosthodontics (50) and paediatric dentistry (20). For a specialisation in maxillofacial surgery, both medical and dental training is required and 2-3 places are available annually for this (see *Table 2*).

Table 2. Number of training places available annually for each dental specialty

Specialty	N
Orthodontics	3-4
Oral Surgery	10
Endodontics and Dental Therapy	105
Periodontology	10
Prosthetics	50
Paediatric Dentistry	20
Oral Maxillofacial Surgery	2-3

Continuing dental education is required for all dentists and is a minimum of 160 hours every five years.

There are also some “tooth doctors” (*zubnoy vrach*) who have undertaken short three-year courses in medical colleges and provide some dentistry (primary restorative dentistry and prophylaxis) in some regions. It is estimated that there are some 1587 “tooth doctors”. They are not permitted in a number of the larger cities, including Minsk.

Dental technicians and dental nurses train for two years after leaving school in educational institutions accredited by the Ministries of Health and Education.

Table 3. Comparison of data from the two national dental epidemiological surveys for the Belarus population [6-8]

	1998	2009
Children (12 years old)	Mean DMFT=3.8 Caries-free: 10%	Mean DMFT=2.14 Caries-free: 30.6%
Adolescents (15 years old)	Mean DMFT=4.7	Mean DMFT=3.4
Adults (35-44 years old)	DMFT=13.7	DMFT=13.11
Adults (over 65 years old)	DMFT=22.5 Missing teeth: 14.8	DMFT=23.4 Missing teeth: 18.9

Epidemiology

In 2009, a study in the Republic of Belarus showed that 30.6% of 12-year-old children had a DMFT index of zero [6]. Another national study in 2009 showed that the mean DMFT index for 12-year-old children was 2.14 [7]. These data indicate improvements since 1999 (*Table 3*).

Costs

Approximately 5% of gross domestic product is spent annually by the government on health care in Belarus [9]. Unfortunately, it is unclear how much is spent on oral health care. Due to the underdevelopment or lack of insurance systems, private dentistry is not well developed. There are no data on how much is spent on private dentistry.

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