

DISEASES OF THE TEMPOROMANDIBULAR JOINT AND FORMULATION OF DIAGNOSIS

Axmedova Malika Qilichovna

Asia International University.

Bukhara, Uzbekistan.

E-mail: axmedovamalika1982@gmail.com

<https://doi.org/10.5281/zenodo.14633181>

Abstract. Comparatively recently, back in the 80s of the last century, differential diagnostics of diseases of the temporomandibular joint (TMJ) was carried out between the most common diseases of the temporomandibular joint - habitual dislocation and subluxation of the lower jaw, arthritis and arthrosis. Later, works began to appear in which the diagnosis made, for example, "dislocation of the meniscus of the TMJ" went beyond the international classification of diseases (ICD), new nosological forms began to appear in the classifications, for example, muscular-articular dysfunction.

Key words: temporomandibular joint, articular disc, arthritis, arthrosis, dislocation of the head of the lower jaw.

ЗАБОЛЕВАНИЯ ВИСОЧНО-НИЖНЕЧЕЛЮСТНОГО СУСТАВА И ФОРМУЛИРОВКА ДИАГНОЗА.

Аннотация. Сравнительно недавно, еще в 80-х годах прошлого века, дифференциальная диагностика заболеваний височно-нижнечелюстного сустава (ВНЧС) проводилась между наиболее распространенными заболеваниями височно-нижнечелюстного сустава — привычным вывихом и подвывихом нижней челюсти, артритами и артрозами. Позднее стали появляться работы, в которых поставленный диагноз, например, «вывих мениска ВНЧС» выходил за рамки международной классификации болезней (МКБ), в классификациях стали появляться новые нозологические формы, например, мышечно-суставная дисфункция.

Ключевые слова: височно-нижнечелюстной сустав, суставной диск, артрит, артроз, вывих головки нижней челюсти.

The rapid further development of medical science and, in particular, the study of TMJ pathology, was facilitated by the emergence in recent decades of highly effective technologies such as computed tomography (CT), magnetic resonance imaging (MRI) and TMJ arthroscopy, which significantly expanded diagnostic capabilities and revealed many previously unknown details of structural changes in the TMJ. It became possible to visualize the soft tissue structures of the TMJ, it was established that many pathological processes are explained or accompanied by

a violation of these structures - the articular disc, intra-articular ligaments and capsule, and these diseases, according to many authors, account for 70 to 80% of all cases of TMJ lesions.

Currently, the most common classification used in our country and abroad is the classification of TMJ diseases based on ICD-10. According to this classification, joint diseases can be classified into two classes.

Class XII. Maxillofacial anomalies (including bite anomalies), section "Diseases of the temporomandibular joint".

- Painful dysfunction syndrome of the temporomandibular joint. • Clicking jaw.
- Dislocation and subluxation of the TMJ.
- Pain in the TMJ, not classified in other sections.
- Stiffness of the TMJ, not classified in other sections.
- Osteophytes of the temporomandibular joint.
- Other diseases of the TMJ.
- Unspecified TMJ disease.

Class XIII. Diseases of the musculoskeletal system and connective tissue. Arthropathies.

- Infectious arthropathies: pyogenic arthritis, reactive arthropathies, Reiter's disease.
- Inflammatory polyarthropathies: seropositive rheumatoid arthritis, Felty's syndrome, other rheumatoid arthritis, juvenile arthritis.

- Traumatic arthropathies.

Arthrosis.

- Arthrosis (polyarthrosis, osteoarthrosis, primary arthrosis).

However, this classification does not take into account the issues of etiology and pathogenesis of TMJ diseases. Most often, the diagnosis is formulated as "temporomandibular joint pain dysfunction syndrome" (Costen syndrome), "clicking jaw" and "temporomandibular joint osteoarthrosis".

The Wilkes classification, Research Diagnostic Criteria (RDC) and the classification of the American Academy of Orofacial Pain (AAOFP) are widely used in foreign literature.

The most common classification used by maxillofacial surgeons in other countries is the Wilkes classification. But this classification does not include all TMJ diseases. The use of the RDC classification requires a large number of complex calculations and calculations, which limits their use in practical dentistry. In 1997, Russian scientists created a new classification of diseases and injuries of the temporomandibular joint, which was adapted to modern diagnostic capabilities and recognized by leading experts as the most successful:

Articular diseases:

1. Inflammatory (arthritis).
- 2.

2. Non-inflammatory.

2.1. Internal disorders.

2.2. Osteoarthritis:

- not associated with internal disorders of the TMJ, primary or generalized;
- associated with internal disorders of the TMJ (secondary).

2.3. Ankylosis.

2.4. Congenital anomalies.

2.5. Tumors.

Non-articular diseases:

1. Bruxism.

2. Pain syndrome of TMJ dysfunction.

3. Contractures of the masticatory muscles.

One of the main features of this classification is the presence of a section on internal disorders.

Internal TMJ disorders. The collective term "internal TMJ disorders" includes conditions in which there is pathology of the soft tissue elements of the joint (articular disc, intra-articular ligaments, capsule), changes in their anatomical and functional relationships. According to literary data, they make up 70-80% of patients who have sought medical attention for TMJ pathology. The most common cause of this type of pathology is long-term changes in the dental system that form forced occlusion. In the absence of occlusal pathology, the cause of internal TMJ disorders may be a change in the state of the muscles involved in chewing. In many cases, the leading etiological factor in the appearance of these disorders is overstretching of the ligamentous apparatus of the TMJ. It should be noted that the onset and progression of internal TMJ disorders is often associated with the initial state of the soft tissue structures that make it up. Patients with connective tissue dysplasia are characterized by a high degree of predisposition to diseases of the musculoskeletal system.

There are 9 clinical forms of internal TMJ disorders.

The main clinical forms, syndromes and clinical manifestations are presented in Table 1.

Table 1 - Main clinical forms of internal TMJ disorders, syndromes and clinical manifestations

Clinical forms	Syndromes	Main clinical manifestations
Chronic dislocation of the head of the mandible	Dislocation of the head of the lower jaw without displacement of the articular disc	Dislocation of the head of the lower jaw, not requiring reduction, without clicking

Subluxation of the articular disc	Anterior early reducible displacement	No dislocation of the head of the lower jaw, clicking within the glenoid fossa
Chronic dislocation of the head of the lower jaw with subluxation of the articular disc	Dislocation of the head of the lower jaw, anterior early irreducible displacement of the articular disc	Dislocation of the head of the lower jaw, not requiring reduction, clicking within the glenoid fossa
Chronic TMJ dislocation	Dislocation of the head of the lower jaw, anterior late reducible displacement of the articular disc	Dislocation of the head of the lower jaw, not requiring reduction, clicking sound during dislocation
Habitual dislocation of the TMJ	Same	Dislocation of the head of the lower jaw requiring reduction, clicking sound during dislocation
Recurrent dislocation of the articular disc	Intermittent anterior non-reducible displacement of the articular disc	Transient blocking of the TMJ with different options for disc position during reduction
Chronic dislocation of the articular disc	Permanent anterior non-reducible displacement of the articular disc	Permanent blocking of the TMJ
Chronic dislocation of the articular disc, osteoarthritis (secondary)	Anterior permanent irreducible displacement of the articular disc, its adhesion, violation of the integrity of the cartilaginous covering of the head of the lower jaw, etc. R-logical signs of osteoarthritis	Permanent blocking of the TMJ
Chronic posterior dislocation of the articular disc	Posterior permanent irreducible displacement of the articular disc	Pain, disturbance of teeth occlusion on the affected side

REFERENCES

1. Qilichovna, A. M. (2024). PREVENTION OF PERIODONTAL DISEASES IN CHILDREN AND TEENAGERS. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 41(5), 234-239.
2. Qilichovna, A. M. (2024). PREVENTION OF PERIODONTAL AND GUM DISEASES IN PREGNANT WOMEN. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 41(5), 240-245.

3. Qilichovna, A. M. (2024). HOMILADOR AYOLLARDA TISH VA PARADONT KASALLIKLARINING OLDINI OLISH. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 41(5), 246-253.
4. Ахмедова, М. К. (2024). ИЗУЧЕНИЕ ПРИЧИННЫХ ФАКТОРОВ ПАРОДОНТИТА. *Journal of new century innovations*, 49(3), 47-53.
5. Qilichovna, A. M. (2024). TO STUDY THE FACTORS THAT CAUSE PERIODONTITIS. *Journal of new century innovations*, 49(3), 40-46.
6. Qilichovna, A. M. (2024). THE ROLE OF PATHOGENESIS IN THE GROWTH FACTORS OF PERIODONTITIS DISEASE. *Journal of new century innovations*, 49(3), 25-32.
7. Qilichovna, A. M. (2024). TISH KARIYESI BO'LGAN BOLALAR VA SOG'LOM BOLALARNING OVQATLANISHIDAGI FARQLAR. *Ta'limning zamonaviy transformatsiyasi*, 6(2), 213-223.
8. Ахмедова, М. К. (2024). РАЗЛИЧИЯ В ПИТАНИИ ДЕТЕЙ С КАРИЕСОМ ЗУБОВ И ЗДОРОВЫХ ДЕТЕЙ. *Ta'limning zamonaviy transformatsiyasi*, 6(2), 224-234.
9. Ergashevich, I. I., Bahronovich, B. F., & Qilichevna, A. M. (2024). ASTMATIK STATUSDAN BEMORLARNI CHIQRISHNING ZAMONAVIY TAMOYILLARI. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 43(8), 36-44.
10. Qilichovna, A. M., Nematilloevna, X. M., & Ergashevich, I. I. (2024). THE ROLE OF CARIOGENIC AND PROTECTIVE FACTORS IN THE PREVENTION OF CARIES. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 43(8), 45-51.
11. Qilichovna, A. M., Nematilloevna, X. M., & Ergashevich, I. I. (2024). KARIYESNING OLDINI OLISHDA KARIOGEN VA HIMOYA OMILLARNING ROLI. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 43(8), 52-59.
12. Qilichovna, A. M. (2024). FACTORS CAUSING THE WIDE SPREAD OF DENTAL CARIES. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 4(4), 154-160.
13. Nematilloevna, X. M., & Qilichovna, A. M. (2024). MORPHO-FUNCTIONAL CHANGES IN ACUTE FORMS OF APHTHOUS STOMATITIS: Yangi O'zbekiston taraqqiyotida tadqiqotlarni o'rni va rivojlanish omillari. *Yangi O'zbekiston taraqqiyotida tadqiqotlarni o'rni va rivojlanish omillari*, 6(4), 177-186.
14. Qilichovna, A. M., & Nematilloevna, X. M. (2024). METABOLIK SINDROMI VA QON BOSIMI BOR BEMORLARDA O'ZGARISH XUSUSIYATLARI BAHOLASH: Yangi

- O'zbekiston taraqqiyotida tadqiqotlarni o'rni va rivojlanish omillari. *Yangi O'zbekiston taraqqiyotida tadqiqotlarni o'rni va rivojlanish omillari*, 6(4), 187-196.
15. Qilichovna, A. M., & Nematilloevna, X. M. (2024). TIBBIYOT TILI HISOBLANMISH LOTIN TILINI SAMARALI O'RGANISH OMILLARI: Yangi O'zbekiston taraqqiyotida tadqiqotlarni o'rni va rivojlanish omillari. *Yangi O'zbekiston taraqqiyotida tadqiqotlarni o'rni va rivojlanish omillari*, 6(4), 197-206
 16. Qilichovna, A. M., & Vahidovna, K. N. (2024). FACTORS CAUSING DISEASES OF PERIODONTAL TISSUES. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, 3(5), 196-201.
 17. Qilichovna, A. M., & Abdumutalib o'g'li, U. A. (2024). KARIES PROFILAKTIKASI NAZARIYASI VA AMALIYOTI. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, 3(5), 202-209.
 18. Vahidovna, K. N., & Qilichovna, A. M. (2024). FACTORS CAUSING PERIODONTAL TISSUE DISEASES. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, 3(5), 185-195.
 19. Qilichovna, A. M. (2024). THEORETICAL FUNDAMENTALS OF CARIES PREVENTION. *Journal of Science in Medicine and Life*, 2(5), 222-226.
 20. Qilichovna, A. M., & Safarboy o'g'li, T. S. (2024). 4-AVLOD ADGEZIV SISTEMA. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, 3(5), 307-313.
 21. Axmedova, M. (2024). CONDITION OF THE ALVEOLAR PROCESS AND PERIOSTE WHEN USING REMOVABLE DENTURES. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 4(11), 528-538.
 22. Qilichevna, A. M. (2024). COMPARATIVE ANALYSIS OF NUTRITIONAL DISPARITIES AMONG PEDIATRIC POPULATIONS: A STUDY OF CHILDREN WITH DENTAL CAVITIES VERSUS THOSE IN OPTIMAL HEALTH. *Central Asian Journal of Multidisciplinary Research and Management Studies*, 1(2), 30-34.
 23. Qilichovna, A. M. (2024). CLINIC FOR PATIENTS WITH DENTURES COMPARATIVE DIAGNOSIS AND PATHOGENESIS. *TADQIQOTLAR*, 30(3), 127-135.
 24. Ahmedova, M. (2023). COMPARATIVE ANALYSIS OF NUTRITIONAL DISPARITIES AMONG PEDIATRIC POPULATIONS: A STUDY OF CHILDREN WITH DENTAL CAVITIES VERSUS THOSE IN OPTIMAL HEALTH. *International Bulletin of Medical Sciences and Clinical Research*, 3(12), 68-72.

25. Ahmedova, M. (2023). DIFFERENCES IN NUTRITION OF CHILDREN WITH DENTAL CARIES AND HEALTHY CHILDREN. *International Bulletin of Medical Sciences and Clinical Research*, 3(12), 42-46.
26. Axmedova, M. (2023). TISH KARIESINING KENG TARQALISHIGA SABAB BO'LUVCHI OMILLAR. *Центральноазиатский журнал образования и инноваций*, 2(12), 200-205.
27. Ахмедова, М. (2023). ИСПОЛЬЗОВАНИЕ КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ НА ЭТАПАХ ДИАГНОСТИКИ И ПЛАНИРОВАНИЯ ОРТОПЕДИЧЕСКОГО ЛЕЧЕНИЯ НА ОСНОВЕ ЭНДОССАЛЬНЫХ ИМПЛАНТАТОВ. *Центральноазиатский журнал образования и инноваций*, 2(11 Part 2), 167-173.
28. Axmedova, M. (2023). USE OF COMPUTER TECHNOLOGY AT THE STAGES OF DIAGNOSIS AND PLANNING ORTHOPEDIC TREATMENT BASED ON ENDOSSEAL IMPLANTS. *International Bulletin of Medical Sciences and Clinical Research*, 3(11), 54-58.
29. Ахмедова, М. (2020). НАРУШЕНИЯ ЭНДОТЕЛИАЛЬНОЙ ФУНКЦИИ ПРИ РАЗВИТИИ АФТОЗНОГО СТОМАТИТА. *Достижения науки и образования*, (18 (72)), 65-69.
30. Axmedova, M. (2023). THE IMPACT OF SOCIOCULTURAL FACTORS ON THE PERVASIVENESS OF DENTAL CARIES AS A COMPLEX HEALTH CONDITION IN CONTEMPORARY SOCIETY. *International Bulletin of Medical Sciences and Clinical Research*, 3(9), 24-28.
31. Ахмедова, М. К. (2024). ОБЩИЕ ПРИЧИНЫ КАРИЕСА ЗУБОВ. *Лучшие интеллектуальные исследования*, 14(4), 77-85.
32. Qilichovna, A. M. (2024). CLINICAL SIGNS WHEN ACCOMPANIED BY DENTAL DISEASES AND METABOLIC SYNDROME. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 39(5), 116-24.
33. Ахмедова, М. К. (2024). Профилактика Стоматологических Заболеваний У Беременных. *Research Journal of Trauma and Disability Studies*, 3(3), 66-72.
34. Ахмедова, М. К. (2024). ОСНОВНЫЕ ПРОФИЛАКТИЧЕСКИЕ МЕТОДЫ ТКАНЕЙ ПАРОДОНТА У ДЕТЕЙ И ПОДРОСТКОВ. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 41(5), 254-260.
35. Narzulaeva, U. (2024). PATHOGENETIC MODELS OF CHRONIC HEART FAILURE. В CENTRAL ASIAN JOURNAL OF EDUCATION AND INNOVATION (Т. 3, Выпуск 12, сс. 154–157). Zenodo. <https://doi.org/10.5281/zenodo.14557952>

36. Farida Farkhodovna, K. Umida Rakhmatulloevna, N. & Mokhigul Abdurasulovna, B. (2022). ETIOLOGY OF CHRONIC RHINOSINUSITIS AND EFFECTIVENESS OF ETIOTROPIC TREATMENT METHODS (LITERATURE REVIEW). Новости образования: исследование в XXI веке, 1(4), 377–381. извлечено от <https://nauchniyimpuls.ru/index.php/noiv/article/view/1367>
37. Numonova, A., & Narzulaeva, U. (2023). EPIDEMIOLOGY AND ETIOPATHOGENESIS OF CHF. Наука и инновация, 1(15), 115-119.
38. Орипова Озода Олимовна, Самиева Гулноза Уткуровна, Хамидова Фарида Муиновна, & Нарзулаева Умида Рахматуллаевна (2020). Состояние плотности распределения лимфоидных клеток слизистой оболочки гортани и проявления местного иммунитета при хроническом ларингите (анализ секционного материала). Academy, (4 (55)), 83-86.
39. Umida Rakhmatulloevna Narzulaeva, & Xamrayeva Muxlisa Farmon qizi. (2023). ETIOPATHOGENESIS OF HEMOLYTIC ANEMIA. Web of Medicine: Journal of Medicine, Practice and Nursing, 1(1), 1–4. Retrieved from <https://webofjournals.com/index.php/5/article/view/26>
40. Нарзулаева, У., Самиева, Г., & Насирова, Ш. (2023). Гемореологические нарушения на ранних стадиях гипертензии в жарком климате. Журнал биомедицины и практики, 1(1), 221–225. <https://doi.org/10.26739/2181-9300-2021-1-31>
41. Umida Rakhmatulloevna Narzulaeva. (2023). Important Aspects of Etiology And Pathogenesis of Hemolytic Anemias. American Journal of Pediatric Medicine and Health Sciences (2993-2149), 1(7), 179–182. Retrieved from <https://grnjournal.us/index.php/AJPMHS/article/view/817>
42. Нарзулаева, У. Р., Самиева, Г. У., & Насирова, Ш. Ш. (2021). ИССИҚ ИҚЛИМДА КЕЧУВЧИ ГИПЕРТОНИЯ КАСАЛЛИГИНИНГ БОШЛАНГИЧ БОСҚИЧЛАРИДА ГЕМОРЕОЛОГИК БУЗИЛИШЛАР. ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ, 6(1).
43. Нарзулаева, У., Самиева, Г., Лапасова, З., & Таирова, С. (2023). Значение диеты в лечении артериальной гипертензии . Журнал биомедицины и практики, 1(3/2), 111–116. <https://doi.org/10.26739/2181-9300-2021-3-98>
44. Narzulaeva Umida Rakhmatulloevna, Samieva Gulnoza Utkurovna, & Ismatova Marguba Shaukatovna (2020). SPECIFICITY OF THE CLINICAL COURSE OF THE INITIAL STAGES OF HYPERTENSION IN ARID ZONES OF UZBEKISTAN AND NON-DRUG APPROACHES TO TREATMENT. Кронос, (4 (43)), 15-17.

45. Umida Raxmatulloeva Narzulaeva, & Mohigul Abdurasulovna Bekkulova (2023). Arterial gipertenziya etiologiyasida dislipidemiyaning xavf omili sifatidagi roli. Science and Education, 4 (2), 415-419.
46. Narzulaeva, U. R., & Samieva, G. U. (2021). Nasirova ShSh. Hemoreological Disorders in The Early Stages Of Hypertension In Hot Climates. Journal of Biomedicine and Practice, 6(1), 221-225.
47. Dilsora Nuriddinovna Juraeva, Umida Rakhmatulloeva Narzulaeva, & Kurbonova Gulbahor Aslamovna. (2022). GENDER DIFFERENCES IN THE PARACLINICAL FEATURES OF THE COURSE OF TRIGEMINAL NEURALGIA. World Bulletin of Public Health, 8, 186-190. Retrieved from <https://www.scholarexpress.net/index.php/wbph/article/view/751>
48. Нарзуллаева, У. Р., Самиева, Г. У., & Пардаева, З. С. (2020). Pathogenetic aspects of verified risk factors such as arterial hypertension and dyslipidemia in the development of chronic heart failure. American Journal of Medicine and Medical Sciences, 10(10), 776-779.
49. Жураева, Д. Н., & Нарзулаева, У. Р. (2020). Эркак ва аёлларда уч шохли нерв невралгияси кечишининг параклиник хусусиятлари. ЖУРНАЛ НЕВРОЛОГИИ И НЕЙРОХИРУРГИЧЕСКИХ ИССЛЕДОВАНИЙ, 1(1).
50. Narzulyeva, U., & Ismoilova, N. (2023). DETECTION OF EATING BEHAVIOR DISORDERS IN STUDENTS BEFORE THE EXAM USING THE DEBQ QUESTIONNAIRE. Наука и инновация, 1(15), 112-114.
51. Narzulaeva, U. (2023). PATHOGENETIC MECHANISMS OF MICROCIRCULATION DISORDERS. International Bulletin of Medical Sciences and Clinical Research, 3(10), 60–65. Retrieved from <https://researchcitations.com/index.php/ibmscr/article/view/2811>
52. Narzulaeva Umida Rakhmatulloeva and Rakhmatova Fotima Ulugbekovna, “PATHOGENETIC MECHANISMS OF DISORDERS IN THE HEMOSTASIS SYSTEM OBSERVED IN PATIENTS INFECTED WITH COVID-19”, IEJRD - International Multidisciplinary Journal, vol. 7, no. ICMEI, p. 3, Feb. 2023.
53. Narzulaeva, U. (2023). PATHOGENETIC SIGNIFICANCE OF HYPERLIPIDEMIA IN THE CLINICAL COURSE OF ARTERIAL HYPERTENSION. International Bulletin of Medical Sciences and Clinical Research, 3(11), 86-91.
54. Narzulaeva, U. (2023). PATHOGENETIC SIGNIFICANCE OF HYPERLIPIDEMIA IN THE CLINICAL COURSE OF ARTERIAL HYPERTENSION. International Bulletin of Medical Sciences and Clinical Research, 3(11), 86-91.

55. Нарзуллаева, У., Самиева, Г., & Пардаева, З. (2022). ПАТОФИЗИОЛОГИЯ РЕПЕРФУЗИОННОГО ПОВРЕЖДЕНИЯ МИОКАРДА. Журнал вестник врача, 1(2), 155–158. <https://doi.org/10.38095/2181-466X-2020942-154-157>
56. Самиева, Г., Нарзуллаева, У., & Самиев, У. (2023). Течение артериальной гипертензии у жителей засушливого региона. Каталог монографий, 1(1), 1–108. извлечено от <https://inlibrary.uz/index.php/monographs/article/view/27456>
57. Oripova, O. O., Samieva, G. U., Xamidova, F. M., & Narzulaeva, U. R. (2020). Sostoyanie plotnosti raspredeleniya limfoidnyx kletok slisistoy obolochki gortani va proyavleniya mestno immuna pri xroncheskom laringite (tahlil seksionnogo material). Akademiya,(4 (55)), 83-86.
58. Rakhmatulloevna, N. U., & Abdurasulovna, B. M. (2022). GEMOREOLOGIK BUZILISHLAR VA ERITROTSITLAR AGREGATSION XOSSALARI O'ZGARISHINING PATOGENETIK MEXANIZMLARI. JOURNAL OF BIOMEDICINE AND PRACTICE, 7(6).
59. Кузиева, М. А. (2023). Клиноморфологические Критерии Органов Ротовой Полости При Применении Несъемных Ортопедических Конструкций. *Research Journal of Trauma and Disability Studies*, 2(12), 318-324.
60. Abdusalimovna, K. M. (2024). THE USE OF CERAMIC MATERIALS IN ORTHOPEDIC DENTISTRY.(Literature review). *TADQIQOTLAR*, 31(3), 75-85.
61. Abdusalimovna, K. M. (2024). CLINICAL AND MORPHOLOGICAL FEATURES OF THE USE OF METAL-FREE CERAMIC STRUCTURES. *TA'LIM VA INNOVATION TADQIQOTLAR*, 13, 45-48.
62. Abdusalimovna, K. M. (2024). THE ADVANTAGE OF USING ALL-CERAMIC STRUCTURES. *TA'LIM VA INNOVATION TADQIQOTLAR*, 13, 49-53.
63. Abdusalimovna, K. M. (2024). MORPHO-FUNCTIONAL FEATURES OF THE METHOD OF PREPARATION OF DEPULPATED TEETH FOR PROSTHETICS. *SCIENTIFIC JOURNAL OF APPLIED AND MEDICAL SCIENCES*, 3(4), 301-307
64. Abdusalimovna, K. M. (2024). Clinical and Morphological Features of the Use of Non-Removable Orthopedic Structures. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, 3(5), 73-78.
65. Kuzieva, M. A. (2024). CARIOUS INFLAMMATION IN ADOLESCENTS: CAUSES, FEATURES AND PREVENTION. *European Journal of Modern Medicine and Practice*, 4(11), 564-570.

66. Kuzieva, M. A. (2024). Malocclusion–Modern Views, Types and Treatment. *American Journal of Bioscience and Clinical Integrity*, 1(10), 103-109.
67. KUZIEVA, M. A. (2024). MODERN ASPECTS OF MORPHO-FUNCTIONAL DATA AND TREATMENT OF AGE-RELATED CHANGES IN THE MAXILLOFACIAL REGION. *Valeology: International Journal of Medical Anthropology and Bioethics*, 2(09), 126-131.