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A

Preparing Today for Tomorrow





Despite tough times, companies all over are accelerating plans to implement artificial intelligence (AI). According to a latest *PwC* survey, a quarter of the companies participating report widespread adoption of AI, up from 18% last year. Another 54% are heading there fast. And they have moved way beyond just laying the foundation. Many are reaping rewards from AI right now, in part because it proved to be a highly effective response to the challenges brought about by the COVID-19 crisis. In fact, most of the companies that have fully embraced AI already report seeing major benefits. By the mid-2030s, up to 30% of jobs could be automated, *PwC* predicts. Also, *CBS News* reports machines could replace 40% of the world's workers within 15 to 25 years.

It's indisputable that AI and related technologies will play a significant role in shaping the way we live and work, and businesses will need to adapt moving forward.

We know that AI, and its machine learning subset, is great for traditional HR and recruiting tasks, turning into a real productivity booster. In these cases, AI analyzes millions of data to provide recommendations, match profiles, streamline employee training, and look up company policies and benefits so the HR team can spend more time on high-quality candidate care and the other aspects of their jobs that require human attention.

Using AI for employee retention and internal mobility could serve as a key differentiator for many companies in today's competitive market. AI can assess a worker's certifications, achievements, credentials, and capabilities, helping companies identify career paths for employees who might be outgrowing their current positions. Smart companies will find ways to encourage employees to "self-automate" their own jobs, delegating rote, repetitive tasks to some form of AI or automation, allowing employees more time to reflect on solutions to strategic problems rather than filling out forms. Organizations have to realize that this is the "new normal", and businesses have to make it easier, for their employees, to always be learning

new skills. Afterall, treating chatbots as colleagues may come easier now that we are getting familiar with "ambient intelligence" - homes and cars being watched over by Al-integrated sensors and cameras, smart speakers to control our lights, TVs, and music and order groceries, rides, check bank balances and so on.

Interactions with the technology will become increasingly personalized. Chatbots, for example, will eventually become truly conversational, learning our habits and personalities and even develop personalities of their own. Such systems will detect signs of dementia, sleep disorders, social isolation, falls and poor nutrition, and notify caretakers.

There are seemingly endless ways in which artificial intelligence is beginning to touch our lives, from discovering new materials to new drugs; it has already played a role in the development of Covid-19 vaccines by narrowing the field of possibilities for scientists to search.

Al is as abstract as thought, written in computer code, but people imagine Al embodied in humanoid form. Researchers are working on combining the technologies to create realistic 2D avatars of people who can interact in real time, showing emotion and making context-relevant gestures. Such avatars could help revolutionize education. Researchers are already developing Al tutoring systems that can track student behavior, predict their performance and deliver content and strategies to both improve that performance and prevent students from losing interest.

But don't worry, the fear of super intelligent machines taking over will remain science fiction for a long time to come; perception, social intelligence, innovation, and creativity in machines are far beyond the capabilities of science today... and while the advancement in technology will contribute to the growing number of jobs lost to automation, one thing is for certain: there are still many industries and workflows that need humans. Machines can automate certain behaviors and tasks, but they don't yet have the cognitive skills and critical thinking ability needed to execute subtle or complex actions. Combining artificial and human intelligence in an integrated workflow produces an outcome better than either could independently. It is important to remember that AI is not just about efficiency or automation, it's a catalyst to rethink the entire employee lifecycle so as to create a more human workplace. With the right mindset, both employees and employers will not only survive, but thrive in the AI-driven future of work!

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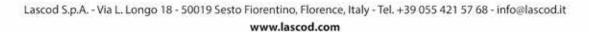














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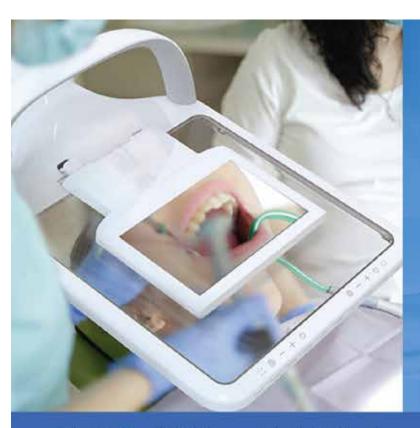
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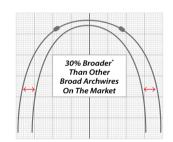
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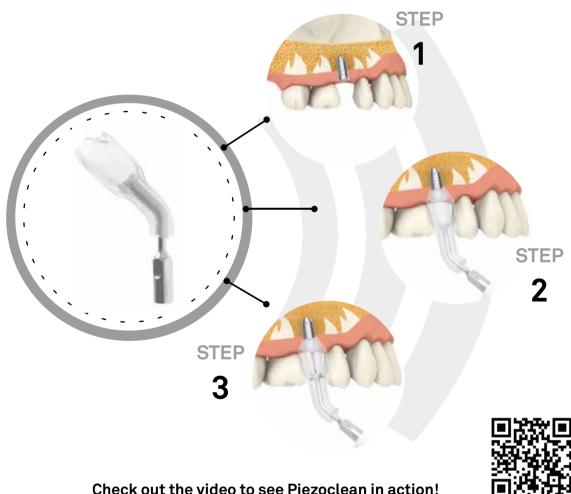


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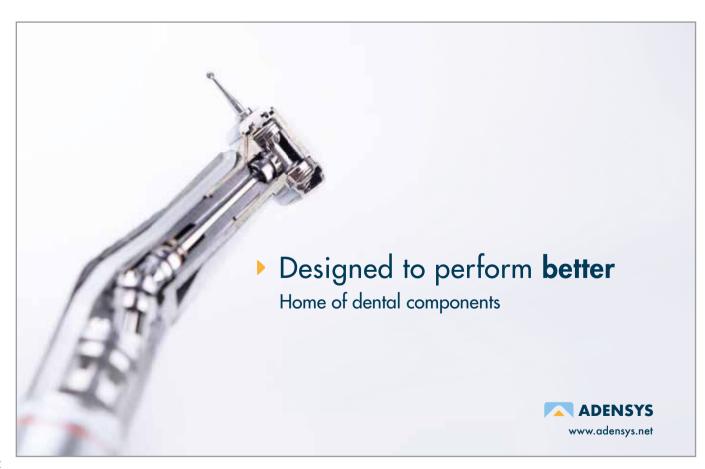
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the preparation of the work.

Height	430 mm
Width	320 mm
Deoth	310 mm
Weight	5,5 kg
Maximum air consumption	90 l/min.
Operating pressure	2 a 5 atm.
LED inside light	

Cabin entirely made of ABS of reduced dimensions maintaining the amplitude in the work area and with a substantial improvement in lighting. They have two mobile micro-blasting nozzles and, in the hopper version, a large sand tank and a 3 mm static gun.

		_
Ref.	080220	080228
Height	330 mm	490 mm
Length	360 mm	360 mm
Width	450 mm	450 mm
Weight	5,7 kg	7,7 kg
Maximum air consumption	80 l/min.	100 l/min.
Operating pressure	2 a 5 atm.	2 a 5 atm.
Interior light LED		

Orión Work box Ref. 080214







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330 mm
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2,6 kg

Weight

Interior light

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sorption determinates a perimplant bone pocket. Long to go the per-implant leads to detachment from the bone component. The current treatment is based of administration of topical/chemical drug therapy and/or topical drug therapy. The treatment with X IMPLANT system aims to attack the biofilm that forms around the implant and

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Author: Silvia Borriello Editorial Director silvia.borriello@infodent.com

An Under Pressure Healthcare System



Poland's healthcare system is keeping most citizens healthy, but there are further improvements necessary for the current system to increase efficiency and reach beyond-average higher standards of health. It may not currently live up to the standards of other western European countries, but it has the potential to improve its healthcare structure to compete with and possibly surpass them in the future, considering its relative economic stability. In pursuit of this goal, Poland is taking steps.

* Purchasing power parity (PPP) is defined as the rate of currency conversion that equalizes the purchasing power of different currencies by eliminating the differences in price levels between countries.

^{**} Percentage of persons living with less than 60 % of median equivalised disposable income. Source: Eurostat Database.

Year 2017	Poland	EU
Share of population over age 65 (%)	16.5	19.4
GDP per capita (EUR PPP*)	20 900	30 000
Relative poverty rate** (%)	15.0	16.9
Unemployment rate	4.9	7.6

In Brief

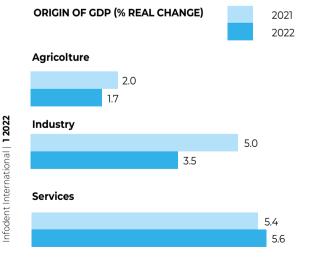
Poland is a European Union (EU) Member State located in Central Europe. With a population of nearly 38.5 million people is the sixth largest population in the EU. As with other countries in Europe, its population is ageing and decreasing. Although the level of GDP has increased over the years, it is still significantly lower than the EU average. In spite of this, Poland's economic ascent has been remarkable. After transitioning from communism, the country's per capita GDP growth was fast and stable, averaging about 4% per year. It moved from middle to high-income status in less than 15 years, providing high standards of living, safety, and economic freedom. as well as free university education and a universal healthcare system. Poland was the only European country to record positive growth in 2008—the year of the global crisis—and to completely avoid a banking sector crisis. Concurrently, the country successfully connected to global and regional markets, while ensuring competition at home.

The well-diversified Polish economy is now among Europe's least affected by the COVID-19 pandemic. Nevertheless, GDP declined by 2.7% in 2020, the first output contraction in over 20 years. Real wage growth and a range of demographically targeted social programs led to robust consumption growth until early 2020. According to forecasts, GDP should rebound for 2022, also supported by the EU's recovery spending, to return

at a similar pre-covid level, bolstered by improving public spending. That said, uncertainty surrounding the pandemic, as well as the country's fragile coalition government, might cloud the outlook.

Healthcare System Overview

The healthcare system that Poland inherited in 1990 from the communist era (the Semashko model) offered universal coverage with a comprehensive program of healthcare benefits distributed through facilities owned and run by the state. Reforms since 1990 included the abolishment of state monopoly in the healthcare sector, the decentralization of ownership and financial and management responsibility to municipalities and regions, the develop-



Source: The Economist Intelligence Unit



Reforms since 1990 included the abolishment of state monopoly in the healthcare sector, the decentralization of ownership and financial and management responsibility to municipalities and regions, the development of a family-doctors model, and the creation of new payment and contracting methods.

Source: Based on Dubas-Jakóbczvk (2017). Notes: * Only includes entities with more than 10 beds. This may not be consistent with other statistics as there is no official definition of "hospital" in Poland. For example, hospitals with fewer than 10 beds and/or having only day care beds are also included in the official register of hospitals.

	NUMBER* OF HOSPITALS	BEDS (NUMBER)	BEDS (%)
Public	600	186,687	87.9
Private	326	25,687	12.1
Total	926	212,374	100.0

ment of a family-doctors model, and the creation of new payment and contracting methods. These lead to a new general obligatory social health insurance system which entered into force on 1 January 1999, marking a radical change from a centrally controlled, budget-based system to a decentralized insurance-based system.

The National Health Fund (NFZ - Narodowy Fundusz Zdrowia,) along with its 16 regional branches, is a state institution that administers the financial resources generated from the compulsory health insurance, paid by the citizens. The fund has responsibility for planning and financing public health services (medical procedures and reimbursement of the cost of medicine). Approximately 91% of Polish receive health benefits financed by the NFZ, through compulsory income-based health insurance premiums deductible from individual income. Citizens are granted equal access to the publicly funded healthcare system. In particular, the government is obliged to provide free healthcare to young children, pregnant women, disabled people, and the elderly, exempted from insurance contributions.

Although the level and structure of healthcare financing have undergone substantial changes in the last 15 years, the share of GDP devoted to health has changed only modestly. At 6.5% in 2017 it is seeing a decreasing trend in recent years, in contrast with EU countries which have seen, on average, an increasing trend (9.8 % aver-

age across the EU). Almost 70% of this spending comes from public sources, a lower share than the EU-28 average (79%). The rest is predominantly paid out-of-pocket by households, primarily for outpatient medicines. At EUR 1,507 per person (PPP), Poland is also among the EU countries with the lowest per capita health expenditure with only Latvia, Romania, Bulgaria, and Croatia ranking lower among EU countries, and this gap does not appear to be closing.

Private healthcare use is very extensive in Poland and plays a much larger role than in most other EU Member States, accounting for approximately 30.8% of current spending on health. Out-of-pocket payments account for the majority of private spending. According to a study conducted by CBOS in 2016, out of 84% patients taking part in the survey, 40% declared use of both private and public health services, 37% use only public healthcare, and 7% use only private health services. 77% of all responders declared using private healthcare is caused by long waiting for public healthcare services.

Health Planning and Organization

Since 2003, healthcare services have been financed, supervised, and controlled by the Ministry of Health, the National Health Fund, and local governments. Governance of the health system is divided between three levels of territorial self-government: the central level, the regional level (voivodship), and the communal level (gminas) with autonomous health-

care administration units (ZOZ). In spite of a well-structured organization, the diversity of competencies and insufficient coordination among the levels obstructs coordination of activities in the public health system. Most public hospitals are owned by the territorial self-governments and the Ministry of Health. The general condition of public hospital infrastructure is poor, and many hospitals struggle to meet the technical and sanitary requirements. In general, availability of specialized medical equipment is lower in Poland compared with the EU averages. Private healthcare provision has developed rapidly over the last years and a number of private companies, mostly located in big cities, have opened facilities for ambulatory and hospital care. Patients are entitled to a choice of any service providers, private or public, registered as approved providers to a health fund. However, patients going to private doctors or hospitals which have no contracts with the fund will be charged the cost of the health services provided.

Healthcare Coverage and Challenges

Executive regulations of the Minister of Health specify lists of guaranteed benefits. The list of guaranteed primary care services, outpatient specialized services and hospital services is comprehensive, while coverage of other services is less generous. Benefits packages for rehabilitation, medical devices and dental

National Health Fund Expenditure on Health by Type of Service (%)

	2005	2017
Primary healthcare	11.0	13.4
Outpatient specialist care	7.1	7.4
Inpatient curative care	44.2	50.7
Psychiatric care and addiction treatment	3.3	3.5
Therapeutic rehabilitation	2.8	3.1
Long-term and hospice care	1.6	2.8
Dental care	2.9	2.3
Health resort treatment	1.0	0.8
First aid and medical transportation	2.9	0.1
Prevention	0.2	0.2
Separately contracted services**	2.6	2.8
Orthopaedic equipment, medical aids and prostheses	1.4	1.3
Reimbursement of pharmaceuticals	19.2	10.8
Cost of services provided abroad	0.1	0.6

Sources: Authors, based on NFZ (2006, 2016b, 2018c). Notes: The state took over financing of emergency services (with the exception of hospital emergency wards) in 2007. **These services are paid for on a fee-for-service basis to ensure that the cost of each provided service is covered by the payer.



Historic Centre of Kraków

of Poland, is situated at the foot of the Royal Wawel Castle. The 13th-century merchants' town has Europe's largest market square and countless medieval houses and atmospheric cobbled streets. It was the first Polish site inscribed on the UNESCO World Heritage List and 10 million tourists visit the city each year. The town's fascinating history is provided by the remnants of the 14th-century fortifications and the medieval site of Kazimierz with its ancient synagogues in the southern part of town, Jagellonian University, and the Gothic cathedral where the kings of Poland were buried.

UNESCO World Heritaae

Number of health professionals working in health care units by profession, 2015–2017

	2017
Medical doctors	88,351
Dentists	13,307
Nurses	183,687
Midwives	22,257
Physiotherapists*	24,421
Medical rescuers	13,900
Laboratory diagnosticians	9,566

Source: CSIOZ (2018b). Notes: Pharmacists are not included since the majority of pharmacists work outside health care units.

* New legislation regarding registration of physiotherapists came into force in 2016 (Act on the Profession of Physiotherapist)

> services are limited due to restrictions in the scope of services or reimbursement. For example, only the most essential dental services are covered. In addition, coverage of some benefits is subject to limitations on their number or frequency (e.g., a dental exam is covered once every 12 months). Certain vulnerable population groups, such as children under 18 and pregnant women, are entitled to a more generous dental benefits package; for example, children under 12 are entitled to orthodontic treatment. Primary care, outpatient specialist care and hospital care within the publicly financed health system are provided free of charge. Patient cost-sharing is present in the area of outpatient medicines, where it is substantial, as well as medical devices, dental services, diagnostic examination, orthopedic devices and aids, and health resort treatment. The share of out-of-pocket payments in health financing is high compared with other EU Member States.

Benefits that are formally guaranteed are not always available in practice. This is due to limits in the NFZ's budget and human resources, leading to limitations in the access to benefits, such as long waiting times for specialist services and resulting in some patients paying for these services out-of-pocket or through voluntary health insurance. Although Poland's healthcare coverage is impressive and provides access to a broad scope of benefits there

are important coverage gaps, most notably for outpatient medicines. resulting in catastrophic spending, particularly for low-income households. The Polish population has one of the lowest life expectancies in Europe (77.8 compared to EU average of 80.9) and unmet medical needs are higher than average rates in the EU, and arise mainly due to long waiting times, but also cost. Organizational problems, politics, underfunding and outdated technology still plague the system. Poland's organizational structure is also incredibly understaffed in physicians, and especially specialists. The government has recently committed to increase the public share of health spending from the low level of 4.6 % of GDP to 6% by 2024 to tackle some of the challenges in the system, such as socioeconomic inequalities in health across educational levels and geographical regions. Shortages of health professionals have become more acute due to migration abroad of nurses and physicians. The main reasons for the decision to move include bureaucracy at work, difficulty in obtaining specialization, and, lastly, financial matters.

Human resources statistics collected by several institutions result in inconsistencies in official statistics however, according to information collected by the national professional chambers, about 567,000 health professionals had the right to practice in Poland in 2017. Out of these, there were 146,000 physicians, 292,000 nurses, 41,300 dentists, 37,700 midwives, 34,800 pharmacists and 16,000 diagnosticians. The numbers of actually practicing healthcare professionals employed in public healthcare units are presented in the table above. The available data does not allow us to say what share of specialists work in ambulatory versus hospital settings and what share work in academia.

Medical Market

The Polish medical equipment market is growing rapidly and in many directions. This is due both to a growing internal market and the companies themselves, which have become increasingly competitive and started to expand to overseas markets. The major export products manufactured by the Polish medical equipment industry include bio-electronic apparatus. About 85% of all medical equipment used in Poland is imported. EU suppliers are leaders in market share due to their competitive prices as well as availability of EU assistance packages for Poland. Poland imports medical equipment primarily from Western Europe, the United States, and Asia (Japan and China). The private market is most active in outpatient care, rehabilitation, and spa/wellness care. It is also the sector with the highest growth rate and purchasing power, mainly in major cities. As Poland is a member of the European Union, import regulations for medical equipment are harmonized with the European Union's Medical Device Directives, which cover essential safety, health, and environmental requirements.



Poland's economic situation does not allow for the allocation of sufficient public funds for healthcare in general and oral healthcare in particular. In such a context, providing oral care financed from public funds, at an appropriate level, constitutes a great challenge for the country.

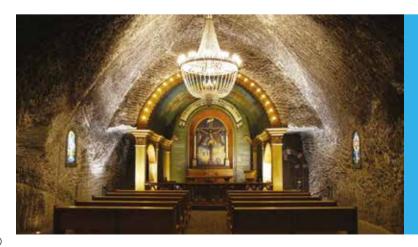
The principles on which the healthcare system in Poland is based are set out in Article 68 of the Polish Constitution stating that all Polish citizens have the right to equal access to healthcare services, financed from public funds and ensured by public authorities. The state should also ensure the 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, thus privileging these groups over general population. Nonetheless, the country's economic situation does not allow for the allocation of sufficient public funds for healthcare in general, and oral healthcare in particular, where expenditure on oral health accounts for only around 2.3-2.7% of the public funds allocated to healthcare.

After the fall of communism, dentistry was the field in which most public services were taken over relatively rapidly by private operators. Today there is a well-developed system of private oral care carried out by large

national dental companies, local dental clinics, and individual and group dental practices. There are around 7.300 private clinics/practices in Poland. Dentists working in private practice may work in one facility or several facilities with different methods of financing, i.e., contract with state funded care (NHF, the National Health Fund), only private practice, or both, However, in spite of this range of options, most dentists provide clinical services on a commercial basis in private practices or medical centers. The prices of oral health services provided privately are not regulated by any legislation, and their level is determined only by market forces; no data are collected to allow an estimate of funds spent on private oral healthcare.

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. The scope of publicly financed dental health services

is very narrow and most dental care financing comes from direct private sources, as oral care is largely excluded from the statutory benefits basket and there is no possibility of extra billing for better quality dental materials. Thus, better dental equipment and better dental materials offered in the private sector are the most common reasons for using private dental services. 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 quaranteed full conservative treatment and oral surgery. Dental treatment under general anesthesia is available to all the young people under 16 years of age and other youths with disabilities. Co-payment regulations have started to be implemented for dental



Wieliczka and Bochnia Royal Salt Mines

The deposit of rock salt in Wieliczka and Bochnia has been mined since the 13th century. This major industrial undertaking has royal status and is the oldest of its type in Europe. Both mines have hundreds of kilometers of galleries, a spectacular chapel often used for weddings or music concerts, rock salt statues and underground lakes.

UNESCO World Heritage



As a relatively low-cost country, Poland has attracted both medical and dental tourists, mostly from Germany, the Scandinavian countries and the United Kingdom, or Poles living abroad.

services where the co-payment may not exceed 50% of the total cost.

As a relatively low-cost country, Poland has attracted both medical and dental tourists, mostly from Germany, the Scandinavian countries and the United Kingdom, or Poles living abroad. 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, with the United Kingdom estimated among the most common destinations.

Workforce and Training

For every 10,000 population there are approximately 3.4 dentists with a range from 2.8 to 5.7, depending on the area of the country. According to data, published in 2017 by the Centre for Medical Systems, 41,300 persons had the right to practice dentistry, 75% of which are female. Public NHF dental services were provided by 13,307 dentists. In Poland, dental technicians, dental assistants, and dental hygienists are not affiliated with the competent chambers or as-

sociations, 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.

Dental education may be obtained at 10 state-owned medical universities. The undergraduate dental course lasts for five years. During the last three years of the undergraduate course, under the supervision of university teachers, dental students deliver clinical treatment direct to patients. 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. On the basis of the Parliamentary Act of 27 July 2005, 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. Dentists may specialize in the following areas: maxillofacial surgery, dental surgery, orthodontics, prosthodontics, periodontics, pediatric dentistry, restorative dentistry with endodontics, public health, and epidemiology. A physician and a dentist have the right and obligation to undertake continuing professional development.

Oral Health

From the end of World War II, until the early 1990s, healthcare in Poland was organized 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. With the introduction of universal health insurance, in 1997, society and the individuals had to start taking on more responsibility for their health. Lack of such a sense of responsibility has resulted in insufficient interest in disease prevention and prophylaxis. Oral services, financed by the state are utilized by about 30% of the population of children and youths aged 0-18 years and only about 15% of the adult population. Dental caries is still a major health problem in Poland. Also, a worrying and growing problem is the polarization of oral health status, with poorer people having greater health and

* Working in practices with contracts with the NHF

Total no. of dentists	41,300
Dentists in public dental services	13,307
No. Public dental clinics	1,170
No. of Private dental practices	7,300
Practicing dentists per 1,000 pop.	0.35
Dental hygienists*	2,260
Dental assistants/dental nurses*	5,238
Dental technicians *	539

Dentists by Specialization, 2015

General dentistry	11,958
Maxillofacial surgeons	268
Orthodontists	1,171
Pediatric dentistry	770
Prosthodontists	1,471
Periodontists	456
Dental surgery	1,856



Old City of Zamość

The southeastern city of Zamość boasts was founded by Polish magnate Jan Zamoyski on the trade route linking western and northern Europe with the Black Sea. Modelled on Italian theories of the 'ideal city' and built by the architect Bernando Morando, a native of Padua, Zamosc is a perfect example of a late-16th-century Renaissance town with buildings that combine Italian and central European architectural traditions.

UNESCO World Heritage

oral health problems, usually among rural residents compared to people living in cities.

Epidemiological studies in specific age groups of children and youngsters have been conducted since 1997 under the umbrella of the Monitoring the Oral Health of the Polish Population Program, by Ministry of Health. Although there has been gradual improvement, in the years, incidence of dental caries in children is very high, the highest amongst most European countries.

Also, studies conducted in 2010, showed that in the age group 35–44 years, tooth decay affected virtually all adults (99.9% of respondents) in Poland. The indicator of conservative treatment of caries was relatively high and amounted to 0.76 in this age

group. The periodontal status of these people was healthy (in nearly a quarter of subjects). Periodontitis was present in 13.5% of adults, and 1.3% of patients required comprehensive, specialized treatment of periodontitis. A national survey conducted, a year earlier, in the age group of 65-74 years showed that only 7.8% of the study population had healthy periodontium. There have been no comprehensive national epidemiological studies of oral health of adults in Poland.

Polish state health policy 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, rather than prevention. This hierarchy of

health problems is the reason the level of public (state) spending on oral healthcare is low, and the limited number of dentists providing publicly funded dental services focus mainly on restorative dentistry. This situation may be worsened by the low level of funding for prophylactic procedures in the range of benefits guaranteed by the NHF, which makes them less likely to be conducted by dentists.

At national level, preventive and prophylactic oral care is provided for children and adolescents under the age of 18 years. 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. Several public programs for pregnant and nursing mothers and for infant care were

Year 2012	Mean dmft	Caries in permanent teeth, mean dmft	Caries Free
6-year-olds	5.3	0.015	
12-year-olds	3.5		20.4%
18-year-olds	8.0		3.9%

Year 2014	Mean dmft	Caries Free
12-year-olds	2.8	24%
18-year-olds	7.0	6%

Year 2010	Average dmft	Edentulous persons	Average no. of own teeth	Full dentition (incl. third molars)
35-44 years	16.9	1.5%	25.3 (2009)	5.4%
65-74 years (2009)		43.9%	6.6	

"

With the introduction of universal health insurance, in 1997, society and the individuals had to start taking on more responsibility for their health.

Lack of such a sense of responsibility has resulted in insufficient interest in disease prevention and prophylaxis.

introduced as well as for preschool age, with the aim to reduce the incidence of dental caries. Nonetheless lack of cooperation and coordination between key institutions and monitoring and prevention of children and young people carried out by primary care and school nurses results ineffective.

Society, especially children and youths, is open to many forms of prohealth influences propagated outside the dental office (mass media, educational programs in schools, human interactions). According to data from 2014, provided by the Monitoring the Oral Health of the Polish Population Program, more than 90% of Polish 18-year-olds said that having natural and aesthetic teeth is particularly important, among a number of other elements that make up the lifestyle of the individual. Integration into the EU has given and gives more opportunities, including financial, to local authorities to initiate and conduct organized prophylactic and educational activities. 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..

The Polish Dental Association

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.

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biuro@pts.net.pl http://www.pts.net.pl

Among main sources (Focus on Poland): -Poland Health Systems in Transition, Vol.21 No.1 2019, European Observatory on Health Systems and Policies

- OECD, The Health Care System in Poland. Economics department working papers no. 257, by Nathalie Girouard and Yutaka Imai.

International Trade Administration,
U.S. Department of Commerce, extracts
from: https://2016.export.gov/industry/health/healthcareresourceguide/
eg_main_108612.asp- Priority Setting in
the Polish Health Care Syste According to
Patients' Perspective, by Anna RybarczykSzwajkowska* and Izabela RydlewskaLiszkowska - https://www.ncbi.nlm.nih.

gov/pmc/articles/PMC7908543/
- An Overview of Healthcare in Poland by Sadat Tashin - https://borgenproject.org/

healthcare-in-poland/ - Portrait of a System Under Pressure https://healthmanagement.org/c/imag-

ing/issuearticle/overview-of-healthcarein-poland
- OECD/European Observatory on Health Systems and Policies (2019), Poland Country Health Profile 2019, State of Health in the EU, OECD Publishing, Paris/European

Observatory on Health Systems and Policies, Brussels
-Malkiewicz, K., Malkiewicz, E., Eaton,
K. et al. The healthcare system and the
provision of oral healthcare in European
Union Member States. Part 6: Poland.
Br Dent J 221. 501–507 (2016). https://doi.

org/10.1038/sj.bdj.2016.780. BDJ (British Dental Journal)

- Children oral health the key challenge for public health in Poland, comparing to European countries, by J Kobza, European Journal of Public Health, Volume 28, Issue suppl_4, November 2018, cky214.128, https://doi.org/10.1093/eurpub/cky214.128, https://academic.oup.com/eurpub/article/28/suppl_4/cky214.128/5187107
 -https://www.worldbank.org/en/country/poland/publication/lessons-from-polandinsights-for-poland
- -https://www.worldbank.org/en/country/poland/overview#1
- -https://www.focus-economics.com/countries/Poland
- -https://www.oecd-ilibrary.org/ sites/75655655-en/index.html?itemId=/ content/component/75655655-en -https://country.eiu.com/poland_econo-

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Centennial Hall, Wrocław

Constructed between 1911-1913 by German architect and urban planner Max Berg, who was appointed the city's senior building official in 1909, when the region was under German rule. The Centennial Hall is a pioneering work of modern engineering and architecture, which exhibits an important interchange of influences in the early 20th century, becoming a key reference in the later development of reinforced concrete structures. The circular concrete building featured the world's largest concrete cupola (67m in diameter), survived World War II, and is still used today as an event and exhibition space.

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An Even Tougher Fight

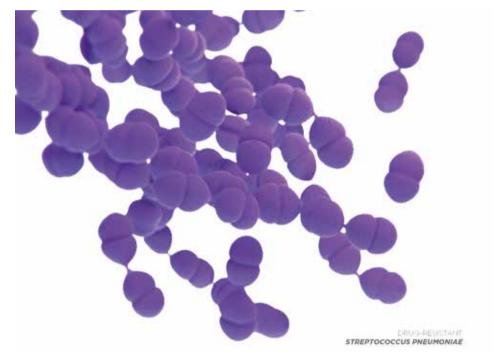


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Even if essential, antibiotics are not the only therapeutic solution to manage persistent infections. In fact, nature provides different solutions that science can make more specific and efficient.

About 3.7 billion years ago, when the earth was uninhabited and devoid of oxygen, there they were. They were there to lay the biochemical foundations of life, tirelessly adapting to the extreme conditions of a planet that had no interest in their survival. Bacteria have always stood out, they have fought with the world around them, and despite the hostile environment, they went beyond simple survival, and created another life. They have produced the oxygen in the atmosphere, making the planet and the life it hosts as it is today.

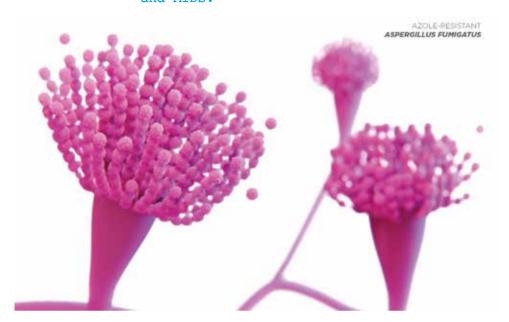
Human beings, as well as almost all living organisms, are strictly dependent on bacteria and their constant work and, in some ways, it can be said that it is all thanks to them, thanks to their adaptive plasticity but, above all, thanks to their ability of having, for billions of years, both protected and passed on their DNA, thus allowing this molecule to express its full biological potential. In short, terrestrial life started through them, continued with them and is, today, dependent on them, so as to guarantee the correct functioning of a planet that is in fact their planet. However, although bacteria as a whole are noble life forms, not all members of this kingdom work for the common good, or at least not from a human point of view. In fact, some of them are opportunistic species that see man as a source of food, nourishment for their own



growth and for their own propagation in the environment, sometimes having the best over the human immune system. And today, nearly a century after the discovery of penicillin, this problem has not been solved. For sure, antibiotics have saved millions of lives

It is only a matter of time before a bacterial species develops resistance to a drug and, once it happens, it is spread to the microbial community through one of the most effective natural gene sharing mechanisms: horizontal gene transfer.

Overall, the phenomenon of infections associated with antibiotic-resistant bacteria constitutes, in Europe, a health problem comparable to the contribution of influenza, tuberculosis and AIDS.



and represent one of the greatest advances that medical science has ever made but bacteria, as already mentioned, have an adaptability that is out of control of science and, above all, out of control of man. For this reason, even the most effective and specific antibiotics are short-lived.

It is only a matter of time before a bacterial species develops resistance to a drug and, once it happens, it is spread to the microbial community through one of the most effective natural gene sharing mechanisms: horizontal gene transfer. Thanks to this genetic sharing system, it is sufficient for a bacterial cell to become resistant to a drug for the new gene to be spread and acquired both inside and outside the bacterial community, giving rise to resistance phenomena even in different microbial species.

In short, it's in their DNA. But it is also in their community. Thousands of individuals communicating with each other, exchanging genetic material, and reacting to all kinds of selective pressure by adapting.

Much of the problem lies right

here; today's society abuses antibiotics; from livestock farms to health facilities, these molecules are used daily in various sectors, creating a selective pressure that effectively stimulates the adaptation of microbial species to this important class of drugs.

SOME NUMBERS

Today, in the United States, there are about 35,000 deaths a year due to infections caused by antibiotic-resistant bacteria which, as statistics collected by the European Antimicrobial Resistance Surveillance Network also show, are on the rise. In fact, in 8 years (2007-2015) the number of deaths associated with Klebsiella pneumoniae resistant to carbapenems and Escherichia coli resistant to third generation cephalosporins has increased by 6 and 4 times, respectively.

Overall, the phenomenon of infections associated with antibiotic-resistant bacteria constitutes, in Europe, a health problem comparable to the contribution of influenza, tuberculosis and AIDS. In short, a rather cumbersome burden that owes

its weight mainly to 6 bacterial species which are overall responsible for about 93% of deaths associated with antibiotic-resistant bacteria.

Among these, the microorganism that, at least according to the Centers for Disease Control and Prevention (CDC) data for the year 2017, has recorded most deaths is MRSA: methicillin-resistant Staphylococcus aureus. This bacterium is quite common both at hospital level and in normal social activities to the point that in hospitals around the world there were (in 2017) over 300,000 infections associated with it, with about 11,000 deaths. Methicillin, for its part, is a beta-lactam used as a last-line drug in the management of strains of S. aureus that had previously developed resistance to penicillin and is, therefore, an antibiotic resistant to the action of lactamases - enzymes produced by some bacterial species to become resistant to a whole range of antibiotics. The fact that S. aureus, just as other bacteria, has developed resistance to a last-line drug, greatly restricts the therapeutic options to adopt in the event of infection, reducing the chances of a patient's survival, and aggravating the burden on the health system.

Another microbial species that, to date, represents a major problem for public health is represented by the *Enterobacteriaceae* family, more specifically the *ESBL-producing Enterobacteriaceae*.

These bacteria, as the acronym summarizes, can produce broad-spectrum lactamases, giving them considerable drug resistance, making it necessary, at times, to use the latest antibiotics such as carbapenems. However, the ever-increasing use of the latter class of antibiotics has led to the development of *Enterobacteriaceae* resistant to them, called: *Carbapenem Resistant Enterobac-*

teriaceae (CRE). In the USA about 200,000 infections associated with ESBL Enterobacteria are recorded while, to a lesser extent, only 13,100 are attributed to CRE with a number of deaths of 9,100 and 1,100 respectively (relative to 2017) but with a constant growing trend.

In fact, in the 5 years between 2012 and 2017 the number of registered infections relating to ESBL Enterobacteria and CRE has undergone an increase of 50% and 11%, respectively.

A third class of microorganisms of considerable importance in the medical field is represented by the **Enterococci**, bacteria which are usually not particularly virulent but intrinsically resistant to many antibiotics. Given their resilience to the microbicidal action of various molecules, it is quite common for this bacterial species to develop resistance to even the most effective antibiotics, and among them, vancomycin is no exception.

Vancomycin Resistant Enterococci (VRE) are a type of enterococci that are particularly virulent and difficult to treat with antibiotic therapies which, in the USA, infect 55,000 people, registering 5,400 deaths.

To conclude this list, two other bacterial species of great health importance should be mentioned: the multidrug-resistant **Pseudomonas** aeruginosa and the drug-resistant Streptococcus pneumoniae. Like the microbial species mentioned above, these bacteria develop resistance to antibiotics quite frequently and quickly, making infections of this type increasingly difficult to manage. If, on one hand, there are almost 33,000 multi-resistant Pseudomonas cases in the world, with about 2,700 deaths; the drug-resistant Streptococcus pneumoniae, on the other hand, recorded about 900,000 infections in 2014, making it the most widespread bacterium among those resistant to antibiotics reported by the CDC. It is also the only bacterium on this list for which a vaccine exists, allowing a drastic spread of this pathogen among children between the ages of 0 and 4.

EXPERIMENTAL ALTERNATIVE THERAPIES

In short, the list is long and, overall, the situation is moving towards a



direction that sees current antibiotic therapies in increasing difficulty and, metaphorically, increasingly up against a wall. But, antibiotics, as essential as they may be, are not the only therapeutic solution to manage persistent infections. In fact, nature provides different solutions that science can make more specific and efficient.

Among the possible options, **bacteriocins** stand out. They are, generally, protein molecules produced and released into the environment, by almost all bacteria, to inhibit growth and limit nutrients competition from other microbial species. These molecules can very often create stable pores on the target cells membrane leading to the collapse of the cell and, more generally, to a greater permeability of the bacterium towards antibiotics, thus making the action of these molecules more efficient.

Some studies have demonstrated that bacteriocins, both alone and in synergistic therapies with antibiotics, such as vancomycin and ruterin, have shown to be effective against difficult pathogens such as MRSA and VRE. In addition, these molecules have high stability, low toxicity and a spectrum of action ranging from wide to narrow; in short, on the whole, they are very versatile and promising molecules in the current healthcare context.

Similarly to bacteriocins, **essential oils** of some medicinal plants also represent an interesting solution. In fact, even in this case, efficacy was observed against bacterial species resistant to antibiotics, such as MRSA, MDR *P. aeruginosa*, VRE, *E. coli* carbapenemases producers and more. As with bacteriocins, the microbicidal action of essential oils has also been studied both individually and in conjunction with various antibiotics,



In short, the list is long and, overall, the situation is moving towards a direction that sees current antibiotic therapies in increasing difficulty and, metaphorically, increasingly up against a wall.

laying the foundations for possible synergistic therapies capable of increasing the sensitivity of bacteria to specific active ingredients.

Two other strategies proposed to solve the problem of antibiotic resistance are based on the direct collaboration between the drug and the host's immune system. The first exploits antibodies, both monoclonal and polyclonal, specific for molecular structures exposed on the bacterial wall (such as lipopolysaccharide (LPS)) with the ultimate aim of increasing the phagocytosis activity operated by the human immune system, thus favoring a positive course of infection. The second strategy, on the other hand, is based on Quorum-sensing inhibitors (QSI), a communication mechanism that allows the bacterial community to activate some transcriptional profiles associated with the expression of genes responsible for antibiotic resistance and, more generally, to greater virulence of the microbial species. In this too, the QSI, by inhibiting bacterial communication and their virulence abilities, collaborate with the patient's immune system to facilitate healing.

To complete the picture of possible alternative therapies to antibiotics, there is one based on the use of bacteria's natural predators: bacteriophages. These phages can infect and quickly kill different types of microorganisms and, due to this ability, they were proposed and used for the first time as possible therapy for bacterial infections in the 1930s. Almost a century later, the research went on and, today, it has been observed how phage therapy can be effective against bacterial strains such as MRSA, VRE and K. Pneumoniae.

In short, in this continuous fight against bacteria, antibiotics are gradually losing ground, but reinforcements are there, and they are also good. Nonetheless, more research is needed to refine techniques and to build therapeutic protocols for a synergistic action of the different antimicrobi-

als, thus leading to the application of low selective pressure strategies. Because, as molecular ecology teaches, the greater the selective pressure of a system, the more the formation of a resistant organism is favored.

Bibliography

[1] Vivas et al.,"Multidrug-Resistant Bacteria and Alternative Methods to Control Them: An Overview", Microbial Drug Resistance, Vol25, N°6 (2019).
[2] https://antibiotic.ecdc.europa.eu/en/publications-data/antibiotic-resistance-increasing-threat-human-health
[3] https://antibiotic.ecdc.europa.eu/en/publications-data/we-work-together-fight-antibiotic-resistance-keeping-europeans-healthy

[4] https://antibiotic.ecdc.europa.eu/en/how-does-antibiotic-resistance-spread [5] https://antibiotic.ecdc.europa.eu/en/publications-data/antimicrobial-resistance-europe-2014

[6] https://antibiotic.ecdc.europa.eu/en/publications-data/growing-resistance-last-line-antibiotics-2013

[7] https://www.cdc.gov/drugresistance/ biggest-threats.html

Pictures taken from "Antibiotic Resistance Threats in the United States" Centers for Disease Control and Prevention, CDC.



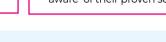
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NOVEMBER

25-30/11/2022



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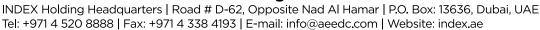




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Infodent International dedicates this section to non-profit social communication. Those whishing to support any of these initiatives can get in touch with them by using the contact details indicated at the end of each article.



Global Dental Relief

From Dental Care to Food Scarcity







While GDR's mission to improve children's health has traditionally been filled by providing dental care, GDR (Global Dental Relief) recognizes that some children in the communities we serve are currently experiencing an even more fundamental health care need due to the COVID-19 pandemic — basic nutrition. This need coincides with a temporary pause in GDR's ability to provide dental care. In commitment to the health of the children in GDR's treatment population, we are dedicated to supporting the children we serve in the form of nutritional assistance rather than dental care until we can fully resume clinic operations.

Children are going hungry — children GDR knows, cares about and is committed to serving. Without proper nutrition, they cannot thrive, their oral health will be affected and their overall health will be damaged. Good dental health begins with proper nutrition. Approximately 20% of the children GDR serves in Guatemala and Nepal are suffering from a shortage of food. These children and their families need emergency help with life sustaining nutrition in order to survive and not suffer irreversible consequences of poor nutrition and starvation. Local partners employed by Global Dental Relief purchase food from distributors. The food is then packaged in boxes by our local partners. Each box includes 5 pounds of beans, 5 pounds of rice, 2 pounds of nutritional supplement powder (to be mixed with water), 2 pounds of corn flour, oil and a vegetable in season. Each box contains enough food to feed a family of five for two weeks.

This vital initiative is designed to feed families in Guatemala and Nepal who, due to the pandemic, do not have sufficient resources to feed their families. Our objectives are:

· Work with GDR local partners in Guatemala and Nepal who will acquire, package and distribute food to families in need.

- Purchase food sufficient to provide complete nutrition to a family of five, bi-weekly, through the end of 2021.
- Distribute the food to families who are experiencing food scarcity and are under GDR's care in dental clinics on a weekly basis.
- Provide work to local partners who are also suffering without an income during the pandemic.

Our first food deliveries in Nepal and Guatemala took place in July 2020. In the last fifteen months, **GDR has provided 1.4 million meals** to children and families in need. We need your help to sustain this program through the end of 2021. Join GDR today in our commitment to provide life sustaining support to families in our care!

These families need us more than ever. **www.globaldentalrelief.org**

About Global Dental Relief

Global Dental Relief (GDR) was founded in 2001 as the Himalayan Dental Relief Project by former Director of Colorado State Parks, Laurie Mathews, and dentist Andrew Holecek. While on sabbatical in Nepal, Laurie and Andrew recognized the desperate need for dental care in a country which, at the time, had 120 dentists for a population approaching 24 million. They knew that if children received early dental care and oral health education, it would change their lives. In 2003, Laurie and Andrew were joined in this effort by adventure travel expert Kim Troggio. She knew that not only local children but also international travelers could be transformed by the experience of providing service in remote communities around the globe. Global Dental Relief's, mission is to bring free dental care to children around the globe, in Nepal, India, Guatemala, Mexico, Kenya, Cambodia, and Kentucky. Teams of volunteer dentists, hygienists, assistants, and general volunteers deliver treatment and preventive care in dental clinics that serve children in schools and remote villages. To date, through their combined efforts, more than 2,600 volunteers have provided over \$35 million in donated care to more than 170,000 children.



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