REVIEW ARTICLE

CONCEPTUAL DIRECTIONS OF THE ORGANIZATION OF DENTAL CARE FOR THE POPULATION OF UKRAINE AND EUROPEAN COUNTRIES

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ABSTRACT

The aim: Conducting a scientific analysis of domestic and foreign sources of information regarding modern conceptual views on the organization of dental care for the population of Ukraine and European countries.

Materials and methods: Used methods of historical-bibliographic and systematic approach. The search for literary sources was carried out in four main scientific databases: Scopus, PubMed, BVS, and Scielo. The review included original articles, research, and official recommendations from medical associations.

Conclusions: Scientific analysis confirmed the expediency of reforming the dental service and substantiated the need to improve dental care as well as the dental care management system to increase medical, social, and economic efficiency.

KEY WORDS: health care, reform, dental facilities per capita, dentists per capita, availability of dental care

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INTRODUCTION

One of the components of the health care system in Ukraine is dental care, the main mission of which is to preserve and restore the dental health of the population and improve the quality of life. Modern conditions for the organization of dental care require fundamentally new approaches to ensuring the quality of services. Given this, the process of reforming the medical industry affected the dental field as well. Prevention implemented within national strategies is a real mechanism for solving global problems related to dental diseases and their risk factors. European and world experience shows that, first of all, it is necessary to rebuild sanitary and educational activities on the model of economically developed countries. Using the example of some European countries, let us try to highlight some conceptual directions of the organization of dental care for the population.

THE AIM

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MATERIALS AND METHODS

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REVIEW AND DISCUSSION

During three decades, the political vector of the state's development, economy, and Ukrainian society changed. The main basis for the development of the health care system of the population of Ukraine is the implementation of the main provisions of the Constitution and laws of Ukraine regarding the provision of affordable qualified medical care to every citizen of Ukraine. The last ten years were characterized by radical processes of healthcare transformation, the introduction of new mechanisms of funding and management of the industry, capable of providing medical care for all citizens of Ukraine at the level of developed European states and patient-oriented [1-4]

Significant changes also took place in the dental field. The dynamic development of dentistry, innovative

technologies, and their implementation in practical health care [5], on the one hand, the increase in patient requirements for the aesthetic component of dental services focused on high-value technologies, on the other hand, all this led to a situation where the state was unable to fully finance the dental industry.

Analyzing the scientific sources of European countries, it can be stated that the global practice of providing dental care to the population is developing at an active pace in the direction of attracting patients to pay for dental services. In most European countries, national systems of dental care consist of three components: private, public, and insurance. In the economically developed countries of the world, there are two models of health insurance: Bismarck and Beveridge. Compulsory insurance programs of 28 countries of the world include the provision of dental services in various volumes, mainly preventive and treatment of uncomplicated caries [6-8]

In the countries of Western Europe, quality assurance standards developed following ISO 9001 and 9002 [9] began to be widely implemented in health care. In the developed countries of the world, dental service consumes approximately 6-8% or more of all financial resources of the health care system (in Ukraine, less than 2%). Dental care in Western countries is largely based on preventive work. Dental care is associated with large financial costs.

The system of medical care in European countries should be considered considering the social characteristics, the economic policy of the state, and entrepreneurship in the largest countries of Western Europe - Germany, France, Italy, as well as Sweden and Switzerland. The specificity of the European model as a whole lies in the fact that post-war European capitalism managed to transform its political, economic, and social institutions in the direction of creating a socially oriented, economically efficient version of a mixed economy. The most important principle of the European model is «democratic evolutionism» - a gradual, step-by-step solution to problems arising in the process of global changes, based on negotiations and consensus.

At the end of the last century, there were reforms in dentistry in the Netherlands, Great Britain, Germany, and Sweden, which were aimed at introducing elements of market relations into the interaction between subjects of public health care [10].

This ideology also played an important role in reforming dentistry in Spain, Italy, Israel, Finland, Norway, and New Zealand [6, 9, 11, 12]. The essence of the proposed new principles for the organization of public financing of the health care system was reduced to three key provisions: separation of functions of buyers and producers of medical services; competition of producers; buyer competition. In the late 1980s, standards were developed that are now used in the certification of quality assurance systems. Quality assurance, under ISO 9001 and 9002 standards, should ensure appropriate trust between the manufacturer of goods and services and the client [9, 13]. Since the mid-1990s, this system has been widely implemented in medicine and health care in Western European countries. The development of national health care and medical insurance programs in various European countries is dialectically interconnected with the political, social, and economic conditions that have developed in these countries [9, 14, 15]. Programs differ in the main sources of funding and forms of ownership (state, public, private), insurance conditions, the list and volume of medical services provided within the limits of this program, organizational forms of their provision, and other parameters. Management of funds is controlled by state structures. The difference between the formation of budgetary and social insurance funds lies in their target orientation. Insurance funds are aimed at a certain circle of people who participate in the insurance program. As a result, contributions come from three main sources: the state, entrepreneurs, and workers (these contributions go directly to healthcare needs and are used purposefully) [9]. The targeted nature of funding allows for a more flexible response to changing public needs by making appropriate adjustments to the targeted health insurance taxation system. Another advantage of the health insurance system is the decentralization of financial management, which contributes to the strengthening of the local healthcare resource base [11].

In European countries, approximately 6-8% of the national budget of the health care system is currently spent on dental care, and a total of about 420,000 dentists and at least as many auxiliary medical personnel work in dental services. The main features of European dentistry include the availability of dental services and the quality of services, the integration of dental and general health care services, the rational basis of dental care, the use of the team method of work in dental services, high-tech dental office equipment and its use, sociological research and prevention among the population. However, the differences in the availability of medical care, the levels of coverage of the population by medical insurance, the conditions for the provision of medical services, and the types of insurance programs are quite significant. Thus, compulsory insurance programs in 28 countries of the world (Germany, England, Italy, Belgium, the United States of America, Holland,

Finland, Denmark, etc.) include in various volumes the provision of dental services, mainly preventive and treatment of uncomplicated caries [9, 16-18].

Dentistry in Germany is among the best in the world and is one of the most developed areas of medical care in the country. Dentistry in Germany is characterized by an individual approach to the patient and the use of the latest achievements of technical and scientific progress [19], which attracts patients from many countries. Comprehensive consultations, accurate diagnosis, effective prevention and treatment of dental diseases, aesthetic dentistry, dental implants, and prosthetics - dentistry in Germany provides all types of dental services. German dentistry pays special attention to issues of prevention and preservation of dental health from an early age [6, 20]. In Germany, there are two systems of health insurance: mandatory and private (voluntary), respectively, there are two lists of dental services with estimated indicators of labor intensity and cost. The list of compulsory health insurance is contained in the Tariff Agreement (Bewertungsmasstab fuer die vertragsaerztlichen Leistungen). The general list of dental services, which are paid from the personal funds of citizens or voluntary insurance, is given in the Regulations on tariffs for dentists (Gebuehrenordnung fuer Zahnaerzte - GOZ). Today, at the expense of compulsory health insurance (OMS), German hospital funds, a full spectrum of dental orthopedic care. The list includes 31 positions on prosthetics (not including other dental manipulations, for example, examination methods, control measures, anesthesia, periodontal examination, etc.) [6].

The main methods used in treatment in a German dental clinic are:

- stomatological prevention of diseases of the oral cavity;
- cosmetic dentistry;
- prosthetics (including the use of implants);
- use of bone tissue augmentation methods;
- computer three-dimensional radiography.

Germany, a country with traditionally strong state power, started developing and implementing public-private partnership projects relatively late. Only since 2002, the public-private partnership market has been actively developing there, providing increased efficiency in the use of budget funds, and allowing the creation of new objects of social, economic, environmental, and informational infrastructure.

Dentistry in Italy, as a professional specialization, exists within one of the general divisions of medicine. This explains the absence of a separate dental service in the country. According to statistics, out of 48 thousand doctors in this country, approximately 10 thousand specialists provide full-time dental care. In addition to them, about 2 thousand dentists work part-time. The professional training of doctors in this specialization consists in completing 3-year courses after receiving a diploma in a general medical specialty. This is a mandatory condition for practicing dentists who have valid contracts in hospitals and other medical institutions belonging to the social security structure. The provision of dental care in Italy is mainly carried out on a paid basis at non-subsidized rates. From the funds of social insurance funds, patients are reimbursed:

- 1/3 of the cost of medical services for tooth extraction and caries treatment;
- 1/3 of the cost of dental filling medical services;
- 1/4 of the cost of dental prosthetics.

In the north of Italy, which is considered to be a more economically developed region of the country, the supply of dentists is higher than the national average. This is explained by the fact that in the center and north of the country, there is a much larger number of large cities with a population of 1 million or more. The phenomenon of economic development also determines higher tariffs for dental services, which are on average 20% higher in the north than in the south of the country. The first Italian experience of attracting private capital to provide services in the social sphere dates to 1923, when the first law on concessions was issued, and in the field of health care, the first projects started in 1998. Already in 1999, several projects were introduced to attract private investment in health care with the help of public-private partnerships for approximately 6 billion euros. This allowed Italy to take 3rd place in the world in terms of investment in health care after Great Britain and Canada [21]. In Italy, about 50 public-private partnership projects for large hospitals and homes for the elderly have already been signed or are in the preparatory stage. 30 of them refer to the creation of medical centers with 600 beds or more for a total of 3.5 billion euros [21]. Following Italian legislation, which does not conflict with EU legislation, public-private partnerships can be implemented in three forms:

1) concessions within the framework of a public initiative;
2) concessions within the framework of the private sector initiative;
3) concessions for service contracts that do not include large objects.

In Switzerland, the dental care system is similar to the German one. It includes health funds, voluntary health insurance, accident, and disability insurance. Hospital funds, in various cases determined by law, bear full or partial costs of providing dental orthopedic care. The public-private partnership in Switzerland has a clearly expressed focus - the satisfaction of the state interest

[22]. For certain categories of the population, the costs of necessary dental treatment are compensated (partially or completely) by social insurance. In Switzerland, in Basel, drinking water is fluoridated and pediatricians prescribe sodium fluoride tablets to children according to indications [22]. In France, industrial enterprises, municipalities, social security organizations, and various mutual funds (for example, funds organized by students or civil servants) have private or public dispensaries [9]. A patient insured in the social insurance system can choose a dentist and type of treatment. In addition to social security contributions, the French themselves pay 30% of the dentist's fee. Fees paid to dentists provide regular and comprehensive care to the entire population; groups that need special attention are not highlighted. The benefits for the private and public sectors from the use of the specified public-private partnership mechanisms are as follows:

- for the private sector: receiving a guaranteed income during the entire duration of the project for the provision of services ordered by the state, as well as expanding the boundaries of its activity;
- for the public sector: improvement of the «price-quality» ratio of the project implementation, compared to the traditional way of its implementation by the state (through a state order), as well as a reduction of the fiscal burden on the state budget due to the distribution of payments (if they are foreseen) for the implementation of the project to the private sector for a long period.

In France, public-private partnership projects are also successfully used in the practice of building healthcare facilities. Thus, the project of the clinical center «Sud-Francillen» was transferred to a large construction and concession group in France. The contract was concluded as a result of a competitive struggle, during which Elqafé won the contract over its main competitors - other French companies, thanks to the existing experience of participating in the implementation of public-private partnership projects in France. The agreement on the creation of the project and the construction of the clinical center «Sud-Francillen» is an example that contributes to the partnership process as a whole. In Europe, as a result of joint activities, in the course of long discussions, the basis of the model was developed, which is called the system of balanced indicators. The approach to the management of dental organizations involves the selection of at least two fundamental problems: improvement of dental care itself; improvement of the dental care management system [23].

The improvement of dental care is inextricably linked with the introduction of new dental medical technologies, the improvement of professional training of the medical staff of dental organizations, and the improvement of the quality of dental care, controlled through the system of standards in dentistry.

Improving the management system of dental care for the population relates to the introduction of advanced management technologies capable of providing the necessary information for analyzing the activities of a dental organization in four main aspects: «medical care», «personnel», «patients» and «finances». The choice of management decision is related to the choice of innovative medical technologies that meet medical, economic, and social criteria.

Investment models of joint participation of the state and the private sector in the field of health care have different forms. In some countries, the main emphasis is on investments in the creation of new infrastructure facilities, and in others - on improving the efficiency of existing ones [24-26].

From all the variety of public-private partnership models that exist in the world, the following main ones can be singled out [27]. Franchising - a private company enters a contract with a state or municipal customer for the management and operation of an existing healthcare facility. The private partner invests in the equipment of the health care facility, its equipment, and vehicles, ensuring the return on the invested investment and obtaining profit due to the efficient operation of the facilities [28-29].

No state in Europe fully provides the population with high-quality and modern dental care at the expense of the budget and is not able to allocate the necessary funds for modern dental equipment, technologies, and materials for the treatment (prevention) of dental diseases in the population.

The main features of European dental care include the availability and quality of dental care, the integration of dental and general health care services, the use of a team method of work in dental institutions, high-tech equipment in dental offices, and preventive work among the population. In the European dental service, two fundamental problems are highlighted: improvement of dental care itself as well as of the management system of dental care. The improvement of the actual dental medical care is developing along the path of state support of the dental care system; availability of several sources of funding for dental care; observance of human rights in the health care system; responsibility of the state (in any form) for dental assistance to socially vulnerable sections of the population. In conclusion, it can be stated that the global practice of providing dental care to the population has the experience of attracting patients to pay for dental services and a rich arsenal of organizational, economic, and legal

mechanisms for planning, regulating, and managing the activities of subjects of the dental services market. The essence of the above is reduced to the improvement of the dental care management system and, in our opinion, consists of a reasonable combination of administrative and professional management of the dental care organization.

CONCLUSIONS

The conducted scientific analysis of normative documents and domestic and foreign sources confirmed the expediency of reforming the dental service and substantiated the need to improve dental care and improve the dental care management system to increase medical, social, and economic efficiency.

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