

THE TERMINOLOGICAL SYSTEM OF MODERN MEDICINE IN LATIN

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Abstract. This article is about the terminology of modern medicine, which is one of the most complex terminological systems. Every language has its own terminology, the language of science, where the meaning of words should not change, because in a term, a word denoting an exact scientific concept, the main thing is immutability. The preservation of scientific Latin terminology attaches special importance to the study of the Latin language, as necessary in practical work. In Latin, as in any other language, one cannot do without systematics and rules of word formation of terms from certain elements. If you master these rules, you can even learn to understand new terms. Most clinical terms are complex words formed from word-forming elements.

Keywords: Latin, Greek, term elements, prefixes, suffixes, word formation.

ТЕРМИНОЛОГИЧЕСКАЯ СИСТЕМА СОВРЕМЕННОЙ МЕДИЦИНЫ НА
ЛАТЫНСКОМ ЯЗЫКЕ

Аннотация. В статье речь идет о терминологии современной медицины, которая является одной из самых сложных терминологических систем. Каждый язык имеет свою терминологию, язык науки, где значение слов не должно меняться, поскольку в термине, слове, обозначающем точное научное понятие, главное — неизменность. Сохранение научной латинской терминологии придает особое значение изучению латинского языка, как необходимому в практической работе. В латинском языке, как и в любом другом языке, не обойтись без систематики и правил словообразования терминов из определенных элементов. Освоив эти правила, можно даже научиться понимать новые термины. Большинство клинических терминов — это сложные слова, образованные из словообразовательных элементов.

Ключевые слова: латынь, греческий, терминологические элементы, префиксы, суффиксы, словообразование.

Introduction

The object of study in the course of medical Latin are words and phrases that denote special concepts of medical science. Such words and phrases are called terms, and their totality forms medical terminology – the professional language of medical professionals.

A medical specialist must competently use a constantly updated professional language and understand the laws governing the origin of terms.

Doctors of any country use a lot of international, generally accepted terms that originated on the basis of ancient Greek and Latin. These terms are universal and understandable to professionals regardless of their nationality. Such internationalism terms form the main foundation of medical science. Terms such as epidemic, bronchus, herpes, carcinoma, and emphysema belong to the most ancient period.

Materials and methods

The terminology of individual sciences consists of tens and hundreds of thousands of terms. The initial position in terminology is that the purpose of a term is to briefly, accurately and unambiguously express a scientific concept. To do this, the term must have the following criteria: adequacy, unambiguity.

In actual terminology, not all terms meet these requirements. Therefore, specialists in various sciences, including medicine, pay great attention to the streamlining and standardization of their professional language.

The terminological system of modern medicine consists of many subsystems, among which there are three leading ones: anatomical and histological terminology, pharmaceutical terminology and clinical terminology.

Functional disorders are usually named using a combination of prefixed and root term elements. The prefix *dys* is most often used in combination with the final root: *dyskinesia*, ae f – *dyskinesia*, disorder of coordinated motor acts. A combination of the noun *dysfunctio*, onis f – *dysfunction* and the name of a specific organ is also used: *dysfunctio renum* – kidneys dysfunction. The complete cessation or absence of any function or physiological process is expressed using the prefix *a* – (*an* – before a vowel): *aphagia*, ae f – *aphagia*, complete inability to swallow; *anuria*, ae f – *anuria*, failure of urine to enter the bladder.

The names of pathological processes and conditions are composed using prefixes, suffixes, and root term elements, and are also expressed in Latin noun terms. At the same time, a definition is often added to the noun terms, characterizing the peculiarity of this pathological process (acute, chronic, complete, partial, etc.). Almost all prefixes are used as term prefixes, but Greek prefixes are much more common than Latin ones. Their meaning in clinical terms usually coincides with the meaning in anatomical terms.

However, it is often difficult to determine the meaning of the Greek prefix in many terms, since, firstly, the root morphemes of such terms are not used in medical terminology without prefixes, and secondly, the Greek prefixes themselves have a lot of meanings. Therefore, in such cases, it is necessary to assimilate the term without allocating prefixes in it and without

conducting a morphological analysis of the word, for example: diabetes, *ae m* – diabetes, the name of a group of endocrine diseases characterized by excessive urine excretion from the body.

The results of the study and their discussion

The terms 'pharmacy' and 'pharmaceuticals' are of ancient Greek origin and go back to the word '*pharmakon*'- medicine. Subsequently, through Latin, these terms entered all the languages of Europe. Medicine traditionally uses Latin and Latinized Greek words in the names of raw materials for the production of medicines, in the names of medicines and in the recipe.

The list of Latin names of dosage forms and preparations is compiled by the International Pharmaceutical Nomenclature. From time to time, as some drugs or dosage forms become obsolete and other drugs or dosage forms become available, the list of pharmaceutical terms is reviewed and updated.

Uppercase and lowercase letters in the vocabulary and in the pharmaceutical term are very important. Capitalized letters are written both in the dictionary form and as part of the term:

1. Medicinal plants Names: *Chamomilla*, *ae f* – chamomile; *Flores Chamomillae* – chamomile flowers; *Frangula*, *ae f* – buckthorn; *decoctum corticis Frangulae* – decoction of buckthorn bark.

2. Names of chemical elements and cations: *Ferrum*, *i n* – iron; *Sirupus Aloes cum Ferro* – Aloe syrup with iron; *Strychninum*, *i n*-strychnine; *Solutio Strychnini nitratis* - strychnine nitrate solution.

3. Names of medicines: *Prednisolonum*, *i n* – prednisolone; *Tabulettae Prednisoloni* – prednisolone tablets; *Leonurus*, *i m* – motherwort; *tinctura Leonuri* – motherwort tincture.

4. Words equivalent to medicines: *Amylum*, *i n* – starch; *Gelatina*, *ae f* – gelatin(a); *Gelatosa*, *ae f* – gelatose; *Propolisum*, *i n* – propolis; *Saccharum*, *i n* – sugar.

Clinical terminology (from Greek. *klinike* (*techne*) – bedridden care) is the most extensive section of medical terminology. The names of various diseases and abnormalities, research and treatment methods, clinical specialties and specialists are presented here. All these names are mostly nouns. Such nouns can be single-root words (*asthma*, *atis n* – asthma; *hernia*, *ae f* - hernia). However, in most cases they are complex in composition and consist mainly of Greek word-forming elements, or term elements: *hyperaesthesia* - hypersensitivity.

There are affixal and root terminological elements. For example, the prefix *hypo* forms terms with the meaning "below normal": *hypothermia* – *hypothermia*, temperature drop; *hypothyreosis* – *hypothyroidism*, decreased thyroid function; *hypoxia* – *hypoxia*, decreased oxygen levels in tissues. The suffix – *oma* usually means "tumor": *lipoma*, a tumor from adipose tissue; *odontoma* – *odontoma*, a tumor from dental tissue. Root terminological elements are bases of Greek and sometimes Latin nouns, adjectives, or pronouns.

It is customary to divide the root terminological elements into initial and final ones. Initial terminological elements are combined with suffixes or final terminological elements. For example, terminological elements *angi* – meaning "vessel" can be combined with the suffixes – *itis* or – *oma* in terms of *angioma* (angioma, a tumor from vascular tissue) and *angiitis* (angiitis, inflammation of the walls of blood vessels). At the same time, this terminological elements can also be combined with root terminal term elements: *angiosclerosis* (angiosclerosis, thickening of the walls of blood vessels), *angiospasmus* (angiospasm, spasm of blood vessels).

The initial term element is usually joined to another, including the final terminological element with the help of a connecting vowel – *o* -: *bronchospasmus* – *bronchospasm*, narrowing of the bronchi. If the terminological element, to which the initial term element is attached, begins with a vowel, then the connective – *o*- is usually skipped: *nephrectomia* – *nephrectomy*, kidney removal surgery. However, sometimes this rule is not followed and the connective – *o* is preserved: *acroaesthesia* is an increased sensitivity of the distal parts of the body.

Root term element can often act as both initial and final term elements, for example: *nos*- and *-nosis* (disease, illness), *nosologia*, *ae f* – *nosology*, the study of forms of diseases and their classification; *zoonosis*, *is f* – *zoonosis*, infectious diseases transmitted from animals to humans.

In such cases, students are required to know both of these options and provide them in an oral or written response: illness, disease - *nos*-, *-nosis*.

Root term element can connect to each other, forming multicomponent structures: *chole* (bile)+*cyst* (bladder)–*cholecyst* – (gallbladder); *cholecystography* – *cholecystography* – radiography of the gallbladder.

Root term elements can sometimes have multiple meanings. So, the initial term *kerat* can have 2 values: 1) the cornea of the eye; 2) the stratum corneum of the epidermis of the skin, *keratitis* – *keratitis*, inflammation of the cornea of the eye; *kerotosis* – *keratosis*, a common name for skin diseases characterized by thickening of the stratum corneum of the epidermis.

The names of sciences, specialties, and branches of medicine are most often formed using the final term *-logia*: *ophthalmologia*, *ae f* – *ophthalmology*. On the basis of term element – *logia*, adjectives are formed with the final element *-logicus*, *a*, *um* -logical), which indicates belonging to a group of sciences, sections of clinical medicine, research or treatment methods: *bacteriologicus*, *a*, *um* – *bacteriological*, related to bacteriology.

Some names of clinical medicine sections are formed using the final term element – *iatria*: *geriatria*, *ae f* – *geriatrics*, a section of clinical medicine devoted to diseases of senile age and methods of their treatment.

The names of some sections of clinical medicine are descriptive: *morbi interni* – internal diseases; *morbi infectiosi* – infectious diseases.

The names of some clinicians are formed using term element - *pathologus* and – *iater*, and such terms always correspond to the names of the relevant sections of clinical medicine: *neuropathologia*, *ae f* – *neuropathologus*, *i m* – neurologist, specialist in diseases of the peripheral nervous system. Latin names of specialists, which in Uzbek equivalents have the final element – *ista*, are masculine nouns of the first declension with the final element – *ista*: *infectionista*, *ae m* – *infectiologist*, infectious disease specialist.

Conclusion

Today, Latin is not only a memory of the philosophers, orators, and poets of Ancient Rome, but also an indispensable attribute of the modern world. Latin is firmly rooted in scientific terminology in many fields of knowledge, especially in medicine, biology, and law. Therefore, they even distinguish medical, biological and legal Latin separately. In medicine, almost all medical terms are of Latin-Greek origin.

REFERENCES

1. Nematilloeyevna, K. M. The Easy Ways of Learning Medical Plants (Phytonyms) in the Department of Pharmaceutical Terminology. *JournalNX*, 7(06), 274-277.
2. Bakayev, N. B., Shodiev, S. S., Khafizova, M. N., & Ostonova, S. N. (2020). SHAKESPEARS LEXICON: REASON WORD AS A DESIGN OF THE CONCEPT OF THE ABILITY OF THE HUMAN MIND TO ABSTRACTION, CONCLUSION. *Theoretical & Applied Science*, (6), 162-166.
3. Хафизова, М. (2023). ТРИ ЧАСТИ МЕДИЦИНСКИХ ТЕРМИНОВ. *Центральноазиатский журнал образования и инноваций*, 2(12 Part 2), 134-138.
4. Хафизова, М. (2023). ПРОСТЫЕ СПОСОБЫ ИЗУЧЕНИЯ ЛЕКАРСТВЕННЫХ РАСТЕНИЙ (ФИТОНИМОВ) В РАЗДЕЛЕ ФАРМАЦЕВТИЧЕСКОЙ ТЕРМИНОЛОГИИ. *Центральноазиатский журнал образования и инноваций*, 2(11 Part 2), 193-198.
5. Nematilloeyevna, X. M. (2024). ANATOMIK TERMINOLOGIYA BO'LIMIDA LOTIN TILI SIFATLARINING MA'NO JIHATLARI. *Лучшие интеллектуальные исследования*, 14(5), 47-54.
6. Nematilloeyevna, X. M. (2024). LOTIN TILI OT SO'Z TURKUMINING O'ZBEK GURUHLARDA O'RGANILISHI. *Лучшие интеллектуальные исследования*, 14(4), 104-110.

7. Hafizova, M. (2024). LOTIN TIL AMALIY MASHG'ULOTLARIDA TERMIN, ATAMA VA IBORA SO'ZLARINING QO'LLANILISHI. *Журнал академических исследований нового Узбекистана*, 1(1), 132-136.
8. Хафизова, М. Н. (2024). УПОТРЕБЛЕНИЕ ЛАТИНСКИХ СУЩЕСТВИТЕЛЬНЫХ В РАЗДЕЛЕ АНАТОМИЧЕСКОЙ ТЕРМИНОЛОГИИ. *Лучшие интеллектуальные исследования*, 16(2), 256-265.
9. Nematilloeyvna, X. M. (2024). LOTIN TILI MODULIDA SANOQ VA TARTIB SONLARNING QO'LLANILISH JIHATLARI. *Лучшие интеллектуальные исследования*, 16(2), 249-255.
10. Khafizova, M. (2024). STUDING MEDICINAL PLANTS (PHYTONYMS) IN THE SECTION OF PHARMACEUTICAL TERMINOLOGY. *Центральноазиатский журнал междисциплинарных исследований и исследований в области управления*, 1(2), 4-7.
11. Nematillaevna, K. M. (2024). Aspects of the Usage of Cardinal and Ordinal Numerals in the Latin Language Module. *Research Journal of Trauma and Disability Studies*, 3(3), 278-283.
12. Хафизова, М. Н. (2024). ПРИМЕНЕНИЯ ЧИСЛИТЕЛЬНЫХ В МЕДИЦИНСКОЙ ТЕРМИНОЛОГИИ. *TADQIQOTLAR. UZ*, 34(3), 116-122.
13. Nematilloeyvna, X. M. (2024). TIBBIYOT TERMINOLOGIYASIDA MA'NODOSH SO'ZLARNING QO'LLANILISH ASPEKTLARI. *Ta'limning zamonaviy transformatsiyasi*, 6(2), 202-212.
14. Nematolloyevna, X. M. (2024). LOTIN TILI VA TIBBIYOT TERMINOLOGIYASI MODULIDA OT, SIFAT, SON VA FE'L SO'Z TURKUMLARINING LUG'ATDA BERILISH SHAKLLARINI O'RGANISH. *SCIENTIFIC JOURNAL OF APPLIED AND MEDICAL SCIENCES*, 3(4), 314-319.
15. Qilichovna, A. M., & Nematilloeyvna, 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. Nematilloeyvna, 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.

17. Nematilloeyvna, X. M. (2024). OTLARNING TURLANISHI LOTIN TILI OTLARINING ASOSIY ASPEKTI SIFATIDA. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, 3(5), 244-250.
18. Nematilloeyvna, X. M. (2024). MURAKKAB ANATOMIK TERMINLARNI TARJIMA QILISHDAGI E'TIBORLI JIHATLAR. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 45(10), 60-67.
19. Nematilloeyvna, X. M. (2024). ANATOMIK TERMINOLOGIYA-TIBBIY TA'LIMNING AJRALMAS QISMIDIR. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 45(10), 68-74.
20. Nematilloeyvna, X. M. (2024). UCH ASOSIY TERMINOLOGIK LUG'ATLARNING TILI. *PEDAGOG*, 7(1), 184-187
21. Nematilloeyvna, X. M. (2024). LOTIN TILINI O'QITISHDA PEDAGOGIK VA INNOVATSION TEXNOLOGIYALARNI TADBIQ ETISH. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 45(10), 53-59.
22. Хафизова, М. Н. КРИТЕРИИ ОБУЧЕНИЯ ПРОФЕССИОНАЛЬНО-ОРИЕНТИРОВАННОЙ КОМПЕТЕНЦИИ.
23. Nematilloeyvna, X. M., & Salohiddinovna, X. Y. (2024). LOTIN TILI SIFATLARI VA DARAJALARI YASALISHINING MUHIM XUSUSIYATLARI. *TADQIQOTLAR. UZ*, 40(5), 208-215.
24. Nematilloeyvna, X. M., & Salohiddinovna, X. Y. (2024). LOTIN PREFIKSLARI ANATOMIK TERMINLAR YASALISHIDA ASOSIY KOMPONENT SIFATIDA. *TADQIQOTLAR. UZ*, 40(5), 216-223.
25. Nematilloeyvna, X. M., & Salohiddinovna, X. Y. (2024). LOTIN TILI VA TIBBIYOT TERMINOLOGIYASINI O'QITISHDA TALABALARDA MOTIVATSIYANI KUCHAYTIRISH YO'LLARI. *TADQIQOTLAR. UZ*, 40(5), 224-231.
26. Nematilloeyvna, X. M., & Salohiddinovna, X. Y. (2024). FARMATSEVTIKADA DORI PREPARATLARI NOMLARIDA MA'NOLI BO'LAKLARNING QO'LLANILISHI. *TADQIQOTLAR. UZ*, 40(5), 232-239.
27. Халимова, Ю. С., & Хафизова, М. Н. (2024). МОРФО-ФУНКЦИОНАЛЬНЫЕ И КЛИНИЧЕСКИЕ АСПЕКТЫ СТРОЕНИЯ И РАЗВИТИЯ ЯИЧНИКОВ (ОБЗОР ЛИТЕРАТУРЫ). *TADQIQOTLAR. UZ*, 40(5), 188-198.
28. Халимова, Ю. С., & Хафизова, М. Н. (2024). КЛИНИЧЕСКИЕ АСПЕКТЫ ЛИЦ ЗЛОУПОТРЕБЛЯЮЩЕЕСЯ ЭНЕРГЕТИЧЕСКИМИ НАПИТКАМИ. *TADQIQOTLAR. UZ*, 40(5), 199-207.

29. Халимова, Ю. С., & Хафизова, М. Н. (2024). КЛИНИЧЕСКИЕ ОСОБЕННОСТИ ЗАБОЛЕВАНИЙ ВНУТРЕННИХ ОРГАНОВ У ЛИЦ, СТРАДАЮЩИХ АЛКОГОЛЬНОЙ ЗАВИСИМОСТЬЮ. *TADQIQOTLAR. UZ*, 40(5), 240-250.
30. Saloxiddinovna, X. Y., & Ne'matillaevna, X. M. (2024). FEATURES OF THE STRUCTURE OF THE REPRODUCTIVE ORGANS OF THE FEMALE BODY. *Modern education and development*, 10(1), 322-336.
31. Халимова, Ю. С., & Хафизова, М. Н. (2024). ОСОБЕННОСТИ СОЗРЕВАНИЕ И ФУНКЦИОНИРОВАНИЕ ЯИЧНИКОВ. *Modern education and development*, 10(1), 337-347.
32. Хафизова, М. Н., & Халимова, Ю. С. (2024). ИСПОЛЬЗОВАНИЕ ЧАСТОТНЫХ ОТРЕЗКОВ В НАИМЕНОВАНИЯХ ЛЕКАРСТВЕННЫХ ПРЕПАРАТОВ В ФАРМАЦЕВТИКЕ. *Modern education and development*, 10(1), 310-321.
33. Хафизова, М. Н., & Халимова, Ю. С. (2024). МОТИВАЦИОННЫЕ МЕТОДЫ ПРИ ОБУЧЕНИИ ЛАТЫНИ И МЕДИЦИНСКОЙ ТЕРМИНОЛОГИИ. *Modern education and development*, 10(1), 299-309.
34. Хафизова, М. Н. (2024). ВАЖНЫЕ ОСОБЕННОСТИ ОБРАЗОВАНИЯ СТЕПЕНИ СРАВНЕНИЯ ИМЕН ПРИЛАГАТЕЛЬНЫХ В ЛАТИНСКОМ ЯЗЫКЕ. *Modern education and development*, 10(1), 288-298.
35. Nematilloevna, K. M., & Salokhiddinovna, K. Y. (2024). IMPORTANT FEATURES IN THE FORMATION OF DEGREE OF COMPARISON OF ADJECTIVES IN LATIN. *Modern education and development*, 10(1), 277-287.
36. Nematillaevna, K. M. (2024). ANATOMICAL TERMINOLOGY AS THE MAIN PART OF MEDICAL TERMINOLOGY. *Modern education and development*, 10(1), 266-276.
37. Khafizova, M. N. (2024). Latin Suffixes in Medical Terminology. *American Journal of Alternative Education*, 1(8), 96-101.
38. Nematilloevna, K. M. (2024). Nomen Adjectivum in Lingua Latina. *Miasto Przyszłości*, 54, 1027-1031.
39. Nematilloevna, X. M., & Saloxiddinovna, X. Y. (2024). TIBBIYOT FANLARIDA MOTIVATSIYON METODLAR. *Modern education and development*, 16(7), 31-42.
40. Nematillaevna, K. M., & Salokhiddinovna, K. Y. (2024). NUMERALS IN THE LATIN. *Modern education and development*, 16(7), 57-67.
41. Nematilloevna, X. M., & Saloxiddinovna, X. Y. (2024). TIBBIY TERMINOLOGIYADA TARJIMA MASALALARI. *Modern education and development*, 16(7), 43-56.

42. Nematilloeyvna, X. M., & Saloxiddinovna, X. Y. (2024). TURLI TIBBIY TERMINLARNING YASALISH USULLARI. *Modern education and development*, 16(7), 68-78.
43. Nematilloeyvna, X. M. (2024). FARMATSEVTIK TERMINOLOGIYADA MA'NOLI QISMLAR. *Modern education and development*, 16(9), 232-243.
44. Nematillaevna, K. M. (2024). THE ROLE OF LATIN IN MEDICAL TERMINOLOGY. *IMRAS*, 7(12), 104-110.
45. Khafizova, M. (2025). THE USE OF SEGMENTS OF FREQUENCY IN THE NAMES OF MEDICINES IN THE PHARMACEUTICAL TERMINOLOGY. *Modern Science and Research*, 4(2), 708-714.
46. Khafizova, M. (2025). IMPORTANT CLASSIFICATION OF MEDICAL TERMINOLOGY. *Modern Science and Research*, 4(3), 743-751.
47. Халимова, Ю. С. (2021). MORPHOFUNCTIONAL ASPECTS OF THE HUMAN BODY IN THE ABUSE OF ENERGY DRINKS. *Новый день в медицине*, 5(37), 208-210.
48. Халимова, Ю. С. (2022). МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ ЯИЧНИКОВ КРЫС ПРИ ВОЗДЕЙСТВИИ КОФЕИН СОДЕРЖАЩИХ НАПИТОК. *Gospodarka i Innowacje*, 23, 368-374.
49. Salokhiddinovna, X. Y. (2023). INFLUENCE OF EXTERNAL FACTORS ON THE MALE REPRODUCTIVE SYSTEM. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 3(10), 6-13.
50. Халимова, Ю. С., & Шокиров, Б. С. (2022). МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ ВНУТРЕННИХ ОРГАНОВ ПРИ ХРОНИЧЕСКОМ АЛКОГОЛИЗМЕ. *Scientific progress*, 3(2), 782-789.
51. Halimova, Y. S. (2023). Morphological Aspects of Rat Ovaries When Exposed to Caffeine Containing Drink. *BEST JOURNAL OF INNOVATION IN SCIENCE, RESEARCH AND DEVELOPMENT*, 2(6), 294-300.
52. Halimova, Y. S., Shokirov, B. S., & Khasanova, D. A. (2023). Reproduction and Viability of Female Rat Offspring When Exposed To Ethanol. *Procedia of Engineering and Medical Sciences*, 32-35.
53. Salokhiddinovna, H. Y. (2023). Morphological Features of the Human Body in Energy Drink Abuse. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 3(5), 51-53.
54. Халимова, Ю. С., & Шокиров, Б. С. (2022). СОВРЕМЕННЫЕ ДАННЫЕ О МОРФО-ФУНКЦИОНАЛЬНЫХ АСПЕКТОВ ЧЕЛОВЕЧЕСКОГО ОРГАНИЗМА ПРИ

ЗЛОУПОТРЕБЛЕНИЕ ЭНЕРГЕТИЧЕСКИМИ НАПИТКАМИ. *PEDAGOGS
jurnali*, 4(1), 154-161.

55. Halimova, Y. S. (2023). Morphofunctional Aspects of Internal Organs in Chronic Alcoholism. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 2(5), 83-87.
56. Shokirov, B. S. (2021). Halimova Yu. S. Antibiotic-induced rat gut microbiota dysbiosis and salmonella resistance Society and innovations.
57. Халимова, Ю. С., & Шокиров, Б. С. (2021). Репродуктивность и жизнеспособность потомства самок крыс при различной длительности воздействия этанола. In *Актуальные вопросы современной медицинской науки и здравоохранения: Материалы VI Международной научно-практической конференции молодых учёных и студентов, посвященной году науки и технологий, (Екатеринбург, 8-9 апреля 2021): в 3-х т..* Федеральное государственное бюджетное образовательное учреждение высшего образования «Уральский государственный медицинский университет» Министерства здравоохранения Российской Федерации.
58. Khalimova, Y. S. BS Shokirov Morphological changes of internal organs in chronic alcoholism. *Middle European scientific bulletin*, 12-2021.
59. Шокиров, Б. С., & Халимова, Ю. С. (2022). ДИСБИОЗ ВЫЗВАННЫЙ АНИБИОТИКАМИ КИШЕЧНОЙ МИКРОБИОТЫ КРЫС И УСТОЙЧИВОСТЬ К САЛМОНЕЛЛАМ. *Scientific progress*, 3(2), 766-772.