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Dental Condition of Periodontal Tissues in Patients with Psychiatric Pathologies

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Abstract: **Relevance.** According to the results of the study, the epidemiological characteristics of psychiatric morbidity (PM) in the Republic, including in the Bukhara region, were noted. It was determined that the studied contingent belongs to a group of very emotional state of patients; at the same time, the authors studied the hygienic condition of the oral cavity (OC) and periodontal tissue, established a high risk of carious lesions of hard dental tissues and their complications, pathology of the temporal-mandibular joints, poor hygiene of the PR, also, PR is a high risk of chronic oral sepsis (RCOS).

The aim of the study was to assess the condition of periodontal tissue and sensory threshold sensitivity of the examined patients with records of epidemiology of pathology in the Bukhara region.

Material and methods. The study is based on retrospective and prospective data, the dental condition of 850 patients with PM (main group - MG) and 175 patients in the control group (CG) without pathology of PM, aged from 18 to 70 years, was assessed. The intensity of dental caries damage and its complications, the hygienic condition of the teeth, the condition of periodontal tissue were determined for all the studied contingent, the viscosity of oral fluid (OF) and pH-saliva were also evaluated.

Results. It was found that in patients with PM it is characterized by high intensities of dental caries (20.67±0.82*); including; with diagnoses of schizophrenia - 21.52±0.98*; epilepsy - 22.86±0.94*; oligophrenia – 19.64±0.78*; - other mental diseases – 18.66±0.98*; while the examined/ G – 11.44 ± 0.62 due to the large number of carious and removed teeth and the high need for prosthetics from 8.2± 0.48 to 9.4 ± 1.4. The correlation analysis is established between the values of the parameters of OF, OC hygiene and the intensity of damage to the hard tissues of the tooth and periodontal tissues revealed a different degree of relationship between these parameters.

Conclusion. Thus, in patients with PW, there is a high prevalence of periodontal tissue disease – 82%, a direct correlation with a high risk of chronic oral sepsis – 13.3%, while the established results differ significantly from patients to CG.

Keywords: neuropsychiatric disease, caries and its complications, periodontal tissue, temporomandibular joint, bite.

Relevance. Issues of combined diseases of the oral cavity (OR) and internal organs occupy a prominent place in dentistry, since they make it possible to reflect the essence of the genesis of many dependent diseases of the oral cavity and outline ways to develop complex preventive measures [3]. Therefore, it is often noted that tissue lesions in the PR are, in most cases, the first clinical signs of disorders in diseases of the neuroendocrine, hematopoietic, digestive, cardiovascular systems (CVS), etc. [1, 5, 9, 15].

The dependence of the occurrence of a pathological situation in PR on the general condition of the body is beyond doubt, while the incidence of caries, periodontitis and pathologies of the high-mandibular joints in a number of somatic diseases has been proven [8], including when the human body is exposed to harmful factors [7]. In the formation of the pathological process, a number of authors see a possible pathogenetic role of dysfunction of the autonomic nervous system (ANS) and the central nervous system (CNS) [6]. A relationship between the occurrence of wedge-shaped dental defects and diseases of the central nervous system has been noted [12]. Also, the state of the dental system (DS) and the provision of comprehensive dental care to mentally ill people is a poorly studied issue. At the same time, with the increase in mental illness (PM), the dental service of psychiatric hospitals cannot cope with the entire flow of patients and some patients with mental disorders end up in regular dental clinics. The experience of dental assistants in providing dental care to patients with mental disorders has shown that special training is necessary to work with this category of patients [11, 13,17].

Purpose of the study - assess the condition of periodontal tissue and sensory threshold sensitivity of the examined patients, taking into accountepidemiology of pathology in the Bukhara region.

Material and methods. The research is based on retrospective and prospective data obtained as a result of observation of patients and their medical records in 2020-2023 with varying severity of psychiatric pathologies, standing on the dispensary records “D” of the Bukhara Regional Psychiatric Hospital, as well as materials obtained from the statistical department of the Ministry of Health of the Republic of Uzbekistan.

To assess the dental condition and for the purpose of further dental research, retrospectively and prospectively, 850 patients with PZ were selected (main group - M/G; also divided into a subgroup according to diagnoses C/G-1, 2, 3, 4) and 175 patients as control group (C/G) without pathology of mental health, aged from 18 to 70 years, who applied at their own request to a dentist at the Dental Base clinic BSMI.

A dental examination of patients undergoing inpatient treatment was carried out, taking into account the individual disease according to the existing classification of diseases and health-related problems. In all 1025 examined patients with PM; including 175 patients who contacted the dentist. C/G examined the patient's teeth, determined the intensity of dental caries damage and its complications using the KPU index, the need for dental prosthetics, and assessed the hygienic state of the patient's health. Oral Hygiene Index-Simlified (OHI-S) was used - a simplified Green-Vermillion oral hygiene index (OH-I) [14, 16, 18] (PHP), assessed the periodontal condition using the CPITN index, determined the viscosity of the oral fluid (OF), and measured the pH of saliva.

In order to determine the relationship between foci of chronic infection of PR and general somatic diseases and assess the influence of PR pathology on the severity of the general condition of the body, we used a modified risk index for chronic oral sepsis (RCOS) PM [10]. In order to assess the condition of the temporomandibular joint (TMJ), a study was conducted, and the coincidence of a triad of signs was taken as a selection criterion for the study group: 1) presence of pain syndrome; 2) restriction of mouth opening; 3) internal disorders of the TMJ according to magnetic resonance imaging(MRI). Also, for the purposeTo determine the sensory threshold sensitivity of the examined patients, sensometry was used using the Sensoest device - the method allows you to determine the emotional state of the patient and his need for premedication.

The determination of saliva viscosity was carried out using a capillary viscometer. The viscosity of the liquid was calculated using the formula: V=KT, where V is the kinematic viscosity of the liquid, K is the viscometer constant; T is the flow time of the liquid in seconds. Also, the pH of saliva was

measured using a portable electronic pH meter.

Statistical data processing: using variational statistical methods, the following were calculated: the average value M, the standard deviation - σ and the arithmetic mean error - m. At a confidence interval of 95%, the data were processed in the Statistica program.

RESULTS DISCUSSION.

An analysis of the data received on psychiatric services in the republic for 2021 shows that doctors in the state are 1399.25; occupied 1195.8; the supply of doctors per 10,000 population is 0.25; number of visits (thousands) 1891363; of which 864,717 were related to the disease; taken for D+C for the first time diagnosed 25060; of which - psychosis - 4001, schizophrenia - 1766, non-psychotic characters - 11008, mental retardation - 6327, including epilepsy 1847; including these indicators for the Bukhara region; 65.5; 64.25; 0.25; 107853; 1466; -395, - 31, - 684, - 252, -104; 74.2 resp.

For the republic for 2022 it shows that there are 1439 doctors in the state; occupied 1244; the supply of doctors per 10,000 population is 0.26; number of visits (thousands) 2261245; of which about the disease 801503; taken to D+C for the first time diagnosed 24345; of which - psychosis - 3635, schizophrenia - 2056, non-psychotic characters - 10333, mental retardation - 5995, including epilepsy 2279; including these indicators for the Bukhara region; 64; 61.5; 0.26; 111990; 43478; -1256, -467, -28, -459, -196; 106 accordingly.

Stationary services: for the Republic 2021; provision of beds – 8094 (per 100,000 population – 22.6); hospitalization per 100 thousand 246.3 of which condition “D” is registered 39.6; death toll 80; including these indicators for the Bukhara region; -497; 24.2; 274.8; 30.7; 0 accordingly.

Stationary services: for the Republic 2022; provision of beds – 8107 (per 100,000 population – 22.6); hospitalization per 100 thousand 253.3 of which condition “D” is registered 40.5; death toll 86; including these indicators for the Bukhara region; -479; 23.8; 285.4; 32.5; 0 resp.

Work in day hospitals: For the Republic in 2021, place per 10,000 population 0.2; consists at the beginning of the year 352; consists at the end of the year 409; days spent 142213; and the number of days of incapacity for work is 5053; including in the Bukhara region these indicators are -0.1; -154; -6; -8; -3452; 0 resp.

Work in day hospitals: For the Republic in 2022, place per 10,000 population 0.2; consists at the beginning of the year 388; consists at the end of the year 301; days spent 163720; and the number of days of incapacity for work is 2976; including in the Bukhara region these indicators are -0.1; -184; -7; -8; -3943; 0 resp.

For outpatient compulsory treatment: for the Republic for 2021, the status at the beginning of the year is 167; status at the end of the year 159; average continuation of stay 708; number of days from the start of p/l to termination 35402; including in the Bukhara region, not a single case of these indicators was noted.

For outpatient compulsory treatment: in the Republic by 2022, the status at the beginning of the year is 159; status at the end of the year 160; average length of stay 1036; number of days from the start of p/l to termination 54882; including in the Bukhara region, not a single case of these indicators was noted.

Inpatient compulsory treatment; for the Republic for 2021, status at the beginning of the year 497; status at the end of the year 530; number of days from the start of p/l to termination 163737; including in the Bukhara region - 14; - 12; - 3986 respectively.

Inpatient compulsory treatment; State of the Republic for 2022 beginning of the year 536; status at the end of the year 548; number of days from the start of p/l to termination 222322; including in the Bukhara region - 12; - 16; - 6819 respectively.

At the same time, financing is the cost of maintaining one per day, including all expenses: for the Republic for 2021, 24-hour hospitals 127881.38; day hospital 29543.15; for maintenance therapy

per patient 83,100.77; for medicines per patient per day in a day hospital 5575.89; for food for one patient per day in a day hospital 3372.53; for medicines per patient per day in hospital 11357.14; for food per person per day in hospital 17877.79; including in the Bukhara region -125780; -25227; -180022.1; -12927; -12300; -12420; -20800 resp.

At the same time, financing is the cost of maintaining one per day, including all expenses: for the Republic for 2022, 24-hour hospitals 173,462.99; day hospital 44271.33; for maintenance therapy per patient 100677.28; for medicines per patient per day in a day hospital 8271.36; for food for one patient per day in a day hospital 3674.50; for medicines per patient per day in hospital 16259.54; for food per person per day in hospital 21944.63; including in the Bukhara region -179144.4; -27243; -239338.2; -11847; -15400; -16512.6; -25445 resp.

One of the objectives of our study was to study the epidemiological state of health care and psychiatric services in the Republic, especially in the example of the Bukhara region. As can be seen from the results of the analysis of the studied medical records of 17,700 patients who are registered as "D" - 9,383 patients with disabilities according to health protection, of which 609 are in the 1st group; -7921 – 2nd group; - 125 - 3rd group with disabilities, -728 - sick children and adolescents under 18 years of age and from the general cards studied - 53.0% are disabled according to the PP. Among women, these indicators were: -7592; - 1975; - 793; - 2623; - 2201 resp. It was also found that of the studied charts of patients with mental health pathologies - with a diagnosis of schizophrenia - 4455; epilepsy – 1790; oligophrenia – 6606; other forms of psychosis – 4849.

It can also be seen from Table No. 1 of the examined patients with mental illness, 52.8% are men, 47.2% are women, while mental retardation is 58.4% among men; schizophrenia - 57.6% among women and oligophrenia also accounts for 28.8% of cases among the general population examined, regardless of gender. The quantitative and percentage ratio between groups by diagnosis (M/G -1, 2, 3, 4) are more fully consistent for statistical processing and as a comparative group between the main groups. In C/G there were 56% men, 44% women, which fully meets the requirements for statistical processing as C/G.

Table No. 1. Distribution of study group patients by diagnosis and gender

Diagnosis of patients (M/G)	Number of patients in study groups, people. (%)		
	Total	men	women
Schizophrenia (M/G-1)	217 (25.5±2.4%)	92 (42.4±4.8%)	125 (57.6 ± 5.7%)
Epilepsy (M/G-2)	181 (21.3 ± 2.1%)	101 (55.8 ±4.2%)	80 (44.2 ± 3.7%)
Oligophrenia (M/G-3)	245 (28.8 ± 3.4%)	143 (58.4 ± 4.1%)	102 (41.6 ± 3.4%)
other odds Psychosov (M/G-4)	207 (24.3 ± 2.2%)	113 (54.6 ± 5.4%)	94 (45.4 ± 4.9%)
Total observ.-e for M/G	850 (100%)	449 (52.8 ± 2.3%)	401 (47.2 ± 2.1%)
C/G	175 (100%)	98 (56.0 ± 1.6%)	77 (44.03 ± 2.8%)
Total survey	1025 (100%)	547 (53.4 ± 3.2%)	478 (46.6 ± 2.8%)

The age indicators of the surveyed are given in Table No. 2. By age; 35-44 years old in M/G - 31.8%, in C/G 33.7%, also 32.1% of the total study, while 35.9% were epileptic patients 35-49 years old, 36.2 % was other forms of psychosis at 24-34 year olds.

Table No. 2. Distribution of study group patients by diagnosis and gender

Diagnosis	Number of patients by age group, people. (%)				
	Total	18-24 years old	25-34 years	35-49 years old	50-70 years
Schizophrenia (M/G-1)	217/100%	38/17.5%	71/32.7%	82/32.8%	26/12%
Epilepsy (M/G-2)	181/100%	40/22.1%	48/26.5%	65/35.9%	28/15.5%
Oligophrenia (M/G-3)	245/100%	68/27.7%	59/24.1%	78/31.8%	40/16.3%
Dr. for. psychosis (M/G-4)	207/100%	59/28.5%	75/36.2%	45/21.7%	28/13.5%
Total observ.-e for M/G	850/100%	205/24.1%	253/29.7%	270/31.8%	122/14.3%
C/G	175/100%	22/12.6%	57/32.6%	59/33.7%	37/21.1%
Total survey	1025/100%	227/22.1%	310/30.1%	329/32.1%	159/15.5%

The results obtained on the condition of the hard tissues of the teeth in patients with PM – M/G revealed multiple lesions of the hard tissues of the teeth by caries and extracted teeth with their complications. At the same time, in patients with C/G, caries (1.64) and extracted teeth (1.02) occur very little; filled teeth (8.42) are very much compared with patients with M/G. In all groups - M/G-1, M/G-2, M/G-3, M/G-4, the prevalence of caries was noted from 96 to 99%; in the control group this figure was 78%.

Table No. 3. The condition of hard tissues of teeth and dentition in psychiatric patients.

Diagnosis of patients (M/G).	Intensity of dental caries of patients in the study groups, M±n in %.			
	CPU	TO	P	U
Schizophrenia; M/G-1 n-85/100%	21.52±0.98	9.4±0.75*	2.8±0.46*	9.3±1.4*
Epilepsy; M/G-2 n-85/100%	22.86±0.94*	9.8±0.42*	3.48±0.67*	9.4±0.84*
Oligophrenia; M/G-3 n-105/100%	19.64±0.78*	8.48±0.54*	3.18±0.36*	8.12±0.79*
other odds psychosis M/G-4n-135/100%	18.86±0.98*	4.42±0.65*	5.62±0.24	8.2±0.48*
Total observ.-e for M/G n-410/100%	20.67±0.82*	8.02±0.56*	3.75±0.44	8.75±0.94*
C/G G n-90	11.44±0.62	1.64±0.16	8.42±0.34	1.02±0.32

Analysis of the table shows that the value of the caries intensity index in all M/G is almost 2 times higher than in C/G ($p < 0.05$). The average value of the KPU index in all groups of patients was significantly higher ($p<0.05$) than in the C/G group. Also, the average number of extracted teeth in the groups of mentally ill patients was significantly ($p<0.05$) higher than in the C/G group. In all studied groups according to the Y element from the intensity of the KPU, the majority of patients in the PZ needed complex prosthetic designs (from 65.5 to 98.5%), and in the C/G patients examined only one dental prosthesis was needed. Also, the number of patients with prosthetics who do not need prosthetics was almost undetected, and the need for prosthetics of both jaws was 75.5%.

Table No. 4. Clinical characteristics of dentition defects and the need for prosthetics in psychiatric patients.

Diagnosis of patients (M/G).	Intensity of dental caries of patients in the study groups, M±n in %.			
	Removed teeth	Dental defects and need for prosthetics		
		One tooth	Up to three teeth	More than three teeth
Schizophrenia; M/G-1 n-85/100%	9.3±1.4*	1.2±0.24*	2.7±0.64*	5.1±0.8*
Epilepsy; M/G-2 n-85/100%	9.4±0.84*	2.8±0.82*	3.28±0.47*	3.2±0.44*
Oligophrenia; M/G-3 n-105/100%	8.12±0.79*	0*	2.48±0.46*	5.84±0.80*
other odds psychosis M/G-4n-135/100%	8.2±0.48*	3.22±0.45*	1.22±0.44	4.8±0.48*
Total observ.-e for M/G n-410/100%	8.75±0.94*	1.8±0.38*	2.4±0.88	4.8±0.44*
C/G n-90	1.02±0.32	1.04±0.46	0	0

During the dental examination, the level of PR hygiene, gingival index - GI, CPITN index to determine the condition of periodontal tissues and the risk index for developing chronic oral sepsis or inflammatory process of periodontal tissue were determined. Thus, the average data on the plaque

index scale corresponded to the upper limits of satisfactory PR hygiene, the average number of carious teeth in a patient in this group corresponded to 2.02, the average data on the gingival index GI corresponded to the indicators of moderate gingivitis, the average number of teeth with existing apical periodontitis was 2 .46, the average CPITN score for the groups ranged from – 1.84 to 2.04, the average number of pathologically mobile teeth in a patient in the group was 1.94. The totality of the data obtained, shown in Table No., made it possible to determine the risk of developing chronic oral sepsis, which affects the development or exacerbation of the patient's general somatic pathology. The risk index for developing chronic oral sepsis and or generalized periodontitis corresponded to the average probability of its occurrence.

Table No. 5 Assessment of the state of PR of patients with PD before treatment.

Diagnosis of patients (M/G).	DI-S – dental plaque index, points	K – teeth affected by caries, number	GI – chronic gingivitis, points	AP – apical periodontitis, number	CPITN – chronic periodontitis, points	PPV – pathologically mobile teeth, number	RHOS – risk of chronic oral sepsis
Schizophrenia; M/G-1 n-85/100%	1.1±0.06	1.47±0.12	1.08±0.07	1.3±0.17	1.14±0.07	0.55±0.15	14.16±1.17
Epilepsy; M/G-2 n-85/100%	0.98±0.06	1.9±0.12	1.02±0.09	1.1±0.22	1.08±0.04	0.35±0.12	12.46±1.22
Oligophrenia; M/G-3 n-105/100%	1.4±0.09	2.44±0.44	1.77±0.33	1.7±0.21	1.4±0.04	0.48±0.22	16.24±1.99
other odds psychosis M/G-4n-135/100%	1.1±0.04	1.08±0.46	1.24±0.07	1.2±0.17	1.48±0.22	0.35±0.98	12.24±1.22
Total observ.-e for M/G n-410/100%	1.1±0.14	1.05±0.22	1.25±0.07	1.3±0.86	1.24±0.44	0.55±0.94	13.24±1.44
C/G n-90	0.1±0.04	0.4±0.16	0.64±0.02	0.2±0.07	0.68±0.45	0.12±0.34	4.54±0.67

The feeling of dryness in the PR is noted mainly by patients of the 1st, 2nd and 4th groups, and increased salivation is noted by patients of the 2nd group, less often of the 3rd.

Table No. 6 Characteristics of viscosity and pH environment of oral fluid in psychiatric patients.

Diagnosis of patients (M/G).	Substrates of the organism under study, M±n in %.	
	Oral fluid viscosity	saliva pH
Schizophrenia; M/G-1 n-85/100%	5.086±0.064	6.964±0.004
Epilepsy; M/G-2 n-85/100%	5.146±0.098*	6.450±0.012
Oligophrenia; M/G-3 n-105/100%	6.578±0.077*	6.252±0.012*
other odds psychosis M/G-4n-135/100%	4.244±0.040*	7.02±0.017*
Total observ.-e for M/G n-410/100%	5.246±0.043	6.638±0.022
C/G G n-90	1.922±0.028	7.450±0.04

Based on the results obtained, a correlation analysis was carried out between the values of the parameters of GC, GI-PR and the intensity of damage to hard dental tissues and periodontal tissues.

In group 1 of those examined, an average correlation was observed between the value of GC viscosity and the intensity of caries (r = 0.57). As for the components of the CP index, it turned out that in M/G patients there is an average correlation between the number of carious and extracted teeth and the value of GC viscosity (r = 0.51 and r = 0.56, respectively), while There is a weak correlation with the number of filled teeth (r=0.37).

In patients of groups 1 and 3, a strong correlation was found between the pH value and the intensity of caries (r = 0.62). Thus, between the number of carious teeth and the pH value of saliva, except for the 3rd group of those examined, an average correlation is observed (r = 0.56), and for extracted teeth this indicator reaches a high level (r = 0.61). For filled teeth, there is a weak correlation between this indicator and the pH value of saliva (r = 0.24).

When studying the relationship between the GI-PR efficiency index and the intensity of caries in patients of the 1st and 3rd groups, we identified an average correlation between these indicators (r = 0.54). A weak correlation is observed in those examined in this group between the number of filled teeth and the GI-PR effectiveness index (r = 0.21) was noted in the 4th group. For carious and extracted teeth, an average correlation was revealed (r = 0.58 and r = 0.42, respectively).

In the control group, the viscosity value of GC (1.922±0.028 Sp) was significantly ($p<0.05$) lower than in the groups of patients with GC. At the same time, in PZ the environment-pH of saliva, as it turned out, this indicator is subject to significant fluctuations.

The intensity of damage to periodontal tissues in the M/G of the examined patients has a high correlation with the viscosity value of the gastric mucosa and the PR hygiene index (r = 0.61 and r = 0.67, respectively); a weak correlation was revealed with the pH value of saliva (r = 0.25).

In group 3, there is a strong correlation between the viscosity value of the gastric caries and the intensity of caries (r = 0.61). There is a strong correlation between GC viscosity and the number of carious and extracted teeth (r=0.62 and r=0.61, respectively), as well as a weak correlation with the number of filled teeth (r=0.42). The same picture is observed in other patients from M/G.

In K/G there is a weak correlation between the value of GC viscosity and the intensity of caries (r=0.20). This also applies to all components of the KPU index; for carious, filled and extracted teeth, a weak correlation was also revealed (r = 0.21, r = 0.14 and r = 0.19, respectively). There is also an average correlation between the PR hygiene efficiency index and the intensity of caries (r = 0.57). Thus, with the number of carious and extracted teeth, an average correlation is observed (r = 0.59 and r = 0.56, respectively), and for of filled teeth, a weak correlation was revealed (r=0.24).

Among patients with PD, bleeding gums and tooth mobility were noted. So in the O/G - 1st, 2nd, 3rd, and 4th group of those examined, bleeding gums and tooth mobility were noted from 36% to 68%, while in the K/G, tooth mobility was noted only on 4 % of patients.

Table No. 7. Prevalence and intensity of signs of periodontal damage according to the CPITN index in mentally ill patients.

Group	CODE 0	CODE 1	CODE 2	KODS	CODE 4	KODH
M/G-1	10.8% 0.64	5.1% 0.32	22.6% 1.36	25.7% 1.54	11.7% 0.70	24% 1.44
M/G-2	5.2% 0.32	9.1% 0.56	31% 1.86	31.3% 1.88	7% 0.42	16% 0.96
M/G-3	7% 0.40	21.7% 1.24	27.3% 1.72	14% 0.84	4% 0.24	26% 1.56
M/G-4	20.7% 1.18	22.9% 1.36	24.6% 1.48	19% 1.14	3.4% 0.20	10.7% 0.64
Total observ.-e for M/G n-410	10.92%	14.5%	26.5%	22.5%	6.5%	19.25%
Control	33% 1.98	28.7% 1.72	25.6% 1.54	10.7% 0.64	1% 0.06	1% 0.06

Analysis of the table results shows that in the 1st and 2nd groups of those examined, the prevalence of periodontal diseases was 88%-92%, respectively. Most often, 25.7% of patients in this group have a periodontal pocket of 4 or 5 mm, which is 2.2 times higher than the prevalence of a periodontal pocket with a depth of 6 mm (11.7%). The average intensity of this feature in group No. 1 was 0.7 sextants. Also in this group, we found, on average, 1.44 excluded sextants, which indicate a large number of extracted teeth.

As for bleeding, the values of this indicator are statistically significantly lower ($p<0.05$) in all groups of mentally ill patients compared to C/G. The presence of tartar or other factors that delay dental plaque in M/G patients is from 8.4% to 15% higher than in those examined in C/G ($p < 0.0001$).

The presence of a periodontal pocket with a depth of 4 or 5 mm in patients of group 1 is 1.4 times lower ($p <0.01$) than in group 2, and also 1.5, 1.6 and 2.2 times higher ($p < 0.0001$) compared to the C/G ratio. In patients M/G-2 this indicator is 2.2 times higher ($p<0.0001$) than in the fourth 1.6 and 2.9 times higher than this indicator compared to C/G ($p<0.0001$). The presence of a periodontal pocket with a depth of 6 mm or more among patients with PM is significantly more common than among those examined in the C/G. So in patients M/G-1 and M/G-3 this indicator is higher than M/G-2 and M/G-4 and several times with C/G ($p <0.0005$). Excluded sextants were found significantly more often among patients with M/G than in patients with C/G ($p<0.0001$), which is explained by the large number of extracted teeth in the study groups.

Table No. 8 Characteristics of the occurrence of TMJ pathology in patients with PZ.

Diagnosis of patients (M/G).	TMJ pathology	criteria for clinical signs for TMJ pathology (triad), including (M+n in %)		
		presence of pain syndrome.	restriction of mouth opening;	internal violations
Schizophrenia; M/G-1 n-85/100%	82/96.5±2.6*	47/57.3±1.8*	38/46.3±1.4*	36/43.9±1.2*
Epilepsy; M/G-2 n-85/100%	76/89.4±2.1*	35/46.1±2.8*	41/53.9±1.8*	58/76.3±1.4*
Oligophrenia; M/G-3 n-105/100%	99/94.3±1.1*	55/55.5±1.6*	42/42.4±1.2*	81/81.8±1.6*
other odds psychosis M/G-4n-135/100%	98/72.6±2.1*	38/38.8±1.5*	29/29.6±1.04	34/34.7±1.2*
Total observ.-e for M/G n-410/100%	355/86.6±2.2*	175/49.3±1.3*	150/42.2±1.01	209/58.8±0.9*
C/G n-90	22/24.4±1.7	6/27.3±0.86	5/22.7±1.5	4/18.2±0.48

The main complaint of patients was pain - 86.6% (M/G); including 96.5% of cases in patients with schizophrenia, 89.4% - epilepsy, 94.3% - mental retardation, 72.6% of cases in patients with other forms of psychosis; while in C/G 24.4% of cases were observed. At the same time, 175 (49.3%) patients complained of pain syndromes, of which 57.3% cases M/G-1, 55.5% cases M/G-3, 46.1% cases M/G-3 ; 38.8% -M/G-4. Complaints with limited mouth opening in 150 (42.2%) including

53.9% - M/G-2; 46.3% - M/G-1; 42.2% M/G-3 and 29.6% cases M/G-4; internal joint growths were noted in 58.8% of cases in patients with M/G; Of these, 81.8% were M/G-3, 76.3% M/G-2 and 43.9% of cases in patients M/G-1. The majority of patients – 255 (62.2%) – characterized the pain as "dull", "pulling", "pressing", "aching" and of a constant nature; In 189 (46.09%) patients the pain was "sharp" and "shooting". In 200 (48.8%) patients the pain was localizedwas located directly in the TMJ and parotid region, in 178 (43.41%) - from the main point of localization it radiated to the temporal, cervical, occipital, infraorbital and postauricular regions, as well as to the upper and lower jaws (m/h), n/ h), 89 (21.7%) patients noted migration of pain from one area to another. Moreover, in all forms and clinical signs, the TMJ pathology in patients with PZ pathologies is higher and the course is more severe from 2 to 8 times compared with patients C/G.

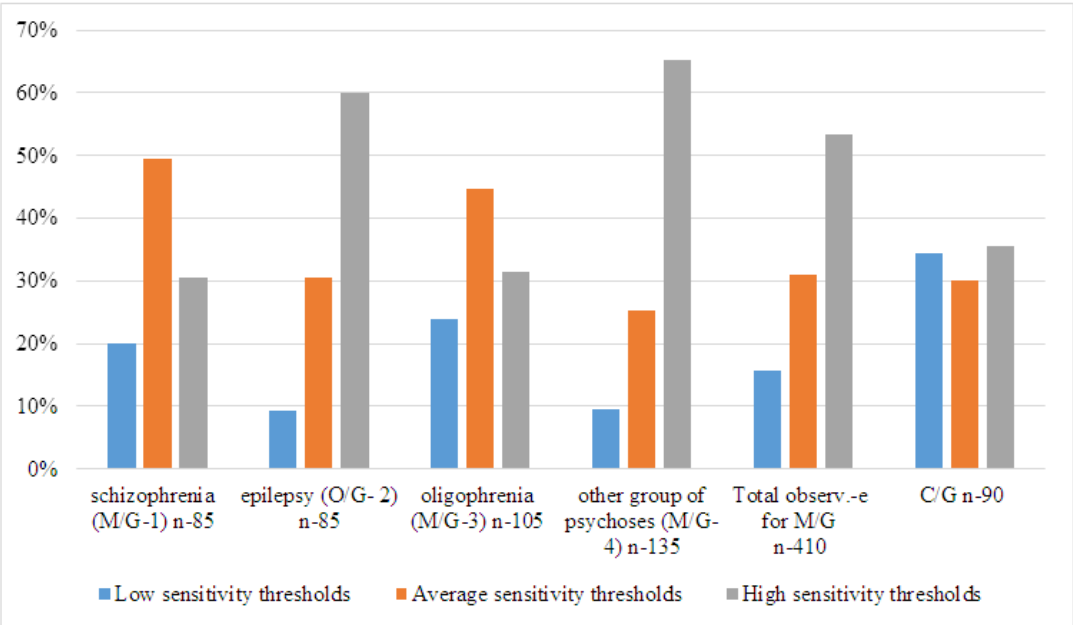
Depending on the values of sensory thresholds, 3 groups of patients are distinguished; that is, with low sensitivity thresholds; they are characterized by a high level of emotional tension; - patients with average threshold values; they are characterized by - average levels of tension, anxiety and - patients who have high sensory thresholds and do not need premedication.

Analysis of the results shows that the sensory thresholds of patients with schizophrenia (M/G-1) and oligophrenia (M/G-3) were closer to C/G ($p>0.05$), as for the rest of the study groups - epilepsy (M/G- 2) and other group of psychoses (M/G-4), then the highest value of the sensitivity threshold is in patients who are from 1.5 to 2 times higher than the value of this indicator ($p <0.05$). In patients of groups 2 and 4, the sensitivity threshold is higher than in those examined in groups 1 and 3 ($p <0.05$). The pain threshold in the examined C/G was significantly lower ($p<0.05$) than in the rest of the group (M/G).

As for the endurance threshold, in the control group this indicator was significantly lower than in patients of the first, second and fourth groups ($p <0.05$). The highest threshold of endurance was found in patients of the second and first groups; in these patients it turned out to be significantly higher compared to those examined in the third and fourth groups ($p<0.05$). In patients of the fourth group, this indicator is 1.3 times higher than in those examined in the third group ($p<0.05$), and also significantly exceeds the endurance threshold in the control group ($p<0.05$). The remaining differences are statistically insignificant.

During our study, patients were distributed into groups according to initial sensory thresholds as follows.

Figure No. 1 Characteristics of sensory sensitivity thresholds in patients with mental illness, including aggressive forms.



Analysis of the results obtained shows that in the 2nd and 4th groups of those examined, patients with high sensory thresholds predominate, which constitute about 60% and 75%, respectively, of all those examined in this group. The remaining about 10% are patients with low and about 30% and 25% average threshold values. At the same time, with aggressive forms of patients with PM, high sensory thresholds are observed in the 2nd group, about 70%, and in the 1st group, about 65%; the average threshold values are observed in the 1st group, 40%; the remaining three groups are almost the same at 35% . At the same time, a low sensitivity threshold is observed in 5% of the 1st and 2nd groups of patients with PM. Analysis of the data obtained shows that among the groups of patients with PD, patients with low sensitivity thresholds are less common ($p < 0.05$), with the exception of patients of the third and fourth groups. Patients with medium and high sensitivity thresholds are found in C/G significantly more often ($p<0.05$) than with low sensitivity thresholds. As for patients with high sensory thresholds, in groups of mentally ill patients, including their aggressive behavior.

CONCLUSION.

Thus, the dental status of patients with dental caries is characterized by a high intensity of dental caries (20.67±0.82*); including; with diagnoses of schizophrenia - 21.52±0.98*; epilepsy - 22.86±0.94*; oligophrenia – 19.64±0.78*; - other mental illnesses – 18.66±0.98*; at the same time, among the examined C/G - 11.44±0.62 due to the large number of carious and extracted teeth and the high need for prosthetics from 8.2±0.48 to 9.4±1.4 of which the need for prosthetics is more than three teeth one jaw from 4.8±0.44 to 5.8±0.80*; At the same time, the need for more than 3 teeth is equal to that of C/G. Also, a correlation analysis between the values of GC parameters, PR hygiene and the intensity of damage to hard dental tissues and periodontal tissues revealed varying degrees of relationship between these parameters.

The state of PR in patients with PM is characterized by a high prevalence of periodontal tissue disease - 82% (with an aggressive form 94%); high risk of chronic oral sepsis – 13.3% (with A/F PZ – 17.7%), poor oral hygiene; DI-S plaque index - 1.1±0.14 points; GI-chronic gingivitis – 1.25±0.07*; apical periodontitis - 1.3±0.86; CPITN – chronic periodontitis - 1.24±0.44*; PPV - pathological mobility of teeth – 0.55±0.94*; while in patients with A/F PZ; -1.7±0.24; -1.85±0.44; -1.7±0.4; - 2.25±0.24; - 1.08±0.06* respectively; Also, all of the above results differ significantly from patients with C/G.

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