The healthcare system and the provision of oral healthcare in European Union Member States. Part 6: Poland

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In brief

- Provides an understanding of the health and oral healthcare system in Poland.
- Provides an appreciation of how Polish dentists currently working in the UK were trained and practise in their own country.
- Identifies challenges to improving oral health in Poland.

Poland is one of the largest European countries in terms of area and population. The country's economic situation does not allow for the allocation of sufficient public funds for healthcare in general and oral healthcare in particular. The health policy of the state focuses primarily on prophylaxis and treatment of diseases, directly threatening the health and lives of the inhabitants. Currently, expenditure on oral health accounts for only 2.7% of the public funds allocated to healthcare. In this context, providing oral care financed from public funds at an appropriate level constitutes a challenge for state institutions, centres providing medical and dental services and private practices. Despite difficult financial conditions in Poland, therapeutic and prophylactic programmes are implemented, aimed at improving the oral health of the society, especially children and adolescents, pregnant women and patients with disabilities or developmental disorders such as cleft palate. In Poland, apart from the oral care system financed by the state, there is also an extremely well developed system of private practices and clinics providing clinical services on a commercial basis. In 2014, oral services, financed by the state, were utilised by about 30% of the population of children and youths aged 0–18 years (2,212,792 patients) and about 15% of the adult population (5,026,383 patients). Training of Polish dentists is conducted in ten state-owned universities, from which 700 graduate each year. Dentists work mainly in private practices or medical centres, some of which provide services guaranteed by the public insurer – the National Health Fund. The other dentists find employment in state clinics, hospitals, and universities and their associated clinics. In Poland dentistry is a predominantly female profession and 75% of the just over 40,000 Polish dentists are female. Accession of Poland to the European Union meant that some Polish dentists have taken up employment abroad. It is estimated that the most common destination is the United Kingdom (UK), where 803 Polish dentists were registered, according to the General Dental Council in 2015.

Introduction

Poland is located at the centre of the continent and is one of the largest European countries in terms of area and population. The country has over 38 million inhabitants, which puts it in sixth place, in terms of population, among the countries of the European Union (EU). In 2015, Poles made up about 7.5% of the total population of the 28 EU Member States.

The political and economic changes that have taken place since 1989 have transformed the country into a democratic state, and on 1 May 2004, along with nine other states, it was admitted to the EU. Figures published by Eurostat show that in 2014 the gross domestic product per capita in Poland amounted to 10,700 Euros (£8,500), compared with an average of 27,400 Euros (£21,600) for the 28 EU Member States.[1] As a relatively low cost country, Poland has attracted both medical and dental tourists, most of whom are from Germany, the Scandinavian countries and the United Kingdom or are Poles who are living abroad. The unemployment rate decreased in the period 2002–2014 from about 20% to about 9%.[2] The percentage of people emigrating annually from the country in the period 2002-2014 ranged from 0.1 to 0.9% of the population.[3] The majority of emigrants left for economic reasons, and their destinations were the larger EU Member States.

Among the people leaving the country there have been doctors and dentists, who have the opportunity to work in all EU Member States thanks to the European Training Directives, which give mutual recognition to professional qualifications.[4] According to the register kept by the Polish Dental Council, to date, 975 documents confirming formal qualifications and 1,656 certificates confirming the time of professional practice have been issued to dentists applying for recognition of qualifications in other EU countries.[5] Only 45 documents confirming the dentists concerned to be specialists have been issued.[5]

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Most emigrating dentists have been young. The UK has been one of their target countries and according to the register of General Dental Council (GDC) on 31 December 2015, 803 dentists with Polish certificates were registered to work in the UK,[6] representing one of the largest national groups of foreigners potentially working as dentists in the UK. However, it is possible that the number of Polish dentists working in the UK is smaller because some of them have returned to Poland but are still registered with the GDC or work in the UK under temporary contracts as locums.

Aim

The aim of this paper is to present the oral healthcare system in Poland and to discuss the principles of its operation, the methods of financing and the range of oral healthcare services that are provided.

The healthcare system in Poland

The principles on which the healthcare system in Poland is based are set out in Article 68 of the Polish Constitution. It states that:

- Everyone shall have the right to have his/her health protected
- There should be equal access to healthcare services, financed from public funds, for all Polish citizens and this shall be ensured by public authorities
- The conditions for, and scope of, the provision of services shall be established by statute
- The state should ensure the right to free dental care to all citizens under the conditions and to the extent specified by law, and a full range of services to children, pregnant women, people with disabilities and the elderly. These groups are privileged in the Polish healthcare system.

A decision to introduce universal health insurance was made in 1997. Principles similar to those used in Poland between the two World Wars were reinstated. From the end of World War II, until the early 1990s, healthcare in Poland was organised and financed in a manner which was typical for the countries of the communist bloc, when full responsibility for the health of citizens was taken over by the state. Nowadays society and the individuals need to take on more responsibility for their health, also financial responsibility. The lack of such a sense of responsibility has resulted in insufficient interest in disease prevention and prophylaxis.

Today, the organisation of healthcare is the responsibility of the government and territorial self-government administration.[7] The Parliamentary Act of 27 August 2004 on healthcare services financed from public funds, lists a catalogue of people covered by public health insurance and forms the basis for the calculation of universal health insurance contributions. People without this insurance, but who have Polish citizenship and live in Poland, who are under 18 years of age or are pregnant or nursing mothers, also have the right to healthcare benefits financed from public funds. As do individuals with refugee status, undergraduate and post-graduate students, as well as members of religious orders and alumni of seminaries.

The delivery system for healthcare is based on primary care physicians (doctors). They both treat patients and are gatekeepers for access to specialist treatment.[8] Healthcare from specialists is available on referral from a primary care physician. Specialists to whom patients have direct access include, among others: gynecologists, obstetricians, psychiatrists, oncologists, dermatologists, and dentists.

Besides the universal health insurance, a range of mechanisms to prevent and control infectious diseases are also funded directly from the state budget, for example, compulsory vaccinations.

National Health Fund

The National Health Fund (NHF) began operation in 2004. It has a head office in Warsaw and 16 regional offices, one for each of the provinces. The NHF is a state institution that administers the financial resources generated from the compulsory health insurance, paid by the citizens. The fund finances both medical procedures and reimbursement of the cost of medicines.

The NHF monitors the availability, quality and costs of healthcare, conducts tenders for best prices and concludes contracts for the delivery of health services.[9] The fund is also active in the field of health promotion and coordinates health insurance reimbursements to Poles living in other EU Member States.

Financing healthcare in Poland

The publicly funded health care system in Poland is based on social solidarity. Financing is based on obligatory employers' and workers' monthly contributions equal to 9% of basic salary or other income of employed or self-employed persons. However, it can be no less than 9% of 3,104 PLN (£530) for self-employed persons, including farmers.

The second element, on which the public health system in Poland is based, is contracts for providing health benefits with healthcare providers, both public and non-public. Specialised outpatient-clinic healthcare and inpatient care are financed depending on the number of medical and dental procedures performed (fee for item). In hospitals pricing is based on the system of homogeneous groups of patients.

The NHF contracts with dentists working in both public clinics and private practices. They tender to provide state funded oral healthcare and then negotiations are conducted about treatment and rates, which the NHF pays for clinical procedures.

Every item of treatment is assigned a certain number of points. The doctor or dentist receives a certain number of points each month. As part of the contract, they can perform a greater number of less complex (low-score) procedures or a smaller number of more complex procedures (high-score) each month. The rate, which the fund pays per single point is negotiated whenever a new contract is agreed or when an old one is renewed. The agreement concluded between the fund and the medical centre or dental practice determines the limit for health benefits that may be awarded during a given period.

In Poland, there are many private insurance companies or medical companies from whom individuals can purchase additional insurance packages providing specific dental services.[10] These companies run their own healthcare centres or sign contracts with private or public care providers.

It should be emphasised that it is not possible to co-finance publicly funded dental treatment, that is, the patient is not allowed to pay for the price difference between the treatment provided within the state system and reimbursed by the NHF and similar treatment provided privately.

Benefits from public funds

After the fall of communism, dentistry was the field in which most public services were taken over relatively rapidly by private operators. Today oral care is carried out both by private clinics and dentists working in their own or group practices. There are 7,300 private clinics/practices. As mentioned previously, dentists working in private practice can and

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do contract to provided state (NHF) funded care and treatment. The public dental services or services, subject to supervision by the state, are carried out in ten dental schools, 21 public hospitals and 1,170 public dental clinics.

The clinical procedures reimbursed by the NHF and dental materials to be used are defined in State regulations.[11] All insured persons have the right to conservative treatment of teeth using amalgam or composite, root canal treatment of incisors and canines, removal of calculus, tooth extraction, prosthetic treatment with acrylic dentures (partial or complete), and radiological diagnosis via intra-oral and panoramic images. Nursing and expectant mothers, children and youths under 18 years of age and disabled persons have wider benefits and they are guaranteed full conservative treatment and oral surgery. Dental treatment under general anaesthesia is available to all the young people under 16 years of age and other youths with disabilities

Treatment with removable orthodontic appliances is free of charge for children aged up to 12 years. Orthodontic retention appliances can be provided up to the age of 13 years of age, financed from public funds. As a special benefit light-cured filling materials can be used in the young, if this is justified by medical indications. Children and adolescents with congenital craniofacial defects are covered for full orthodontic treatment with removable and fixed appliances until 18 years of age and, if necessary, after this age. Prosthetic rehabilitation of such patients is financed by the State only for removable dentures. Permanent dentures, including those based on implants must be paid for by patients from their own funds.

Cost of care

In 2012, publicly funded provision of general dental services cost 1,291,573,000 PLN (£222,000,000).

In 2013 a total of 1,773,079,000 PLN (£320,000,000) was spent on publicly funded dental care, which accounted for 2.9% of all funds allocated to healthcare in Poland.[12].

In 2014, 1,729,110,000 PLN (£ 300,000,000) was allocated for publicly funded oral health. Total expenses for dental care in 2014 accounted for 2.7% of all funds allocated to healthcare in Poland.[13]

The State healthcare plan for 2015 allocated 1,799,691,000 PLN (£ 345,000,000) from public funds to be spent on dental care, which will constitute 2.7% of the total state budget allocated to healthcare.[14]

Private dental care

In Poland there are public healthcare clinics that have a signed contract with the NHF and provide commercial services. There are also, private healthcare clinics that have a contract with the NHF and provide commercial services, private healthcare facilities providing purely commercial services, individual private practices providing services within the NHF and commercial services and individual private practices providing only commercial services. Dentists may work in one facility or several facilities with different methods of financing.

However, in spite of this range of options, most dentists working in Poland provide clinical services on a commercial basis in private practices or medical centres.

Private oral care is carried out by large national dental companies, in local dental clinics (centres), and in individual and group dental practices. The prices of oral health services provided privately are not regulated by any legislation, and their level is determined only by market forces. In Poland no data are collected to allow an estimate of funds spent on private oral healthcare to be made.

Use of dental services

In 2014, the oral services, financed by the state, were utilised by about 30% of the population of children and youths aged 0-18 years (2,212,792 patients) and about 15% of the adult population (5,026,383 patients). There are no data on the utilisation of privately funded oral healthcare.

Workforce

For every 10,000 population there were 3.4 dentists with a range from 2.8 to 5.7, depending on the area of the country. According to data, published in 2014 by the Centre for Medical Systems, 40,116 persons had the right to practice dentistry, including 30,973 women and 9,173 men, of whom 591 did not work in the profession. A limited licence to practice, during a mandatory postgraduate internship, was granted to 1,704 individuals. In addition, in 2014, the right to practice in Poland was given to 95 dentists from EU Member States and to 51 dentists from other countries. According to data from 2014, public NHF dental services were provided by 13,056 dentists, including 9,866 women and 3,190 men.

In 2014, in practices (offices) providing NHF funded dental services, there were 2260 dental hygienists as well as 5,238 dental assistants (dental nurses) and 539 dental technicians.[15] In Poland, dental technicians, dental assistants and dental hygienists are not affiliated with the competent chambers or associations, therefore it is not possible to provide the full number of persons working in each profession, other than those working in practices with contracts with the NHF.

Also in 2014, NHF funded dental services for children and youths up to 18 years of age were provided in 8,888 practices, including 664 dental offices located in schools.[15]

In 2015, 11,958 dentists had a specialisation in general dentistry (formerly residency, which is a condition for fellowship) or conservative dentistry with endodontics. There were: 268 maxillofacial surgeons, 1,171 orthodontists, 770 paediatric dentistry specialists, 1,471 prosthodontists, 456 periodontists and 1,856 specialists in dental surgery.[16]

Training and education

Training of dentists

In Poland the undergraduate dental course lasts for five years. Classes total at least 5,000 hours during ten semesters and the number of ECTS (European Credit Transfer System) credit points gained by each student is at least 300 during the course of the studies.[17] During the last three years of the undergraduate course, under the supervision of university teachers, dental students deliver clinical treatment direct to patients. Education takes place in the dental faculties of ten state-owned universities and the total number of students in the academic year 2014/2015 was 3,439 students. The ten medical universities that have dental schools are located in Warsaw, Krakow, Poznan, Wroclaw, Zabrze, Lodz, Lublin, Bialystok, Gdansk and Szczecin. Dental education in English is offered at eight of these dental schools and in the academic year 2015/2016 approximately 700 (13%) of all dental undergraduates in Poland took this option.

On the basis of the Parliamentary Act of 27 July 2005,[18] the Minister of Health in consultation with the Minister of Science and Higher Education determines the number of students that may enter medical and dental schools in Poland. After successfully completing the five year undergraduate course, young dentists have to complete a 12-month postgraduate internship and pass a state examination before they are given a licence to practice. This internship involves both dentistry and medicine. The dental part is divided between clinical disciplines: conservative dentistry, paediatric

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dentistry, periodontics, orthodontics, dental surgery and prosthodontics and the medical part is emergency medicine. In addition, the internship includes training in medical jurisprudence and law and bioethics. Postgraduate internships for doctors and dentists take place in institutions with accreditation. They can be both university hospitals and private dental clinics, which meet the criteria required for the training of young dentists. The District Medical Councils directs doctors and dentists with limited licence to practice for internships. While undertaking a postgraduate internship young dentists receive a basic monthly salary of 2007 PLN (£ 350).

After the 12 month internship, doctors and dentists take the Medical-Dental Final Examination (LDEK), which is a nationwide examination, organised by the Centre for Medical Examinations (CEM), based in Lodz. In order to pass, the dentist must answer correctly at least 56% of the 200 test questions. The examinations are held twice a year. Passing the Final Examination also qualifies the dentists to apply for specialist training. During the qualification procedure the number of points obtained during the postgraduate examination is the only criterion for acceptance for specialist training.

The licence to practice dentistry is issued by a competent district medical chamber for the region concerned to persons who satisfy the following criteria:[19]

- Persons who are Polish citizens or citizens of another Member State of the European Union. However foreigners must have a command of spoken and written Polish to the extent necessary to practice as a doctor or dentist
- Persons who possess: a Doctor of Dental Surgery diploma issued by a Polish higher education institution, confirming the completion of at least five years of study at the Faculty of Medicine and Dentistry or an equivalent qualification from another EU Member State, which meets the requirements of the European training directives
- Persons who have full capacity to perform acts in law
- Persons whose state of health allows them to practice dental profession
- Persons who demonstrate impeccable ethical conduct.

Those who fulfil the above mentioned conditions are granted a licence to practice dentistry by a district medical chamber, on condition that they have completed a postgraduate internship in Poland or have obtained recognition of postgraduate internship acquired outside the territory of the Republic of Poland and have successfully passed the Medical-Dental Final Examination held in the Polish language or in the language in which dental studies are conducted in Polish universities. As mentioned previously, eight Polish medical universities offer a possibility of studying dentistry in the English language.

Dental specialties in Poland

Dentists may specialise in the following areas: maxillofacial surgery, dental surgery, orthodontics, prosthodontics, periodontics, paediatric dentistry, restorative dentistry with endodontics, public health and epidemiology.

Training in public health and dental surgery takes four years and training in maxillofacial surgery six years. In the other specialties training takes three years.

Dentists obtain the title of a specialist after completing specialist training and passing the theoretical and practical parts of the State Specialisation Exam (PES), or after recognition of an equivalent specialist title obtained abroad. The PES is organised twice a year by the Centre for Medical Examinations (CEM).

Continuing professional development (CPD)

According to the Act on professions of physician and dentist (Journal of Laws of 2011. No. 277, item 1634, as amended), a physician and a dentist have the right and obligation to undertake continuing professional development. This includes self-education, participation in postgraduate training courses or specialist training. Constant professional activity is required. Doctors and dentists need to gain 200 education points in a four year period. In the case of courses, seminars and conferences, one hour of classes corresponds to one education point (CPD). The doctor/dentist may gain the number of points set out in the regulations also through publication of a scientific work, obtaining a specialisation or an academic title. The district medical chamber updates the district register of doctors and the equivalent document for dentists.

Training of dental hygienists

Undergraduate studies in dental hygiene can be carried out at medical universities and include both theoretical and clinical studies and various examinations. Completion of undergraduate studies gives the right to continue education in the field of public health and to obtain a master's degree. Two-year dental hygienist education is available to high school graduates.

In 2012 a dental hygienist diploma was issued to 561 individuals, in 2013 to 965 and in 2014 to 1,344 people. According to the relevant regulations,[20] a dental hygienist is licenced to: prepare the surgery and workplace for the dentist; perform administrative activities relating to medical records and running dental practice; perform initial dental examinations and preventive and therapeutic treatments in the oral cavity such as fluoride application, scaling, professional teeth cleaning, taking dental impressions, under dentist's supervision; and performing health promotion activities, both in healthcare centres and beyond, for example, in kindergartens and schools.

Training of dental assistants

Training for dental assistants (dental nurses) takes place over two years at a further education college. Their tasks include preparation of the dentist's workplace, active assistance during dental procedures and activities connected with the patients' records and administration of dental practice. The numbers graduating were 1,929 in 2012, 2,180 in 2013 and 2,570 in 2014.

Training of dental technicians

Dental technicians work preparing prosthetic or orthodontic appliances as prescribed by a dentist and have no right to perform any treatment procedures directly on patients. Training of dental technicians takes place over two-years at further education colleges or at medical universities, where it involves three-year undergraduate studies in dental technology. Similarly to dental hygienists, technicians have the opportunity to continue their education at the graduate level. In 2012, 591 graduated as a dental technician, in 2013, 536 and in 2014 the number was 526. At the same time in 2014, 473 graduates received a bachelor's degree in dental technology.

The Polish Dental Association

The Polish Dental Association organises conferences and courses, during which dentists can improve their professional skills. The Association cooperates closely with the ten medical universities that have

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dental schools. It publishes a number of peer-reviewed scientific journals including the *Journal of Stomatology*, Dental Prosthetics, *Dental and Medical Problems*, *Dental Forum* and *Implantoprosthetics – Clinical Dentistry*. The oldest of them – the *Journal of Stomatology* – has been published continuously for more than 60 years with a monthly circulation of 5,000.

Oral health in Poland

Epidemiology

Dental caries is still a major health problem in Poland. It has many important organisational, economic, educational and social consequences that require appropriate solutions. Another worrying and growing problem in recent years is the polarisation of oral health status, with poorer people having greater health and oral health problems. However, these problems are frequently discussed in the newspapers and radio and television programmes and have been identified as priority topics for research and the development of new systems in healthcare.

Epidemiological studies in specific age groups of children and youngsters, in accordance with the criteria adopted by the World Health Organisation, have been conducted in Poland annually since 1997, at the request of the Ministry of Health under the umbrella of the Monitoring the Oral Health of the Polish Population Program.

In 2012, groups of 6 and 12-year-old children and 18-year-old youths[21] were examined in seven of the 16 Polish provinces.[21] The mean dmft of 6-year-olds was 5.3. This age group also had caries in permanent teeth with a mean DMFT of 0.015. Of the 12-year-olds, only 20.4% were caries free (DMFT = 0), while the average number of teeth affected by caries was 3.5. In approximately 20% of children the mean DMFT was ≥5 and the mean Significant Caries Index (SIC), which only considers the third of a population with the highest caries prevalence, was 7.4. For the other 80% of 12-year-olds, the mean DMFT was 1.7. Only 3.9% of 18-year-old youths were free of dentinal caries (DMFT = 0). The mean DMFT in this age group was 8.0.[21]

Studies conducted in 2014[22] in three provinces showed some improvement, 24% of children aged 12 years were free of caries (DMFT = 0). The average value of DMFT for the same group was 2.8. Among the 18-year-olds, only 6% were free of dentinal caries (DMFT = 0). The mean DMFT was 7.0.

Oral health status in adult population

Studies carried out in 2010, commissioned by the Ministry of Health, showed that in the age group 35–44 years, tooth decay affected virtually all adults (99.9% of respondents) in Poland. The proportion of edentulous persons aged 35–44 years in Poland was 1.5%, and it was twice as high among rural residents compared to people living in cities. The average number of own teeth in this age group in 2009 was 25.3, ranging from about 22 to 28 depending on the region of the country. A full dentition, including third molars, was present in only 5.4% of the examined individuals. 46% of respondents had at least 28 teeth of their own.[23]

The average value of the DMFT index was 16.9 and was higher in the rural than in the urban population. The indicator of conservative treatment of caries (Caries Treatment Index) was relatively high and amounted to 0.76 in this age group. The periodontal status of these people, assessed using the CPI, was healthy (CPI = 0) in nearly a quarter of subjects. Periodontitis (at the CPI 3 level) was present in 13.5% of adults, and 1.3% (CPI = 4) of patients required comprehensive, specialised treatment of periodontitis.[23]

A national survey conducted, a year earlier, in the age group of 65-74 years showed that 43.9% of the study population were edentulous, and the average number of own teeth was 6.6. Only 7.8% of the study population had healthy periodontium.[24]

There have been no comprehensive national epidemiological studies of oral health of adults in Poland.

Public prevention and treatment programmes

Dental prophylaxis is funded nationally by the government, that is, the Ministry of Health and the insurer – the NHF and at a regional level by local government. At national level, preventive oral care is provided for children and adolescents under the age of 18 years. Children and youths were granted the right to additional free prophylactic oral care which is financed from public funds. This care includes: oral hygiene instruction, oral health evaluation, control of oral hygiene, fluoride treatment, assessment of occlusion, orthodontic prophylaxis, assessment of the periodontium and oral mucous membrane and fissure sealing of premolars and molars.[25] The above-mentioned procedures are provided within the framework of services guaranteed by the NHF to patients, who visit a dentist and are assessed as requiring preventive treatment. A study conducted in 2014, in three provinces, showed the presence of fissure sealant on the surface of the teeth in 28% of 12-year-old children. Healthcare for children and youths, who are subject to compulsory school and education, is performed by: primary care doctors, dentists, school nurses, dental hygienists and midwives.

The Minister of Health's regulation provides for cooperation between the school nurse or dental hygienist and the dentist responsible for healthcare of pupils. The range of duties entrusted to the school nurse or dental hygienist includes performing group fluoride prophylaxis with supervised tooth brushing, carried out for 6 - 12-year-olds), six times a year at six weekly intervals.

An analysis of pro-health programmes currently conducted all over the world (USA, Australia, countries of Western Europe) showed that the reduction of tooth decay in the population is affected by the reduction of dental caries in young children aged 0 to 3 years.[26] Numerous reports point out the very important role of oral health promotion directed at pregnant women and mothers of young children (newborns, infants and children at the pre-school age).[26] Actions aimed at improving the oral health of the population should therefore be aimed at increasing health awareness of the pregnant women and mothers of young children. In 2012, a Ministry of Health regulation was introduced on standards and procedures for medical health services for pregnant and nursing mothers and for infant care[27] in which the educational activities for pregnant women included oral healthcare. Among the recommended diagnostic examinations and consultations performed on women during pregnancy, a dental examination was included.

Oral health education for mothers of young children was included in the list of guaranteed services provided by primary care nurses during home (patronage) visits.[27] In order to improve the oral health awareness of the youngest children, a decision was made to introduce a programme of brushing teeth with fluoride toothpaste in children of preschool age.[28] The programme is financed under the Swiss-Polish Cooperation Program in accordance with an agreement signed between Office for Foreign Aid Programmes in Health Care as the intermediary and the Medical University in Poznań as the contractor. The main aim of the project is to reduce the incidence of dental

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caries in children aged 0-5 years. The project includes:

- Promotional activities, that is, creating a website with a forum where experts answer questions, distribution of informative posters, broadcasting TV spots, organising conferences
- Direct educational and prophylactic activities implemented by educators for target groups related to children aged 3–5 years through training for teachers, children and their parents or guardians, equipping children with toothbrushes and toothpaste, distribution of educational films
- Indirect educational and preventive activities implemented for target groups related to children aged 3-5 years through the support of parents or guardians of children through educational and promotional materials, distribution of leaflets, mascots, educational packages, by assigning trained teachers to act on children, providing children with toothbrushes and toothpaste and activities implemented for the target groups related to children aged 0–2 years through training of nurses, midwives and paediatricians.

The project is being implemented throughout the country (in all 16 provinces), in cooperation with the dental school of the Medical University in Poznań and eight other dental schools.. Ultimately, the oral health promotion and prophylactic dental care programme will cover 300,000 children aged 3–5 years, whose parents agreed to their participation. They attend 6,735 kindergartens. In addition, 500,000 adults, including 15,000 teachers and educators, who will be trained in the health promotion, are taking part in the programme. Local administration funds and runs, prophylactic activities such as screening, tooth varnishing with fluorine compounds and tooth sealing.

Changes introduced in recent years

Changes made in the healthcare system for oral health mainly concern reforms in undergraduate education of dentists. The basis for their implementation, which started in the academic year 2012/2013, was established in an Act of Parliament,[29] under which clinical training in dentistry and medicine, which, as decribed previously, is currently conducted during a 12-month postgraduate internship, has been incorporated into undergraduate education. However, the duration of studies will not be extended and will remain at five years. Under the new rules, there is an increased emphasis on clinical work. Postgraduate internship will be organised for the last time for dentists with effect from 1 October 2016. Graduates of medical and dental faculties, who started their studies in the academic year 2012/2013 or in the subsequent years, will not be required to complete postgraduate internships.

Discussion

In Poland, as in many other EU Member States, increasing differences in health status and oral health status of different sections of the population and socio-economic conditions are the reasons why the introduction of a coherent health policy has become a challenge.[30,31] It seems obvious that the introduction of a uniform system of prophylactic and therapeutic measures is a necessary step in the context of the equalisation of living standards between individual EU Member States.

The search for an appropriate strategy to improve the state of oral health in the realities of the Polish healthcare system is particularly difficult when taking into account phenomena such as low awareness of health, as found during studies into monitoring the health of the population, and the negative health behaviours of mothers of children and adults who were surveyed.[32,33] Equally alarming is the low importance oral care has in the Polish state health policy, which is directed mainly at prophylaxis and treatment of serious health problems (directly threatening life and health) such as coronary heart disease, cancer, diabetes, infectious diseases, without fully established aetiopathogenesis, etc. This hierarchy of health problems is the reason why the level of public (state) spending on oral healthcare is relatively low, and the limited number of dentists providing publicly funded dental services focus mainly on repair procedures. This situation may be worsened because of the low level of funding for prophylactic procedures in the range of benefits guaranteed by the NHF, which makes them less likely to be carried out by dentists. This problem is not unique to Poland.

In the Polish situation of low health awareness of the public and generally low preventive awareness of dental professionals (with simultaneous occurrence of high medical needs) there is an imbalance between therapeutic and prophylactic benefits. Adverse health effects occur mainly in children and adolescents with the highest susceptibility to dental caries, as this group does not regularly seek oral healthcare. Inclusion in a public programme for dental caries prevention of children at the highest risk of severe caries, the majority of whom often come from rural areas, small towns and large families, would allow the incidence of dental caries to decrease along with and the need for dental treatment.

It is worth noting that there are a number of positive factors which contribute to improvement of the oral health of the Polish population. The current concept of the importance of involving kindergartens and schools in health and oral health promotion creates favourable opportunities to initiate and implement health programmes in dentistry. Society, especially children and youths, is open to many forms of pro-health influences propagated outside the dental office (mass media, educational programmes in schools, human interactions). They should oblige the individual to take personal care for their own health – including oral health. According to data from 2014, provided by the Monitoring the Oral Health of the Polish Population Programme, more than 90% of Polish 18-year-olds said that having natural and aesthetic teeth is very important, among a number of other elements that make up the lifestyle of the individual.[22] Given the wide availability of the full range of resources to maintain good oral hygiene, it can be hoped that this attitude will result in improvement of oral health of the Polish population in the coming years. Integration into the EU has given and gives more opportunities, including financial, to local authorities to initiate and conduct organised prophylactic and educational activities. It seems necessary, however, to implement a wider use of highly qualified dentists to carry out preventive measures within the framework of national programmes. At the same time it is necessary to extend the duties of dental hygienists and dental assistants so that they include conducting educational and preventive activities. In these fields they can effectively replace dentists, whose skills should be used to treat patients. On a final note, one encouraging sign has been a steady growth of the private sector, providing a full range of dental prophylactic and corrective services can also be observed.

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