



## The Level of Periodontal Care to the Population of Andijan Region

1. Usmanov B. A.

Received 27<sup>th</sup> Sept 2021,  
Accepted 29<sup>th</sup> Oct 2021,  
Online 11<sup>th</sup> Nov 2021

<sup>1</sup> Department of Hospital and Clinical  
Dentistry Andijan State Medical Institute

**ABSTRACT:** The article presents data on the prevalence of inflammatory periodontal diseases among the mature population of the Andijan region. Statistical reports on the offer of dental support in 6 districts of Andijan region for 5 years have been analyzed. The results indicate a high prevalence of inflammatory periodontal diseases and a low level of availability of periodontal support in the districts of the Andijan region.

**KEY WORDS:** periodontal diseases, organization of periodontal support.

Periodontal disease is one of the pressing problems of modern dentistry. This is due to the high prevalence of this pathology and the low effectiveness of treatment [2,3,6,8]. The analysis of the situation concerning the provision of periodontal care to the adult population, carried out by different authors over the past 20 years, indicates the inadequacy of this type of dental care to the needs of it and requires its optimization [1,2,4,5].

The aim of the work was to study the prevalence of inflammatory periodontal diseases and the level of periodontal care for the population of the Andijan region of the Republic of Uzbekistan.

Material and methods of research was stomatological examination of 177 people at the age of 15 - 74 years living in different districts of Andijan region. There were examined 80 people in Kurghantepe river, 30 people in Jalakuduk river, 20 people in Bulakbashi river, 10 people in Pakhtaboda river, 12 people in Markhamat river and 20 people in Shakhrikhan river.

All the surveyed people were divided into 4 age groups. The first group consisted of 106 persons aged 15-34 years; the second group consisted of 36 persons aged 35-44 years; the third group consisted of 20 persons aged 45-64 years; the fourth group consisted of 15 persons aged 64-74 years.

To assess the prevalence of periodontal disease, we used the periodontal CPI index (WHO, 1995). Such signs as bleeding gums, tartar and periodontal pockets were taken into account.

The need for treatment of periodontal disease was assessed using the CPITN index (WHO) according to the codes corresponding to the degree of periodontal damage.

In order to obtain data on the level of periodontal care, quality of diagnosis and treatment planning for periodontal disease, statistical reports on the provision of dental care to the population of Andijan region for the periods from 2016 to 2020 were analyzed, the reporting documentation (form №039-2/-88) of 292 dentists of various municipal dental institutions of Andijan region were studied.

In addition, the analysis of 200 "Medical cards of the dental patient" (form № 043/u) a number of polyclinics district Kurgantepe and other districts of the Andijan region, 780 patients with inflammatory periodontal disease were surveyed. Statistical processing of the material was carried out using a package of applied programs for machine processing Microsoft Excel 2013.

Results of the study and their discussion. The data of epidemiological surveys of a number of cities and districts of Andijan region showed that the prevalence of signs of periodontal tissue lesions according to CPI index is high and varies on average from 54,04% to 99,33% in different localities. The percentage of patients with inflammatory periodontal diseases increases naturally with increasing age of the examined persons (Table 1).

**Table 1: Prevalence of periodontal disease in the adult population Andijan region (in%)**

Age (years)	Districts						
	Kurghantepa	Bulakboshi	Jalakuduk	Pakhtaobod	Markhamat	Shahrikhan	Total
15-34	45,05	98,96	80,92	81,48	87,50	96,34	58,78
35-44	76,47	100,00	97,43	100,00	100,00	100,00	89,72
45-64	72,15	100,00	97,22	95,00	100,00	100,00	85,84
65-74	87,72	100,00	100,00	100,0	-	96,34	90,79
Total	54,04	99,33	86,16	90,48	97,01	98,23	69,43

At a young age (15-34 years), initial signs of periodontal tissue inflammation in the form of bleeding gums (32.06%) and tartar (21.15%) predominate. Periodontal pockets are detected in 5.58% of cases. the number of persons with detected periodontal pockets increases with age:

at 35-44 years, up to 29.37%; at 45-64 years, up to 43.28%; at 65-74 years, up to 74.68%.

The percentage of people in need of periodontal care according to the CPITN index averaged 68.43% in Andijan Oblast.

There are 28 posts of periodontist in Andijan province for the organization of specialized care for the periodontal patients; three of these posts are assigned to the children's dental service. The vast majority of periodontists work in municipal dental polyclinics and MSCh. Kurhantepe (22 doctors), two dentists-parodontists each in Bulakbashi District and Jalaakuduk District, and one each in Pakhtaoboda District, Markhamat District. It should be noted that in municipal dental clinics of Andijan there is not a single rate of hygienist.

Only 11,72% of periodontists have the highest qualification category, 38,28% - the first, 22,43% - the second and 27,57% do not have any category at all. 45.43% of periodontists have less than 10 years of work experience.

According to the results of the study of reporting documentation for the period from 2016 to 2020, the treatment of periodontal diseases in dental institutions of 6 districts and 4 districts of Andijan region increased by 1.7 times - from 183 courses in 2016 to 329 courses in 2020. However, despite this, the availability of periodontal care remains extremely low.

Considering that currently there are no objective criteria for the volume of periodontal care to the population among the quantitative indicators of the work of a dentist, we used the indicator characterizing the volume of periodontal care to the population proposed by N.E. Shirshova (2007)

[6], which is expressed as a percentage and reflects the number of primary patients who applied for treatment of periodontal diseases.

According to this indicator, the volume of periodontal care for the adult population of the Udmurt Republic averaged 2.67% for the period from 2016 to 2020. Moreover, the volume of periodontal care provided to the rural population of the republic was even lower and averaged 1.40%.

Analysis of the report documentation of dentists according to Form No. 039-2/-88 revealed that 56.38% of periodontal diseases are treated by periodontists and 43.62% by general practitioners.

The level of preventive and health education work among doctors was extremely low. Thus, in 2020 dentist-therapists taught oral hygiene to only 30.14% of the number of first-time patients, and periodontists taught oral hygiene to only 5.8% of patients. In other words, only one in twenty primary patients received oral hygiene information. In addition, when recording the primary diagnosis, 27.77% of the "medical records..." did not indicate disease severity, 44.95% did not indicate disease stage, 21.68% did not indicate process prevalence, and 4.70% did not formulate a complete primary diagnosis.

It should be noted that the doctors prescribed a treatment plan in 87% of cases. However, the treatment plan was mostly limited to the prescriptions of the general practitioner and periodontist and included preliminary treatment (removal of dental deposits, anti-inflammatory therapy, and physical therapy). Surgical and orthopedic treatment was not included in the plan. treatment of periodontal inflammatory diseases was generally limited to removal of dental deposits and antiseptic treatment of gums (100%), application of solutions of various medications (71.32%) or gingival dressings (35.25%) followed by prescription of physiotherapy courses (76.01%). Every tenth patient was splinted with movable teeth; only 6.75% received selective desiccation; and 5.50% received curettage. Surgical treatment was limited to the methods and means of oral care from the periodontist, which almost completely eliminated the prevention of inflammatory periodontal disease and the patient's own motivation to improve the effectiveness of the treatment performed.

At the same time, analysis of "Medical Records of Dental Patients" showed that assessment of oral hygiene is performed in 92.75% of cases. In addition, the depth of periodontal pockets is determined, but only in 47.75%; the degree of tooth mobility is assessed in 64.75%; the degree of gingival recession is determined in 30.25%; and the bite condition is determined in 42.00%. Only 22.25% of those examined were referred for an orthopantomogram, and an occludogram was performed on 2.5% of those examined. unfavorable factors in the oral cavity (depth of the vestibule, attachment of frenulum and mucosal bands) were counted in 9.75% of cases, although every second patient was consulted by a dental surgeon, prosthodontist, general practitioner, and other specialists.

When analyzing medical records, we did not observe a complete detailed diagnosis in any chart that included the following in addition to the main periodontal disease: complications, anatomical and functional disorders (congenital and acquired), concomitant dental diseases, background and concomitant diseases by removal of movable teeth in 40.00%. Only in two cases frenum correction was performed, and flap operations were not prescribed at all. Orthopedic treatments were performed in 24.75% of patients.

Agreement of the proposed treatment by the physician with the patient occurred in 87.75% of the Medical Records. Although treatment interruption and refusal of the proposed treatment were recorded in 12.25% of cases. The patient's motives for refusing or interrupting treatment offered varied: employment, financial problems, duration of treatment, and the patient's confidence in the incurability of his disease.

There is no doubt that when diagnosing and treating inflammatory periodontal diseases, doctors are guided by medical and economic standards (MES). The currently available MES do not contain a clear algorithm for the treatment of periodontal disease by dentists. Therefore, most dentists use the most common "free" algorithm for treating patients with inflammatory periodontal disease [7].

After treatment of periodontal disease, 66.51% of patients saw temporary improvement; 4.95% had no change in their condition; and 28.54% of patients had difficulty answering.

31.15% of respondents were satisfied with the doctor's explanation of periodontal disease; 41.85% were mostly satisfied; and 21.00% of patients did not receive the necessary information from the doctor.

Only 12.54% of respondents were satisfied with the level of periodontal care in the city; 557.66% believed that periodontal care was available, but only for a fee; and 33.80% claimed that it was very difficult to get an appointment with a periodontist.

**Conclusion.** Thus, the study has shown that the prevalence of inflammatory periodontal diseases in Andijan region is high. More than 50% of the population of the republic needs preventive measures, and 20% need qualified periodontal care with the participation of not only a periodontist, but also other specialists: a surgeon-dentist and an orthopedist.

At the same time, the treatment of periodontal disease in most patients is currently limited, as a rule, to the removal of dental deposits, antiseptic treatment with the application of solutions of various drugs, followed by the prescription of courses of physiotherapy. Such treatment can only stop acute inflammatory phenomena, but in terms of the long term prognosis it is more harmful. In these patients, as a rule, a new exacerbation quickly sets in, the process steadily progresses and leads to the "loss of teeth". To date, there is no clear algorithm for the actions of the dentist when admitting periodontal patients, which should be supported by a standard of therapeutic and diagnostic manipulations. Of course, the implementation of the algorithm of actions will require adequate material and technical support of the medical institution, appropriate solvency of the population, and most importantly - sufficiently high qualification of the dentist for this pathology.

Taking into consideration all the above said, it seems we need to think about the new system of periodontal patients care organization which will provide for complexity and consistency of our actions in real conditions of stomatological service.

#### Literature:

1. Botero J.E., Rosing K.K., Duque A., Jaramillo A., Contreras A. Periodontal disease in children and adolescents in Latin America. *Periodontol* 2015 Feb; 67 (1): 34-57.
2. Ganzha I.R. The state and prospects for the development of periodontal care for adult population in Samara: Author's dissertation ... candidate of medical sciences/ I.R. Ganzha. - Samara, 2003. - 23 c.
3. Murillo GV, Castillo J, Serrano J, Ramirez J, Viales J, Benitez C. Prevalence and severity of plaque-induced gingivitis in three Latin American cities: Mexico City-Mexico, Metropolitan Area-Mosta Rica and Bogota-Colombia. *ODOVTOS-Int J Dental Sci.* 2018 May-Aug; 20 (2): 91
4. Rizaev J.A., Abdashimov Z.B., Nurmatova K.C., Usmanbekova G.K. Some issues of perspective planning in the stomatological service of the Republic of Uzbekistan/. *Stomatologiya.* №4.77.2019г.
5. Tsepov L.M. Periodontal diseases: A glance at the problem / L.M. Tsepov.-M.: "medpress-inform", 2006. - 192 c.
6. Shirshova N.E. Medico-social bases of periodontal diseases prophylaxis in student youth: dissertation ... D. in medical sciences / N.E. Shirshova. - Perm, 2007. - 23 c.
7. Eke P.I., Page R.K., Wei L., Thornton-Evans G., Jenko R.J. Update on case definitions for population-based periodontal disease surveillance. *J Periodontol.* 2012 Dec; 83(12): 1449-5
8. Elias-Boneta AR, Toro MJ, Rivas-Tumanian S, Rajendra-Santosh AB, Brach M, Collins SJ. Prevalence, severity and risk factors of gum inflammation in Caribbean adults: a cross-city study. *PR Health Sci J.* 2018 Jun; 37(2): 115-23.