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A. V. Marchenko
Ukrainian Medical Stomatological Academy, Poltava

ANALYSIS OF PROVISION OF POLYCLINIC DENTAL CARE TO POPULATION OF THE POLTAVA REGION

e-mail: allamarchen@ukr.net

Preserving of the dental health of the population is one of the priorities, which is controlled by the European strategy of the World Health Organization to achieve health for all. Bibliosemantic, medical-statistical, system approach and system analysis was performed. We determined relative values, time series. We have analyzed the quantitative indicators of the dental service activity for 2015-2019. The number of visits, including by rural residents, has grown, which may indicate that in the villages of public utilities "dental clinic" is not and, obviously, that villagers prefer the regional institution. The number of teeth treated for caries in children 0-17 years old, inclusive, increased by 26.7%, which may indicate insufficient preventive work. The analysis of planned sanitation and medical work indicates an increase in the number of visits, including by rural residents, indicates an increase in the activity of the population in dental health.

Key words: dynamics, dental service, caries, diseases.

А.В. Марченко

АНАЛІЗ НАДАННЯ ПОЛІКЛІНІЧНОЇ СТОМАТОЛОГІЧНОЇ ДОПОМОГИ НАСЕЛЕННЮ ПОЛТАВСЬКОЇ ОБЛАСТІ

Збереження стоматологічного здоров'я населення є одним із пріоритетів, який контролюється Європейською стратегією Всесвітньої організації охорони здоров'я щодо досягнення здоров'я для всіх. Бібліосемантичний, медико-статистичний, системний підхід та системний аналіз. Визначені відносні величини, показники динамічного ряду. Метою роботи був аналіз якісних та кількісних показників діяльності закладів, що надають стоматологічну допомогу населенню Полтавської області за 2015–2019 рр. Аналізували кількісні показники діяльності стоматологічної служби за 2015-2019 роки. Кількість відвідувань, у тому числі сільськими жителями, зросла, що може свідчити про те, що в селах комунальних служб "Стоматологічна поліклініка" немає і, очевидно, що жителі села віддають перевагу обласній установі. Кількість зубів, пролікованих з приводу карієсу у дітей 0-17 років включно, зросла на 26,7%, що може говорити про недостатню профілактичну роботу. Аналіз показників планової санації та лікувальної роботи свідчить про збільшення числа відвідувань, в тому числі і сільськими жителями, що говорить про зростання активності населення щодо власного стоматологічного здоров'я.

Ключові слова: динаміка, стоматологічна служба, карієс, захворювання.

The work is a fragment of the research project "Mechanisms of pathogenic factors impact on the dental status of persons with somatic pathology, ways of their correcting and blocking", state registration No. 0115 U001138.

During the last five decades, measures to combat dental caries and periodontitis have been developed, tested and implemented in many populations around the world and are thought to have benefitted millions of people. Despite the huge effort made, a large part of the world's population still suffers from these two oral diseases (Marcenes et al. 2013), which are the main causes of tooth loss [15.]. Systematic reviews demonstrate that untreated cavitated dentine carious lesions make up the single most common disease that affects humans worldwide. Severe periodontitis is not far behind, being the sixth most common disease globally. The reviews

demonstrate that prevalence and incidence of periodontitis are highly age dependent and that there is marked geographic variation [12].

Preserving of the dental health of the population is one of the priorities, which is controlled by the European strategy of the World Health Organization to achieve health for all [8]. The current state of dental health and of the organization of dental care for the population of Ukraine is characterized by a high prevalence of dental diseases, curtailment of preventive measures, reduction of public funding for dental services [10].

The diverse process of reforming dentistry, the lack of modern regulations is the main reason for the receipt of insufficiently reliable data from the regions [1]. Lack of information from non-governmental organizations does not allow health authorities to have an adequate idea of the situation in the field of dental care [6].

The purpose of the work was to analyze the qualitative and quantitative indicators of the activities of institutions that provided dental care in Poltava region in period of 2015-2019.

Materials and methods. Dental care is one of the most popular types of medical care, because dental diseases are very common [3]. Diseases of the oral cavity and teeth take third place in the structure of the overall morbidity of the population of our country. Therefore, dental health is one of the direct indicators of public health and an integral indicator of national health. Strengthening and maintaining dental health is not only a medical, but also an important social problem of Ukraine [5].

The structure, nomenclature and development of the network of dental institutions are closely connected with the political and economic system in the country and depend on it. At the stage of reforming of the health sector in modern socio-economic conditions in Ukraine there are significant difficulties in organizing care for children and adults, due to lack of legal framework and clear principles of functioning in modern conditions, lack of budget funding and the required number of qualified personnel (doctors and dental technicians), outdated and insufficient material and technical base, low living standards. The network of dental institutions, which formed during the Soviet period, still in function at all regions of Ukraine. After the reform of medicine, there are no more dental offices in the villages, and instead, there are dental departments at the district hospitals. All dentists from the outpatient clinics are attached to the department, and the district dentist acts as the head [7].

Analysis was performed on accounting and reporting state documentation (municipal) of health care institutions that provided dental care to the adult population of Poltava region in 2015-2019, annual statistical reports of the Poltava Regional Information and Analytical Center for Medical Statistics in 2015–2019. Methods: bibliosemantic, medical-statistical, system approach and system analysis. Relative values, time series were determined.

Results of the study and their discussion. Dental care for the adult population of Poltava region is provided in the Poltava regional dental clinic and, accordingly, in the dental departments of district hospitals also city dental clinics of Kremenchuk. In addition, there is a network of private dental institutions in the region, whose activity reports are not submitted to the analytical department. Therefore, the analysis of the dental service was conducted on the example of the dental office. The Ministry of Health of Ukraine approved the order No 527 from 28.07.2014 “On the approval of forms of primary accounting documentation and instructions for filling them out used in health care institutions providing outpatient care to the population, regardless of subordination and form of ownership”, where the issues of the activity of the dentist are included, according to which it is possible to assess the provision of outpatient dental care to the adult population.

The number of primary visits decreased by 4.68% on a variable basis, and compared to 2015 –18.0%. 2015 was marked by the reform of the health care system, the purpose of which was to bring medical care directly to the consumer through the general introduction of primary care – family medicine-general practice and at the same time reducing the need and volume of highly specialized and inpatient care. These actions effectively eliminated dental care in the primary care structure, as it was proposed to transfer dental care to family physicians. These doctors are usually only initially acquainted with dental pathology and do not study the technology of dental manipulations [4]. Dental care actually remained only at the secondary and tertiary levels. This situation does not contribute to the proper provision of dental care to the population and generally excludes the possibility of centralized prevention of dental diseases in the field [10.]. Also, dental care, even in a public clinic, is partially paid, and not every resident can pay for it, so the number of initial visits has decreased. For the same reason, the number of rehabilitated in the order of planned rehabilitation decreased in small numbers – -0.12 %. Indicators of preventive work in the order of planned sanitation, sanitized from among those in need of sanitation - in an insignificant amount, but increased, which may indicate that the

overwhelming part of the population still chooses a state dental clinic for oral care and that it is growing activity of the population in the prevention of oral diseases (table. 1).

Analyzing the quantitative indicators of the dental service activity for 2015-2019. First of all, it should be noted that the number of visits, including by rural residents, has grown (rate of increase +24%), which may indicate that in the villages of public utilities "dental clinic" is not and, obviously, that villagers prefer the regional institution (table. 1) [2].

Table 1

Dynamics of indices in the dental service of Poltava region (2015-2019)

	2015	2016	2017	2018	2019	Rate of increase, %
Number of visits, including by villagers	7263	11797	12530	14731	16172	+24.0
Number of visits, primary	92190	88034	87779	81259	75988	-4.68
Total sanitized in the planned sanitation and by requests	57664	57502	57002	55002	57300	-0.12
Preventive work of the inspected in the planned sanitation	19067	19070	22177	20002	19941	+1.55
Preventive work (including the inspected need sanitation)	11851	11559	14829	13704	13929	+4.97
Preventive work (sanitized among those in need of sanitation)	8287	8300	9911	9075	10370	+6.35
Worked out conventional unit of labor intensity	396762	416043, 25	441174	422252	439014	+2.65
Total	182310	181425	181410	181202	176900	-0.75

The next step in our study was to study the dynamics of the incidence of caries. Caries and its complications occupy a leading place in the clinic for therapeutic dentistry [11]. Despite significant advances in the study of its etiology, pathogenesis and possible prevention, some aspects remain highlighted and require clarification. The study of the epidemiology of caries clarifies the unclear issues of this pathology. It was found that along with various factors that contribute to the development of caries, such as the natural and climatic conditions of the area, the socio-economic status of the population plays an important role [13].

Table 2

Dynamics of the number of treated teeth for caries and oral mucosa

	2015	2016	2017	2018	2019	Rate of increase,%
The number of teeth treated in the reporting year for caries, total	94475 (9 066.69)	92682 (8 894.62)	91781 (8 808.15)	85578 (8 212.85)	80072 (7 684.45)	-4.02
The number of teeth treated in the reporting year for caries in children 0-17 years old, including	1668 (160.07)	2441 (234.26)	5500 (527.83)	2079 (199.52)	2026 (194.43)	+26.7
The number of treated teeth with complicated caries, total	23888 (2 292.5)	23303 (2 236.37)	22023 (2 113.53)	20967 (2 012.18)	19930 (1 912.66)	-4.42
The number of treated teeth with complicated caries in children 0-17 years old, including	412 (39.53)	324 (31.09)	850 (81.57)	199 (19.09)	300 (28.79)	-28.7
A course of treatment for diseases of the oral mucosa was carried out, total	2042 (195.96)	1892 (181.57)	1818 (174.47)	1939 (186.08)	1751 (168.04)	-3.58
A course of treatment of diseases of the oral mucosa in children aged 0-17 years, inclusive	68 (6.52)	40 (3.83)	80 (7.67)	63 (6.04)	90 (8.63)	+20.1

As it is shown in table 2, the number of teeth treated for caries in children 0-17 years old, inclusive, increased by 26.7%, which may indicate insufficient preventive work. In the work of Lyakhova NO it is proved that preventive work is carried out by doctors: the percentage of children who received primary and specific caries prevention from the number of examined increased (rate of increase +6.1%), although the rate of sealing of fissures decreased (rate of increase -1.4%) [7]. The fact that there is a tendency towards a decrease in complicated caries looks optimistic, which may indicate a higher literacy of the population.

Damage to the oral mucosa is an important indicator of oral health and quality of life, especially in the elderly [14]. As shown in table 2 a course of treatment of diseases of the oral mucosa in children aged 0-17 years, inclusive increases by 20.1%.

Conclusions

1. The analysis of planned sanitation and medical work indicates an increase in the number of visits, including by rural residents, indicates an increase in the activity of the population in dental health. The indicators of preventive work have slightly increased, which indicates a positive trend in the improvement of the population's health.

2. The growth of caries indicates a high dental morbidity and the ineffectiveness of preventive work for this nosology.

3. The prevalence of oral mucosal lesions, together with information on the risk habits associated with oral health, such as tobacco and alcohol use, can help in planning future oral health studies and screening programs.

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