

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

## Part 8: Azerbaijan

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### Abstract

This paper provides a description of some aspects of oral health care for the population of Azerbaijan throughout 2007 and early 2008. It details the oral health care and treatment that is funded by the public health insurance system. It then describes the dental workforce in Azerbaijan, providing data on the numbers of dentists and other dental staff. The following section of the paper gives details of the education of dentists at undergraduate, postgraduate and continuing levels and outlines dental technician training. Finally, the paper gives brief details of oral epidemiological studies that have been performed in Azerbaijan and the numbers of dental clinics.

*Key Words:* Azerbaijan, Oral Health Care System, Dental Workforce, Dental Education

### Introduction

Most of data quoted in this paper are derived from the official statistics of the State Statistical Committee of Azerbaijan [1] and relate to 2007 and the beginning of 2008.

At the beginning of 2008 Azerbaijan had a total population of 8,629,900, of which 50.7% were male and 49.3% were female. Approximately 4,464,800 (51.7%) resided in urban areas and 4,165,100 (48.3%) resided in rural areas [1]. The country is divided into 10 economic zones (comprising 73 territorial regions) and the capital city, Baku (composed of 11 territorial districts).

### Health Insurance

The public insurance system covers the costs of medical services for all citizens of the Republic when they attend public health institutions (as outpatients at local clinics or as in-patients at district/cityhospitals). There are also special health care institutions for certain groups (military, police, justice, transport and other authorities), where the major costs of medical care are covered by the insurance system. In addition, various private organisations and companies run health insurance schemes for their employees.

Apart from public health institutions, there are

also private facilities, where all services, including oral health care, are chargeable directly to the patients concerned unless they have private health insurance.

### Oral Health Care in the Context of Health Insurance System

Theoretically, the public health insurance system covers dentistry. Under this system, the following care is provided to all populations at any residential public clinic where dental services exist or at any specialised paediatric dental clinic: a preliminary consultation and preventive treatment services, including dietary and oral hygiene advice (application of topical fluoride, fissure sealants, preventive fillings); dental radiography (including intra- and extra-oral); conservative treatment (composite fillings); endodontic treatment; periodontal treatment; prosthetic treatment (acrylic dentures, resin crowns, resin with metal crowns); orthodontic treatment (removable and functional orthodontic appliances, fixed orthodontic appliances, space retainers, advice on controlling habits such as thumb-sucking); oral surgery (extractions, alveolar surgery, emergency immobilisation of maxillary and mandibular fractures); and consultations for oral medical problems (such as cancer, ulcers).

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The costs of some prosthetic treatment (ceramic crowns, metal-based dentures, prostheses covering implants), periodontal surgery, and dental implants are not covered.

There are also some self-funded, public (state) dental clinics, as well as private dental clinics and offices (surgeries) where all services are chargeable.

## The Dental Workforce

### Dentists

The number of dentists registered in 2007 and early 2008 was 2522. Most were in active practice. Many dentists working in public (state) clinics also worked part-time in private clinics.

A total of 1200 dentists graduated from the dental school of the state university between 2000 and 2007 (*Figure 1*). There are no official statistics on the number of dentists who graduated from the dental schools of private universities. A potential problem has arisen due to the rapid growth over the

last ten years in the number of dentists graduating from the dental faculties of private universities. However, this problem has been addressed as, since 2007, student admission to the dental schools of private universities has been stopped.

On graduation, dentists are registered by the Ministry of Health.

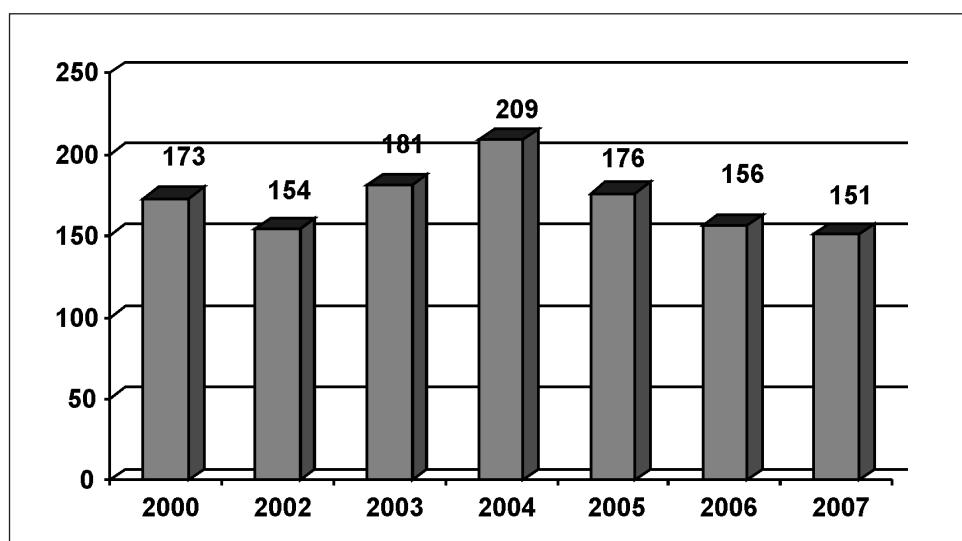
### Dental Technicians

A relatively large number (1497) of dental technicians graduated in Azerbaijan between 2000 and 2007 (*Figure 2*).

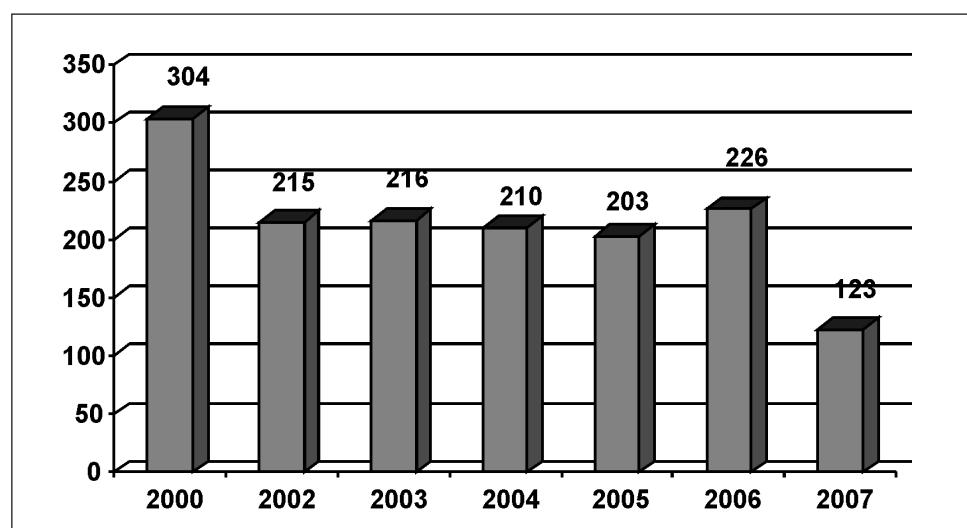
### Dental Nurses

There are no data for the number of dental nurses (chair-side assistants) in Azerbaijan. One estimate is that there may be approximately 1000.

Official data on the numbers of dental technicians and dental nurses in Azerbaijan are not available. Most of them work in private laboratories and private clinics, and not all of them are registered. There are no dental hygienists in Azerbaijan.



**Figure 1.** Number of dentists graduating in Azerbaijan in 2000-2007 from the State University



**Figure 2.** Number of dental technicians graduating in Azerbaijan (2000-2007).

## Dental Education

Dentists train in the Dental Faculty of Azerbaijan Medical University. As explained earlier in this paper, there used to be dental faculties in private universities but these were closed in 2007.

The Government pays the fees of students who have entered the state dental school after gaining the highest marks in their entrance examinations. The remaining 40-50% of students with lower marks pay their own fees. Currently, 150 new dentists graduate each year.

Training lasts for five years. Basic sciences are studied in the first two years. The final three years are devoted to clinical dentistry (the second and third years proceed in parallel with general medicine). There is then a state graduation examination. On graduation, a new dentist receives the diploma of stomatologist (dental doctor). However, before new graduates are allowed to practise independently, they have to complete a one-year internship, pass an examination, and be issued with a certificate.

It is possible to specialise in oral surgery, orthodontics, children's dentistry, and prosthodontics. In order to do so, a two-year clinical residency must be completed. Clinical residencies are offered only by Azerbaijan Medical University.

At present, the university education system in Azerbaijan is undergoing reform and is in transition to the "Bologna System" [2], which is widely used throughout Europe. First-year students have already made the transition. Specialist training is also being re-organised to follow the pattern common in Europe.

Dentists are required to take part in continuing professional education (CPE) and have to complete at least 220 hours every five years. CPE courses are held at the Azerbaijan State Advanced Training Institute for Doctors. During the courses, they are updated on all aspects of their professional practice. In addition, the Dental Association of Azerbaijan plays a major role in raising the professional awareness of dentists. Every year, international confer-

ences, workshops, and training courses are held and the latest developments in dentistry are presented.

Dental technicians used to train for two years. However, since 2010 this period has been extended to three years. Training takes place at the Baku Medical College No. 2. At the end of their education, dental technicians have to pass licensing examinations organised by the Ministry of Health.

There is no special educational programme for dental nurses (chair-side assistants). Their training is theoretical and practical, as with general medical nurses. Like the dental technicians, their training used to last for two years but since 2010 it has been extended to three years. They train at the Baku Medical Colleges No. 1 and No. 2. After graduation, they learn practical dental skills while working in dental clinics.

## Epidemiology

To date, no nationwide epidemiological oral health surveys have been conducted in Azerbaijan. A number of local studies have been organised by the staff of the Dental Medicine Faculty at Azerbaijan Medical University but without any overall plan.

A doctoral thesis, published in 2001, suggested that the prevalence of caries among the child population of Azerbaijan ranged from 79.1% to 92.8%, and the rates of Decayed Missing Filled Teeth (DMFT) and Decayed Filled Teeth (DFT) were reported to be between 1.5-2.2 and 2.4-3.1, respectively [3].

A report published in 2009 suggested that the prevalence of caries among the adult population of Azerbaijan varied between 82.5-100%, and DMFT was estimated to be 7.19-14.0 (depending on the area of residence) [4].

## Oral Health Care Provided

There are data for the number of dental (stomatological) clinics and the percentage of the population that has attended these clinics. These are shown in *Table 1*. In this table, it should be noted that:

**Table 1.** Stomatological aid centres 2000-2007: Stomatological aid rendered

	2000	2002	2003	2004	2005	2006	2007
Number of independent stomatological clinics	49	44	44	44	44	43	37
Number of establishments with stomatological departments (rooms)	685	694	674	665	658	653	666
Percentage of the national population that received stomatological aid	6.7	7.1	7.3	7.4	7.5	7.8	8.1

- Most of independent stomatological clinics are private.
- The term “stomatological aid” implies consultations for oral problems and onward referral of patients to appropriate specialists (oral surgery, fillings, endodontic, periodontal, prosthetic and orthodontic treatment, cancer and so on).

## References

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## Costs

In 2007, 4.3% of the public budget was spent on health care. Due to the largely private nature of much oral health care, no information is available on the precise amount spent on this aspect of health care because it is unknown and is paid directly to dentists (stomatologists) by patients.

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